

Software Project Management Plan (SPMP)

Intelligent Lifestyle

Team Daedalus ([s440gf](#))

Ho-Jung Simon Youn - ([hjsy](#))

Jian Alan Huang - ([jhua](#))

Nathaporn Eiamvittayakorn - ([neiam](#))

Saw Ai Soon - ([sasoon](#))

Wendy Wai-Tak Tsang - ([wtttsang](#))

Revision: 4.0.0
29 October 2004

Maintained by: Jian Alan Huang - ([jhua](#))

Abstract

This document, the Software Project Management Plan, outlines the organisational structure and details the roles and responsibilities of members of Team Daedalus. It also details all procedures pertaining to Team Management, Project Planning and Task Management.

Contents

- 1 Introduction 7**
 - 1.1 Purpose 7
 - 1.2 Scope 7
 - 1.3 Intended Audience 7
 - 1.4 Project Overview 7
 - 1.5 Quality Goals 7
 - 1.6 Personnel 8
 - 1.6.1 Development Team 8
 - 1.6.2 Supervisor 8
 - 1.6.3 Clients 9
 - 1.7 Definitions and Acronyms 9
 - 1.7.1 Definitions 9
 - 1.7.2 Acronyms 10
 - 1.8 Reference Documents 10
 - 1.9 References 10

- 2 Project Organisation 11**
 - 2.1 Organisational Structure 11
 - 2.2 Sub-team Organisation Procedures 11
 - 2.2.1 Sub-team Creation Procedure 13
 - 2.2.2 Sub-team Decomposition and Recomposition Procedures 13
 - 2.2.3 Sub-team Suspension and Reactivation Procedure 14
 - 2.3 Project Sub-Team Missions and Responsibilities 14
 - 2.3.1 Team Daedalus 15
 - 2.3.2 Administration Team 15
 - 2.3.3 Quality Assurance Team 16
 - 2.3.4 Risk Management Team 16
 - 2.3.5 Requirements Team 17
 - 2.3.6 Research Team 17
 - 2.3.7 Design Team 17
 - 2.3.8 Testing Team 17
 - 2.3.9 Implementation Team 18
 - 2.4 Leadership Roles and Responsibilities 18
 - 2.4.1 Project Manager 18
 - 2.4.2 Client Liaison Officer 18
 - 2.4.3 Quality Assurance Manager 19
 - 2.4.4 Risk Manager 19
 - 2.4.5 Human Resource Manager 19
 - 2.4.6 Research Leader 20
 - 2.4.7 Design Leader 20
 - 2.4.8 Implementation Leader 20
 - 2.4.9 Test Manager 20
 - 2.4.10 Release Manager 21
 - 2.4.11 Document Maintainer 21
 - 2.4.12 Librarian 21
 - 2.4.13 Logistic Manager 21

2.4.14	Technical Guru	22
2.4.15	Verification and Validation (V&V) Manager	22
2.4.16	Web Master	22
2.4.17	Endeavour Day Coordinator	23
2.4.18	Industry Night Coordinator	23
3	Managerial Process	24
3.1	Project Planning	24
3.1.1	Project Plan	24
3.1.2	Project Planning Process	25
3.1.3	Communicate the Project Plan	26
3.2	Task Management	26
3.2.1	Task Identification	26
3.2.2	Task Allocation	27
3.2.3	Task Recording	27
3.2.4	Task Tracking	28
3.2.5	Task Reporting	28
4	Human Resource Process	29
4.1	Monitoring Availability	29
4.1.1	Availability Matrix	29
4.1.2	Availability Chart	29
4.2	Resource Conflict Resolution Plan	30
4.3	Team Motivation Plan	30
4.3.1	Rules of the Game	31
4.3.2	Criteria for Good Point	31
4.3.3	Criteria for Bad Point	31
4.4	Punctuality Policy	32
4.4.1	Collecting Fines	32
5	Technical Process	33
5.1	Process Model	33
5.1.1	Reality Summarization	33
5.1.2	Process Model Description	33
5.2	Methods, Tools, and Techniques	34
5.2.1	NetOffice Online Project Management System	34
6	Supporting Process	36
6.1	Communication Procedure	36
6.1.1	Meeting Procedures	36
6.2	Workshop Procedures	40
6.2.1	Pre-Workshop Procedures	40
6.2.2	Workshop Procedures	41
6.2.3	Post-Workshop Procedures	41
6.3	Decision Making Procedure	41
6.3.1	Recording Decisions	41
6.3.2	Voting Procedures	42

A Appendix	43
A.1 Change Log	43
A.2 Task Tracking Timesheet Template	44
A.3 Sub-teams and Leaders History	45

List of Figures

1	The Organisational Structure for Team Daedalus	12
2	The Structure of the Admin Team	12
3	The Process Model Adopted by Team Daedalus	34

List of Tables

1	Development Team	8
2	Quorum	37
3	Change Log	43

1 Introduction

1.1 Purpose

The purpose of this document is to establish an understanding for members of Daedalus on the management plan to be applied during the course of the Intelligent Lifestyle project. These standards aim to enhance coordination and management across different phases and various areas specifically associated with the development of the Intelligent Lifestyle.

1.2 Scope

The scope of the document includes specifications of the process development model used, the organizational breakdown structure of the team, and any managerial and technical processes adopted by Daedalus. Moreover roles and responsibilities of the personnel are clearly defined in this document to remind members of their obligations as members of Daedalus.

1.3 Intended Audience

The intended audiences for this document are all members of Team Daedalus.

1.4 Project Overview

The aim of the Intelligent Lifestyle project is

- **To design and build a system via the ROADMAP methodology comprising of some intelligent agents, for the explicit purpose of providing demonstrations of Intelligent Agents.**

This aim is an attempt to balance the two requirements from the Clients. This is necessary as meeting both fully would be impossible with current time constraints. The individual aims of the Clients are shown below.

1. To provide a demonstration of intelligent agents.

The Clients wish to have something that can demonstrate agents, agent behaviour and intelligence. Scenarios will be used to demonstrate these features.

2. To implement the ROADMAP methodology (section 12.3.2) and create an intelligent agent system.

This Clients wish to test out ROADMAP and produce an example of an intelligent agent system. They believe this methodology will be useful in implementing the project.

1.5 Quality Goals

This section details the quality goals that Daedalus endeavours to achieve for the processes applied during the development of the deliverables. These goals relate specifically to an agent-oriented software development approach to facilitate the nature of the project.

1. Correctness: the extent to which the demonstration of the concepts of intelligent agents satisfies its specifications and fulfills the Clients' objectives;

2. Reliability: the extent to which the demonstration can be expected to showcase the concepts of intelligent agents with an agent-oriented software development approach with required adaptiveness and precision;
3. Usability: the effort and rationality required for humans to interact with the agents and to perform defined goals in an intelligent manner;
4. Maintainability: the effort required to locate and fix an error in the system;
5. Portability: the effort required to transfer the system from one environment to another whilst maintaining the same intelligent features that the system provides.

The quality goals for the processes adopted by Daedalus are:

1. Efficiency: the effectiveness to which the process will help to complete certain tasks in a timely manner;
2. Flexibility: the degree to which the process can accommodate ease of performing the required actions via variable means;

1.6 Personnel

1.6.1 Development Team

Name	Login ¹	Phone no.
Carol Poon	cyspoon	0401-959-660
Dominic Mendonca	dxm	0411-093-253
Glenn Fry	gmfr	0418-372-176
Simon Youn	hjsy	0403-438-830
Jian Alan Huang	jhua	0402-001-910
Kieran Simpson	kieranjs	0412-821-128
Masyuri Tjhandana	masyurit	0413-150-311
Mei Ling Leong	mleong	0413-689-314
Nathaporn Eiamvittayakorn	neiam	0407-565-824
Quyen Quach	qlq	0412-122-031
Shirley Soon	sasoon	0407-552-338
Wendy Tsang	wwtsang	0412-049-823
Ivan Wong	ywong	0411-863-261

Table 1: Development Team

2

1.6.2 Supervisor

Kendall Lister
 Department of Computer Science and Software Engineering
 University of Melbourne
 krl@cs.mu.oz.au

²Email addresses of team members can be derived from the user's login name by appending @students.cs.mu.oz.au.

1.6.3 Clients

Leon Sterling
Department of Computer Science and Software Engineering
University of Melbourne
leon@cs.mu.oz.au

Thomas Juan
Department of Computer Science and Software Engineering
University of Melbourne
tlj@cs.mu.oz.au

1.7 Definitions and Acronyms

1.7.1 Definitions

Guidelines

Non-strict processes that members will not be penalized for by not following. However they are created for individual benefit and the benefit of the team.

Procedures

Strict processes that members must follow to achieve a specific goal contributed towards the final outcomes of the project.

Baseline

A work product that has been formally reviewed and accepted by the involved parties. A baseline should be changed only through formal configuration management procedures. Some baselines may be project deliverables while others provide the basis for further work.

Milestone

A scheduled event used to measure progress. Examples of major milestones for software projects may include an acquirer or managerial sign-off, baselining of a specification, completion of system integration, and product delivery. Minor milestones might include baselining of a software module or completion of a chapter of the user's manual.

Single Point of Control

Control each design decision from exactly one place.

`$GROUP`

`/home/se440/s440gf`

`$GROUPCVS`

`/home/se440/s440gf/Repository`

`$GROUPWWW`

`http://www.cs.mu.oz.au/SE-projects/s440gf`

1.7.2 Acronyms

<i>CVS</i>	Concurrent Versions System
<i>IEEE</i>	Institute of Electrical and Electronic Engineering
<i>RAP</i>	Review and Audit Plan
<i>RMP</i>	Risk Management Plan
<i>SADD</i>	Software Architecture Design Document
<i>SCMP</i>	Software Configuration Management Plan
<i>SDD</i>	Software Design Document
<i>SPMP</i>	Software Process Management Plan
<i>SQAP</i>	Software Quality Assurance Plan
<i>SRS</i>	Software Requirements Specifications
<i>SVVP</i>	Software Verification Validation Plan
<i>SVVR</i>	Software Verification Validation Report
<i>TM</i>	Traceability Matrix
<i>TP</i>	Test Plan
<i>UD</i>	User Documentation
<i>V&V</i>	Verification and Validation
<i>433-440</i>	The Advanced Software Engineering Project offered to fourth year Software Engineering students b

1.8 Reference Documents

The following documents should be read in parallel to assist the understanding of this document.

1. Team Daedalus Risk Management Plan (RMP)
2. Team Daedalus Software Configuration Management Plan (SCMP)
3. Team Daedalus Software Quality Assurance Plan (SQAP)
4. Team Daedalus Software Validation and Verification Plan (SVVP)

1.9 References

1. IEEE Std 1058.1-1997 IEEE Standard for Software Project Management Plans
2. Software Project Management Plan, Team Atomic, 2003

2 Project Organisation

This section

1. describes the processes and structure according to which the team is organised;
2. identifies and describes organisational boundaries and responsibilities for major project roles.

2.1 Organisational Structure

This section outlines the organisational breakdown structure of the team.

In order to carry out more specific tasks related to particular areas of the project, team Daedalus is further decomposed into the following sub-teams:

1. Administration Team³
2. Quality Assurance Team⁴
3. Risk Team⁵
4. Requirement Team⁶
5. Research Team⁷

Other sub-teams may be created as needed. Refer to section 2.2.1 for sub-team creation procedures.

See Figure 1 for a graphical representation of the organisational structure.

Each sub-team will have a leader, who also acts as a representative for their sub-team to the Administration sub-team. Hence, the Administration sub-team consists of the Project Manager and the leaders from those sub-teams which are active. The leader of the Administration sub-team is the Project Manager.

See Figure 2 for a graphical representation of the structure of the Admin Team.

It is expected that the Administration Team, Quality Assurance Team and the Risk Management Team remain relatively permanent during the course of the project, while all other teams may be suspended and reactivated depending on the phase of the project. Refer to section 2.2 for sub-team creation and suspension procedures.

2.2 Sub-team Organisation Procedures

During the course of the project, it may be necessary that sub-teams be created in order to complete specific tasks related to particular areas of the project.

The following sections details the procedures to be followed to:

³This sub-team was formed on 10th March 2004

⁴This sub-team was formed on 10th March 2004

⁵This sub-team was formed on 10th March 2004

⁶This sub-team was formed on 10th March 2004

⁷This sub-team was formed on 10th March 2004

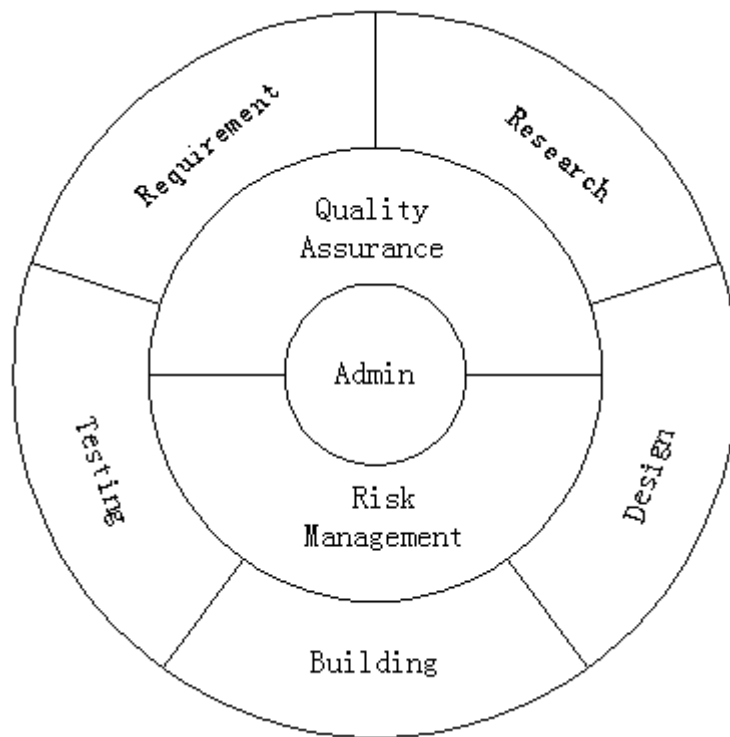


Figure 1: The Organisational Structure for Team Daedalus

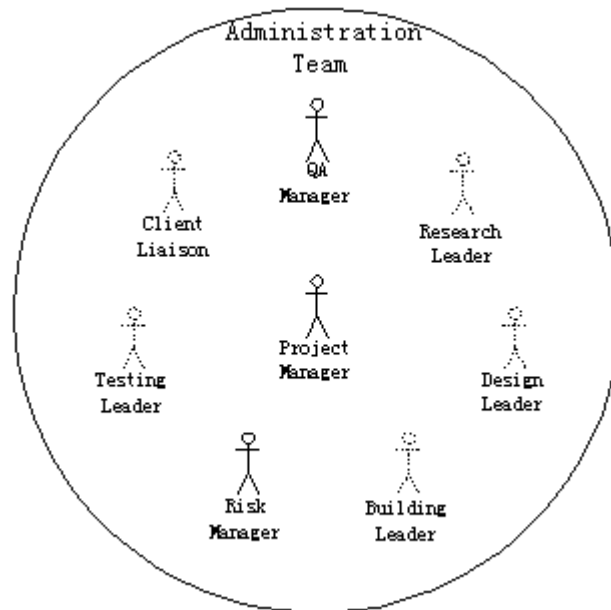


Figure 2: The Structure of the Admin Team

1. create a sub-team,

2. decompose a sub-team,
3. suspend a sub-team and
4. reactivate a sub-team.

2.2.1 Sub-team Creation Procedure

For the duration of the project, any team member may initiate the creation of a new sub-team.

Sub-team creation will require the subsequent procedure:

1. Any team member can initiate the creation of a new sub-team proposal.
2. Initiation proposals for sub-team creation will be sent to the PM via email, or during any meeting where the PM is present.
3. If proposal is sent via email, the tag [440 Admin] must be used. The email subject heading must specify the request for sub-team creation.
4. The proposal will be raised during the Admin Sub-team Meeting by the PM, including any related issues.
5. The Admin Sub-team will vote to decide whether to approve the creation.
6. If the decision is finalised during the Admin meeting, the PM is responsible for documenting the decision in the decision log with adequate justification on why the sub-team is created. (Refer to section 6.3.1 for decision logging related procedures.)
7. If the creation has been approved, the creation of the new sub-team is notified to the team via email, using the tag [440 General] or will be added to the agenda to be announced during the team meeting to give the team the opportunity to apply for the proposed roles.
8. Once the creation has been notified, members can then be nominated for the news roles in the team just created, either during the team meeting or via email.
9. The new sub-team leader and his/her sub-team members must state their roles and responsibilities at this stage of sub-team creation. They shall send the list of responsibilities to [440 QA] so the QA sub-team can document them into this document.
10. The QA manager is responsible for ensuring that changes are documented if necessary to reflect the new team structure.

2.2.2 Sub-team Decomposition and Recomposition Procedures

If necessary, sub-teams may be further decomposed into a number of smaller sized teams in order to carry out more specific tasks. Decomposing usually brings about more specialised, coherent and better coordinated sub-teams.

Sub-team decomposition will follow the subsequent procedure:

1. All sub-team leaders are able to, at any time, decompose the sub-team into smaller sub-teams for carrying out specific tasks.

2. Sub-team leaders should discuss the decomposition among all relevant sub-team members including the new structure of the sub-team. They should also inform which team each member will belong to when the sub-team is decomposed.
3. Once the decomposition is agreed on, it is the sub-team leader's responsibility to document the decision in the decision log with adequate justification on why the sub-team is decomposed, following the decision logging related procedures and the template as specified in section 6.3.1.

The decision of recomposition of the team is reached when the aim's of the decomposed sub-team is accomplished. The structure of the sub-team before decomposition has taken place will re-apply, if not stated otherwise.

2.2.3 Sub-team Suspension and Reactivation Procedure

Any team member can initiate the suspension of a sub-team, once the sub-team has fulfilled its roles and completed its tasks, becoming redundant. The suspended team may be reactivated at a later stage if required.

Sub-team suspension will follow the subsequence procedure:

1. The suspension proposal should be discussed among all sub-team members during either sub-team meeting or via email.
2. The proposal will be raised during an Admin Meeting to be discussed and to notify other Admin Sub-team members. This will also give the sub-team leader a chance to communicate and clarify any queries about this decision.
3. The Admin Sub-team will vote to decide whether to approve the suspension where necessary.
4. If the suspension is approved, resource redistribution issues will then be discussed by the Admin Sub-team. If no conflict exist, the resources will be redistributed evenly into all remaining sub-teams.
5. If the decision is finalised during the Admin meeting, the relevant manager is responsible for documenting the decision in the decision log with adequate justification on why the sub-team is suspended. (Refer to section 6.3.1 for decision logging related procedures.)
6. The suspension will be announced to the team via email using [440 General] tag.
7. The QA manager is responsible for documenting such changes in this document to reflect the new team structure.

Any sub-team that has previously been suspended can be reactivated if necessary. Reactivating a sub-team should follow the same procedures as creating a new sub-team (as defined in section 2.2.1) with the exception that old roles will be reassigned to sub-team members, if not specified otherwise.

2.3 Project Sub-Team Missions and Responsibilities

This section will detail the mission statements and responsibilities of team members and each sub-team.

2.3.1 Team Daedalus

“We aim to develop professional skills needed for our software engineering career. We endeavour to work professionally, efficiently and collaboratively, strive to maintain team members involvement in the project at a high and even level, and at the same time, devote ourselves to bring to our clients a successful completion of a quality product that meet their needs.”

All members of Team Daedalus are responsible for:

1. checking team related email at least twice a day during weekdays and at least once per day during weekends as a guidelines;
2. attending all team and sub-team meeting as required;
3. being punctual to meetings or notify the Chairperson in advance for being absent or late to meetings;
4. committing a minimum of 15 hours a week for Team Daedalus’ workload;
5. fulfilling the assigned roles’ responsibilities as specified in Team Daedalus SPMP;
6. contributing to various tasks of Team Daedalus as assigned by the Project Manager and all sub-team leaders;
7. updating the progress of tasks to the task assigners;
8. notifying the delay and request for the extension of tasks with reason to the task assigners;
9. adhering to standards, practices and conventions outlined in the relevant documents;
10. suggesting changes to processes if any inefficiency is detected;
11. completing tasks that are assigned on time;
12. pro-actively identify risks associated with all aspects of the project, and contribute to the development of mitigation and management strategies for these risks;
13. attending social events organised by Team Daedalus members.

2.3.2 Administration Team

“We identify and manage milestones, schedule activities and organise scarce resources for Team Daedalus to carry out in order to ensure successful completion of the Intelligent Lifestyle Project.”

The Administration sub-team consists of all sub-team leaders as well as the PM. The Administration Team is responsible for:

1. high level planning and scheduling for the project. This may include top level project planning activities and management issues regarding the project;
2. planning, monitoring and controlling the progress of their sub-teams;
3. presenting information and issues related to the progress of their sub-teams;
4. identifying risks relating to all aspects of project;

5. identify and mitigate slippage related to all areas of the project;
6. chair and attending their respective sub-team meetings and workshops.

Note: Sub-sub-team leaders are also responsible for the same responsibility that Administration Team has.

2.3.3 Quality Assurance Team

“We are dedicated to establish, educate and enforce auditable processes to be followed by Team Daedalus to enhance the efficiency of activities performed and improving the standards used throughout the Intelligent Lifestyle Project.”

The main aim of this sub-team is to ensure a quality product will be delivered to the client. Please refer to section 1.5 for quality goals. The Quality Assurance Team is responsible for:

1. developing processes and standards that the team will follow;
2. recording these processes and standards into relevant documents;
3. promote process awareness and conformance among the team;
4. monitoring process adherence among the team by periodically performing mini audits;
5. notifying team members and provide advice if they have not been following procedures and standards;
6. assessing effectiveness of the current processes, practices and standards;
7. organising and conducting various verification and validation activities;
8. maintaining the SQAP, SCMP, RAP, SPMP, SVVP and Traceability Matrix;

2.3.4 Risk Management Team

“Our mission is to find sources of danger in the Intelligent Lifestyle Project and lead Team Daedalus to actively participate in eliminating and destroying them.”

The Risk Management Team is responsible for:

1. develop mitigation and management strategies for risk;
2. create and maintain Risk Reports;
3. create Expired Risk Reports;
4. maintain Risk Log;

Refer to RMP section 2 for the description.

2.3.5 Requirements Team

“By negotiating the requirements with the Clients of the Intelligent Lifestyle Project, we will elicit a precise and complete set of requirements and describe them accurately and correctly using the ROADMAP methodology, as well as ensure that they are feasible for Team Daedalus to implement.”

The Requirement Team is responsible for:

1. keeping the client informed about the project progresses;
2. conveying information from the client to the team and vice versa;
3. organising and preparing for and attending client meetings;
4. developing and maintaining the SRS;

2.3.6 Research Team

The Research Team is responsible for:

1. identifying research topics when necessary;
2. researching potential technologies, methodologies and software to be used for the project;
3. researching topics that are identified that are within the scope of the project;
4. recording the research findings into research reports and ensuring that this information is available to all team members through the use of CVS;
5. presenting the contents of the research reports at meetings (team and sub-team) and also training workshops;
6. attending research related meetings.

2.3.7 Design Team

The Design Team is responsible for:

1. designing overall architecture of the system according to requirements;
2. creating detailed design of the architecture for the system;
3. communicate the design of the system to other team members when necessary;
4. developing and maintaining the SADD, SDD.

2.3.8 Testing Team

The Testing Team is responsible for:

1. choosing implementable testing techniques for the testing activities to be performed;
2. creating test cases and executing them to quantitatively test the system;
3. creating test reports that summarises results from testing activities;

4. informing coders of bugs to be fixed;
5. monitoring the number of defects found over time and controlling them in order to minimise amount of faults in the system.

2.3.9 Implementation Team

The Implementation Team is responsible for:

1. creating well documented codes;
2. adhering to coding conventions specified;
3. informally testing own codes to avoid bugs during formal testing activities.

2.4 Leadership Roles and Responsibilities

This section details the roles and responsibilities of managers for Team Daedalus.

2.4.1 Project Manager

The Project Manager shall:

1. maintain and update the project plan on a weekly-basis;
2. organise and chair team meetings and admin meetings;
3. plan, monitor and control the progress of the project;
4. act as a role of liaison between the team and the supervisor. Project Manager shall report progress to the supervisor and acquire his advice on issues regarding the project if necessary;
5. allocate and rearrange necessary resources for the sub-teams to carry out their tasks. These may include technical, physical and human resources;
6. allocate tasks that are regular on a weekly basis to sub-team leaders and relevant team members.

2.4.2 Client Liaison Officer

The Client Liaison Officer shall:

1. act as the point of contact between the team and the clients;
2. organise client meetings with the clients;
3. maintain communication between the team and the clients, and updating the clients on the development progress of the project;
4. manage the creation of the SRS;
5. lead the requirements elicitation process, including requesting research tasks to requirements team members. These research tasks may refer to research into methodologies to help elicit requirements more efficiently, or feasibility study.

6. be responsible for eliciting requirements that are feasible for Team Daedalus to complete, by researching and prototyping;
7. maintain the SRS once the Requirements sub-team is inactive.

2.4.3 Quality Assurance Manager

The Quality Assurance Manager shall:

1. coordinate and oversee the development of the process related documents including SPMP, SQAP, RAP, SCMP and SVVP;
2. coordinate and oversee the development of standards and processes to be adopted by Daedalus;
3. regularly coordinate and oversee the efficiency evaluation of the processes defined in process related documents to improve existing processes;
4. inform members of Team Daedalus of new changes in processes via emails or meetings;
5. attend and quality assurance related meetings.

2.4.4 Risk Manager

The Risk Manager shall:

1. evaluating, analysing and updating the team mitigating strategies, monitoring and management of risks;
2. collecting the information of identified risks and analyse them;
3. finalising decision on mitigation and management strategies for risk;
4. review risks at least once a week and monitor them;
5. attend and chair Risk Sub-team meetings;
6. create and maintain the RMP;
7. plan and ensure that verification and validation activities for RMP are scheduled and carried out.

2.4.5 Human Resource Manager

The Human Resource Manager shall:

1. conduct performance appraisal and evaluation;
2. devise rewards schemes to motivate team members;
3. resolve conflicts among team members;
4. keep track of team members' involvement level;
5. schedule meeting times outside regular weekly meetings if requested by sub-team leaders;
6. maintain web calendar on the team's web site;

7. assess team members' availability to schedule meetings;
8. assess individual skills;
9. identify new roles.

2.4.6 Research Leader

The Research Leader shall:

1. coordinate the research, prototyping and coding activities of the team throughout the year;
2. oversee the production of the Technology Report;
3. report to the requirements team the feasibility of completing the requirements obtained from the client after prototyping;

2.4.7 Design Leader

The Design Leader shall:

1. perform research into relevant design architecture to be used for the implementation of the system;
2. coordinate design activities;
3. oversee the development of the architecture and detailed design of the system;
4. attend and chair Design sub-team meetings and workshops;
5. create and maintain the SADD.

2.4.8 Implementation Leader

The Implementation Leader shall:

1. coordinate implementation activities to be performed for the system;
2. attend and chair Implementation sub-team meetings and workshops.

2.4.9 Test Manager

The Test Manager shall:

1. coordinate testing activities to be performed for the system;
2. organise resources needed for testing activities;
3. perform research into relevant testing techniques, tools and methodology to be used;
4. attend and chair Testing sub-team meetings and workshops.

2.4.10 Release Manager

The Release Manager shall:

1. plan and estimate effort for all activities pertaining to release engineering;
2. monitor and control the progress of all release engineering tasks;
3. ensure that all deliverables and products met release criteria, the requirement and the quality as specified in Team Daedalus SRS;
4. integrate all release elements and be responsible for final packaging of the deliverables and products;
5. coordinate and assist with Industry night and Endeavour coordinators in distribution of media and channels required for releasing the products and deliverables.

2.4.11 Document Maintainer

The Document Maintainer shall:

1. be responsible for the creation, storing, compiling (if applicable) and version controlling of the specific document;
2. be responsible for requesting for reviews of the document as well as baselining of the document;
3. be responsible for making baselined document accessible to the team via the team web site;
4. be aware of any changes that will affect the contents of the document and perform regular update on the document under maintenance if any changes are identified;

2.4.12 Librarian

The Librarian shall:

1. manage and maintain hard copy artifacts which includes manuals, hard copy documents, meeting agendas, design notebook, hard copy reviews and hard copy time sheet;
2. document all design decisions in the Design Notebook;
3. update the Design Notebook both hard copy and soft copy;
4. maintain CVS, following the conventions stated in the SCMP with the help of the Technical Guru;
5. create backup processes, conduct weekly backups and make sure backups are working well.

2.4.13 Logistic Manager

The Logistic Manager shall:

1. maintain team's account;
2. maintain team's food supply;
3. maintain team locker.
4. collect the list of members to fine at the start of each month and issues these fines.

2.4.14 Technical Guru

The Technical Guru shall:

1. attempt to help any team member with any computing related query;
2. manage any technical aspects of the Teams project space including setting up CVS, and any subsequent databases.

2.4.15 Verification and Validation (V&V) Manager

The V&V Manager shall:

1. maintain the SVVR;
2. communicate with all sub-team leaders of the V&V activities planned during each iteration and their result and outcome;
3. collect and document the detail of V&V activities planned in the SVVR;
4. collect and document the results and outcomes of all V&V activities planned in the SVVR;
5. notify relevant sub-team leaders to produce the iteration report at the end of every iteration;
6. ensure that following up are done for each V&V activities;
7. ensure that V&V activities plan are carried out by responsible members;
8. ensure that the V&V activities done are following the process stated in the SVVP and RAP by regularly communicate the V&V processes documented and their update and inform the team when the processes are not being followed;
9. regularly coordinate and oversee the efficiency evaluation of the V&V processes defined in the SVVR and RAP to improve existing processes.

2.4.16 Web Master

The Web Master shall:

1. create and maintain the team web site throughout the project's lifetime, located at:

\$GROUPWWW

2. regularly updating the web, at least once a day;
3. upon a request, put up a new link / adding a new content to the web site;
4. advice any web-related problem to other team members;
5. ensure that the web is not being misused by any external users (non-team members)

2.4.17 Endeavour Day Coordinator

The Endeavour Day Coordinator shall:

1. plan, organise and coordinate the demonstration of our project at Endeavour day 2004, October 27;
2. collaborate with Industry Night Coordinator and other team members to ensure that the demonstration runs smoothly as required;
3. keep the team informed with the progress of the preparation;
4. liaise with the Endeavour 04 team with regards to anything that is related to our project.

2.4.18 Industry Night Coordinator

The Industry Night Coordinator shall:

1. ensure that all the material required for the presentation are ready before the Industry Night;
2. coordinate with the Endeavour Day coordinator in preparing for the demonstration;
3. report to the team the progress of the preparation;
4. be aware of any changes that will affect the presentation of the Industry Night;
5. monitor the progress of all the industry night related tasks;
6. ensure the team have a clear idea for the content of the industry night.

3 Managerial Process

This section of the SPMP specifies the tools and processes related to project management, including:

1. project planning and
2. task tracking

3.1 Project Planning

This section describes the tools and processes related to project planning.

3.1.1 Project Plan

The creation and maintenance of the project plan is the responsibility of the Project Manager, who may delegate this task to sub-team leaders for more detailed planning for their own sub-teams. The project plan will be used primarily for high-level planning and scheduling.

Team Daedalus' project plan will be created in the form of a Gantt Chart using MS Project 2002/2003. The project plan can be found in

`$GROUPCVS/Management/Project_plan`

For easy update and maintenance, the main project plan (`project_plan.mpp`) will be decomposed into a number of sub documents:

1. `project_plan_qa.mpp` – for planning quality assurance related activities.
2. `project_plan_research.mpp` – for planning research related activities.
3. `project_plan_req.mpp` – for planning requirement related activities.
4. `project_plan_design.mpp` – for planning design related activities.
5. `project_plan_impl.mpp` – for planning implementation related activities.
6. `project_plan_test.mpp` – for planning testing related activities.
7. `project_plan_release.mpp` – for planning release related activities.

This major plan should be configured in a way that it includes the sub-plans by linking to them. In this way, any changes made in the sub-plans are reflected in the major plan without having to change the major plan and vice versa, which reduces the overhead of having to copy the contents to and from the sub-plans, and thus facilitates concurrent maintenance.

The sub-plans must use the same template for consistency in terms of representation of the plan. This also complies to the principle of Single Point of Control thus enhances maintainability. The template will be in MS Project template format (`.mpt`) and can be found in

`$GROUPCVS/Document/Template`

The Gantt Charts in the sub-plans will be presented using colors different from each other for the ease of distinguishing between activities in different areas of the project.

3.1.2 Project Planning Process

High level project planning is made during weekly Admin Meetings.

As a guideline, prior to a weekly Admin Meetings, sub-team leaders are required to:

1. be aware of the top 5 risks affecting the project as well as all risks related to the Admin Team (refer to RMP section 4.1 for accessing risk log via the team web site);
2. prepare to report on the progress of their sub teams, including:
 - (a) major activities being carried out during the week;
 - (b) any occurred/potential slippage;
 - (c) likelihood of meeting future milestones;
 - (d) modifications to milestones if necessary;
3. prepare to discuss the plan for the coming week;

It is the responsibility of the Project Manager to bring a copy of the current project plan to the meeting.

As a guideline, during Admin Meetings, sub-team leaders are expected to:

1. report to the Admin Team the progress of their sub-team;
2. discuss the schedules for the following week;
3. negotiate and request additional resources to carry out their tasks if necessary;

After the Admin Meeting, sub-team leaders are required to:

1. come up with detailed plans for their sub-teams with all tasks identified for the coming week;
2. allocate those tasks in NetOffice to their sub-team members within 12 hours; (Refer to section 3.2.2 for task allocation procedures)

The Project Manager is required to:

1. allocate all other tasks that are regular on a weekly basis to relevant team members; A list containing weekly tasks can be found at:

`$GROUPCVS/Management/Task_report/weekly_tasks.txt`

2. update the resource allocation chart on the team web site. (Refer to section 4.2 for Resource Conflict Resolution Plan)

3.1.3 Communicate the Project Plan

The project plan is communicated across the project team mainly in three channels:

1. The Project Manager and sub-team leaders are responsible for communicating the overall project plan across the Admin Team.
2. Sub-team leaders are responsible for communicating within the sub-team the specific schedules related to their sub-teams.
3. The project plan should also be available in both tabular and Gantt Chart format from the team web site at:

`$GROUPWWW/project_plan/project_plan.html`

`$GROUPWWW/project_plan/project_plan.gif`

3.2 Task Management

Assigning tasks and being able to keep track of them are integral components of the project and thus having a decisive effect on project success. This section defines the processes and procedures Team Daedalus will follow to identify, allocate, trace and report tasks.

For the purpose of achieving a better task management result, Team Daedalus has adopted the NetOffice Online Project Management System ⁸ for its task management activities (Refer to section 5.2.1 a further description). As a result, the description of the task management process will refer closely to the usage of this system. The NetOffice system can be accessed from

`http://lab0213pos01.cs.mu.oz.au/no_s440gf/general/login.php`

3.2.1 Task Identification

Tasks can be identified either during or after meetings by any team member. Generally speaking, the person who identifies the task is responsible for creating the task using NetOffice, except when task is identified during team meetings, in which case the team leader will be responsible for creating that task.

While the task is being created, the following steps must be followed:

1. Add a new task under the relevant “project”⁹;
2. specify the name of the task;
3. give a brief description of the goal of the task, i.e. what needs to be achieved for the task to be considered finished;

After the task has been created, the relevant sub-team leader or the PM should be notified, except when the person is him/herself the sub-team leader or the PM, in which case he/she should allocate the task to a team member following the Task Allocation procedures defined in section 3.2.2.

⁸This system is formally introduced to the team on 5th April 2004. This system will be referred to as NetOffice for short in this document.

⁹Due to the limitation of the NetOffice system, a project can not be decomposed into various phases that suit the needs of the team, therefore multiple projects are created to achieve a better grouping of tasks

3.2.2 Task Allocation

Tasks can only be assigned to other team members by either sub-team leaders or by the Project Manager. The only exception is when somebody wants to allocate task to him/herself.

After a task has been identified and subsequently created, it is the sub-team leader's responsibility to make sure the task is assigned to a team member to carry it out.

When assigning tasks to team members, the assigners¹⁰ must log on to NetOffice and specify:

1. the person to whom the task is assigned;
2. the start date of the task;
3. the due date of the task;
4. expected length of the task.

The assigner also needs to change the Status of the task from "Not Started" to "Open".

A task must not have the expected length longer than one week. Otherwise, it must be further decomposed into sub-tasks and then assign to team members.

3.2.3 Task Recording

Before any online task tracking system has been introduced¹¹, Team Daedalus will use timesheets for recording time spent on tasks. Every team member will maintain an individual timesheet in

`$GROUPOCVS/Document/Timesheet`

which must be updated no less than once every week and no later than 10pm every Sunday evening. The timesheet should contain the following information:

1. task name;
2. by whom the task is allocated;
3. task goal;
4. start date;
5. finish date;
6. time spent

Refer to Appendix [A.2](#) for the task tracking timesheet template.

¹⁰ For convenience, the person who allocates task to others will be referred to as the "assigner", likewise, the person to whom a task is assigned will be referred to as the "assignee" throughout this section.

¹¹The NetOffice Online Project Management System is formally adopted by the team on 5th April 2004. This procedure thus no longer applies after that date.

3.2.4 Task Tracking

Being able to keep track of each task's status is an important component of task management activities. For this reason, it is required for team members to keep regular logs about how their tasks are being carried out.

1. For any task, it is required for the person who carries out the task to record soon as the task has been finished, including the total number of hours spent on the task.

3.2.5 Task Reporting

It is very important for the team leaders to be constantly notified of the progress of the task currently being undertaken. Therefore, for tasks that take longer than 5 days, it is crucial for team member to report back via email half way through the task to the team leader by whom the task is allocated, unless tasks are finished before those days. It must be made clear what has been achieved so far, and likelihood on meeting future goals on time.

Under any circumstances, failing to finish task allocated on time should be avoided. At any time, as soon as any potential slippage is identified, before the expected finish date, team member should notify the team leader of the situation, clarify the situation and request for extension.

The Project Manager should prepare a weekly report on time devotion in carrying out project tasks for every team member. This report will be sent to the entire team, including the supervisor. It should also be stored under:

`$GROUPCVS/Management/Task_report/`

For the purpose of assessing and ultimately improving project planning accuracy, the weekly task report produced by the Project Manager will also provide the following information:

1. Tasks allocated at start of week;
2. Tasks allocated during week;
3. Tasks expected to be completed (with estimated effort);
4. Tasks actually completed (with actual effort);
5. Estimated effort vs actual effort;

4 Human Resource Process

Due to the scarcity of human resources available to the project, being able to:

1. keep track of the human resources available;
2. distribute human resources in an efficient way;
3. monitor human resource utilization;

are key components to the success of this project. This section details the major processes for Human Resource Management adopted by the Team Daedalus to meet the above objectives.

4.1 Monitoring Availability

Being able to forecast, monitor and control individual availability for project work is the precondition for effective usage of the available human resources, and thus a important component of Human Resource management.

4.1.1 Availability Matrix

By publishing and monitoring individual team member's available time slots, we aim at minimising the overhead of scheduling group activities, such as team meetings and workshops.

The following processes are to be followed for collecting and updating this information:

1. A table containing each team member's timetable should be published on the team web site. This table should contain for each team member, what time slots they available.
2. Team members are responsible to update their availability matrix on the website every week on either Friday, Saturday or Sunday.
3. Team members are required to notify the HR Manager once they've updated their availability matrix via email by midday of Sunday at the latest (12pm).
4. Team members should use the email tag [440 HR] to notify the HR Manager, with the subject of the email as *AM Update*. All but the HR Manager needs to do this.
5. In the email, team members should follow the availability matrix update notification email template from \$GROUPCVS/Template/template_hr_avai_email.txt.

4.1.2 Availability Chart

By publishing and monitoring individual team member's available hours for project work, we aim at a better utilization of available human resources and to overcome the following problems:

1. Scarce human resources are not utilized evenly and effectively.
2. Lack of information about people's available hours to be used when assigning tasks.

The processes below are to be followed for collecting and updating this information:

1. A chart containing each team member's available hours for the current week should be published on the team web site.

2. When tasks are allocated to a team member, the assigner of this task should notify the HR manager via email specifying the assignee of the task and the total hours assigned.
3. The HR manager is required to update this information on the web site.
4. As a guideline, it is every team member's responsibility to check this information regularly and identify any incorrectness, in which case, he/she should notify the HR manager with sufficient proof for a correction.

4.2 Resource Conflict Resolution Plan

Due to the fact that Daedalus team members are often involved in multiple sub-teams when performing their roles during the course of the project, conflicts will inevitably arise when two (or more) activities compete for the same resources. This may lead to critical tasks not having enough resources to be carried out.

To resolve conflicts and to prevent conflicts from occurring at the first stage, the following steps are to be followed:

1. Before weekly admin meeting, sub-team leaders are required to estimate the workload of their sub-teams in terms of hours.
2. The Project Manager is required to prepare a resource distribution chart containing the latest information on team members' involvement in different sub-teams and bring it to the weekly admin meeting.
3. During the weekly admin meeting, a consensus must be reached on the priority ranking of all sub-teams for the coming week.
4. Sub-team leaders may request for additional resources and if no conflicts exist, the distribution chart will be re-adjusted.
5. If any two (or more) requests impact the same resource leads to a conflict, the sub-team with the higher priority will be satisfied first.

The resource distribution chart is available on the team web site at:

`$GROUPWWW/distribution.mht`

4.3 Team Motivation Plan

This section documents the plan that Team Daedalus will use to motivate its team members. This system is called "The Honour Board". This policy¹² was initiated because it has been realized that it is crucial to the success of our project to maintain a high level of initiative and motivation across the team.

¹²Established on 22nd April 2004

4.3.1 Rules of the Game

The aim of this game is to collect as many points as possible. The rules of the game are:

1. Every team member is a participant of the game.
2. The maximum number of points that can be collected is +10.
3. The minimum number of points that can be collected is -10.
4. Each team members starts of at the neutral point, 0.
5. Team members who have positive points are in the 'good' side, whereas team members who have negative points are in the 'bad' side'.
6. The criteria to collect a good point and a bad point is documented in section [4.3.2](#) and section [4.3.3](#).
7. When a team member collects a good point, his/her pointer will move one unit towards the positive direction. When a team member collects a bad point, his/her pointer will move one unit towards the negative direction.
8. This is a continuous game, good and bad points can be given to a team member any time the criteria is met.
9. The Human Resource (HR) Manager is responsible to update the "Honour Board".
10. The team member who reaches the maximum +10 points first will get a prize.
11. The a team member who has the least points (and is also in the 'bad' side) for three consecutive weeks will be referred to the Supervisor for further action.

4.3.2 Criteria for Good Point

1. A team member does more than 15 hours of project work in a week.
2. A team member successfully destroys a risk (evidence must be shown to and approved by the Risk Sub-team).
3. A team member assigned the task of destroying a risk has shown evidence to the Risk Sub-team that the exposure of the risk is decreasing at each time interval.
4. A team member who has successfully initiated three improvements to the team processes.

4.3.3 Criteria for Bad Point

1. A team member does less than 10 hours of project work in a week.
2. A team member being absent from a meeting without notification.
3. A team member is late for a meeting for more than 10 minutes.
4. A team member fails to complete the mission of destroying a risk which is assigned to him/her.
5. A team member does not know what is the top risk at the moment when questioned by the Risk Manager during on-spot check during meetings.

4.4 Punctuality Policy

The main purpose of introducing the Punctuality Policy is to encourage team members to be punctual. Not only does being late to meetings reduce team productivity and efficiency, it also hurts team morale. Therefore, being late or absent from team meetings without prior notification is unacceptable by Team Daedalus.

The Punctuality Policy is as follows:

1. Being 10 or more minutes late for a meeting will result in \$1 fine.
2. Being absent from a meeting will result in a \$5 fine.
3. Fines can be avoided by notifying the meeting's Chairperson by email or phone prior to the commencement of the meeting. The reason for the lateness or absence must be stated.
4. The name of the offenders will be recorded in meeting minutes for later reference. Refer to SQAP section 4.1 for meeting related procedures.

4.4.1 Collecting Fines

On the first Monday of every month, the sub-team manager is responsible for gathering all fines relevant to their sub-team. Meeting minutes and workshop logs will be used to determine the fines that need to be paid. Sub-team leaders shall send the list to the Logistic Manager and she will collect money from the offenders and will be placed in the team locker.

5 Technical Process

This section of the SPMP specifies the development process model, the technical methods, tools, and techniques to be used to develop the various work products.

5.1 Process Model

This section details the process model Team Daedalus has chosen to accomplish the Intelligent Lifestyle project, together with the justification of the choice.

5.1.1 Reality Summarization

Some aspects of the project have important impact on the process model to be adopted by the project team, including:

1. the clients' requirements are vague;
2. the technical risks associated with the project are high;
3. the development team's familiarity with developing agent-based system is low.

Therefore, the team should organise its development activities in an iterative way such that the whole development course is decomposed into smaller and more manageable components so that

1. the sub-problem which has the highest associated risk is identified and solved first;
2. crucial activities, such as design, can be repeatedly refined before the whole system is delivered;
3. the 'Big Bang' effect, i.e. for a long time nothing happens and then a completely new situation all of a sudden, is avoided;
4. risk of being unable to deliver is greatly diminished for the system is developed incrementally.

Many aspects of the project also require prototyping to be carried out during the early course of the project, including:

1. the clients' requirements are not sufficiently accurate;
2. the clients need a better impression of the system before a large investment is made;
3. numerous technologies are involved, which members of the team aren't familiar with;
4. the developers need a better understanding of the feasibility of clients requirements;
5. the clients will be constantly available.

5.1.2 Process Model Description

The process model Team Daedalus adopts consists of essentially three iterations throughout the project.

1. During the first iteration, namely Prototyping, main focuses will be requirement gathering and feasibility analysis. The aim of this iteration is to elicit a firm set of client requirements.

2. During the second iteration, the overall structure of the system will be designed and the sub system with the most uncertainty will be implemented and tested.
3. During the third iteration, the remaining system will be designed, implemented, tested and released.

This process model is shown graphically in Figure 3.

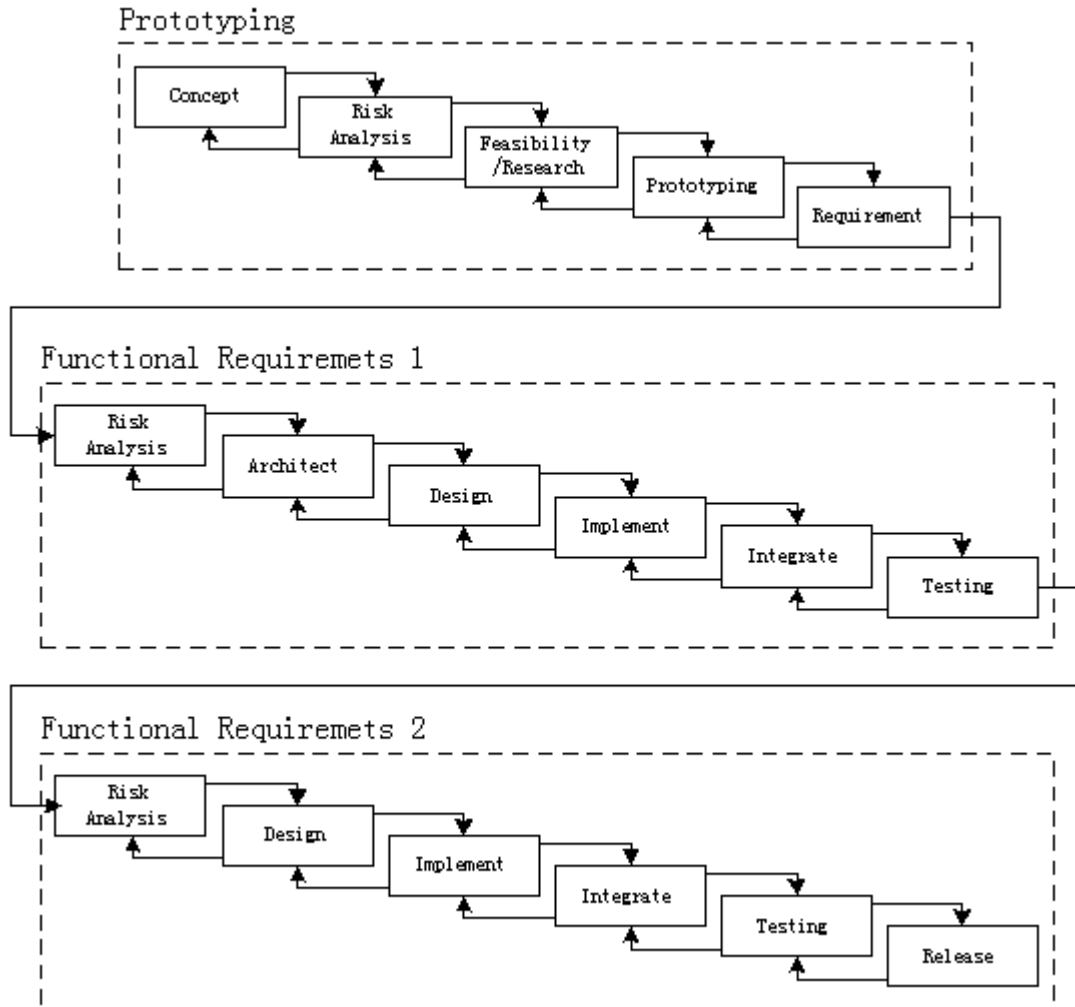


Figure 3: The Process Model Adopted by Team Daedalus

5.2 Methods, Tools, and Techniques

5.2.1 NetOffice Online Project Management System

The NetOffice Online Project Management System will be used by Team Daedalus as our task tracking system. This system provides various services that helps Team Daedalus members to achieve better individual task management and facilitates Team Daedalus' task tracking activities. Among others, it mainly allows team members to:

1. Group related tasks into “projects”;
2. Create tasks and assign them to team members;
3. Log hours spent against completed tasks;
4. Generate various reports on task related statistics.

Refer to section [3.2](#) to task management processes and procedures. A tutorial explaining how to use the basic functions of the system is available at:

`$GROUPCVS/Misc/netOffice_tutorial.txt`

6 Supporting Process

This section of the SPMP describes procedures for the supporting processes to be used by Team Daedalus.

6.1 Communication Procedure

The main channel of communications between sub-team leaders and their team members are through meetings and in workshops. These are the avenues where sub-team leaders discuss and decide on issues relevant to their sub-teams. Other possible communication channels are through emails and the team's web site, which are specified in SQAP's section 5.1 and 5.6, respectively. The following sections describe the procedures that sub-team leaders and their team members shall adhere to whilst using these two communication channels. These procedures aim to aid sub-team leaders to manage communication in a structured and professional manner.

6.1.1 Meeting Procedures

This section describes the standard for all meetings. Meetings are held in order to:

1. identify and discuss risks related to each sub-team;
2. report on task progress;
3. review progress according to project plan;
4. allocate tasks;
5. discuss any issues that require resolution from the team;
6. make decisions.

There are two types of meetings: regular and additional meetings which will be explained in the subsequent sections. Either form of meetings shall not exceed ninety minutes in duration in order to maintain efficiency. For procedures for evaluating efficiency of meetings please refer to section 4.1 in SQAP.

6.1.1.1 Regular Meetings

Each sub-team will have regular meetings conducted throughout the project to meet the objectives stated in section 6.1.1. These meetings are suggested to be held once a week as a guideline for each sub-team. Each sub-team may arrange such meeting each week at a fixed time, however these may be subject to change depending on team members availabilities.

6.1.1.2 Additional Meetings

1. Additional meetings are those that are held outside the regular meeting time and that are assigned and initiated by the sub-team leaders.
2. In the case where any additional meeting is required in addition to the regular meetings, the sub-team leader shall approach the HR Manager to work out a possible suitable time for such meeting.
3. All meeting procedures apply to additional meetings. For meeting procedures, please refer to section 6.1.1.4 and 6.1.1.6.

6.1.1.3 Quorum

The quorum is to be met prior to commencement of meetings so that decisions can be made with sufficient members present. The following are the different quorums for different types of meetings. The Supervisor and any team member can be invited to different sub-team meetings.

Type	Chairperson	Attendees	Quorum
Team	Project Manager	all members	2/3 of team
Sub-team	Sub-team leader	Sub-team members	2/3 of team
Admin	Project Manager	PM, Sub-team Leaders	PM and 2/3 of Sub-team Leaders
Client	Requirement Team Leader	Client and Requirement team	Client and 1 member

Table 2: Quorum

6.1.1.4 Pre-Meeting Procedures

1. If the meeting to be held is of a regular meeting type as stated in section 6.1.1.1 then the Chairperson shall remind and confirm the relevant team members of the meeting at least twenty-four hours prior to the meeting, using the relevant sub-team tag.
2. For additional meetings as stated in section 6.1.1.2 the Chairperson shall notify the relevant team members about the meeting at least thirty-six hours prior to the meeting via email, using the relevant sub-team tag.
3. The Chairperson must prepare an agenda for the meeting. For details of the agenda please refer to section A.2 in SQAP.
4. Not all fields in the agenda template are relevant to Client meeting due to its nature, and thus should not be discussed. In such case, the Chairperson shall specify "Not relevant" under the irrelevant items on the agenda. However the agenda template does apply to all other types of meetings.
5. The agenda is to be sent out to relevant team members via email as an attachment at least twelve hours prior to the intended starting time of the meeting.
6. The Chairperson is also responsible for checking the agenda into the repository, at least twelve hours prior to the intended starting time of the meeting, under:

\$GROUPCVS/Document/Meeting/[SubTeamName]

where [SubTeamName] is the name of the relevant sub-team. For the set of sub-team names used please refer to SQAP's 6.1.2.

7. All attendees shall read the agenda before the meeting takes place.
8. The Chairperson should also organise the venue prior to the meeting if applicable.

6.1.1.5 Inviting Supervisor to Meetings

1. Any meetings where the Supervisor is one of the expected attendees shall be arranged at least two days prior to the intended date of meeting with the Supervisor. Sub-team leader can do so by emailing the Supervisor using the [440 Supervisor] email tag to invite him to the meeting.
2. Pre-meeting procedures still apply for such meeting. Please refer to the next section for pre-meeting procedures.

6.1.1.6 Meeting Procedures

1. Every meeting must have a Chairperson and a Secretary. Refer to section 6.1.1.3 for a list of relevant chairpersons for different types of meetings.
2. The Secretary shall either be assigned by a Chairperson, or maybe volunteered by any attendees accept the Chairperson.
3. Meeting will commence after the Chairperson have checked that the quorum is met.
4. If the Chairperson is not present within fifteen minutes of the proposed start time of the meeting, attendees present may nominate a replacement chairperson. Such replacement must be documented in the "Chairperson:" section in the minutes template by tagging <REPLACEMENT> after the replacement chairperson's login. For details of minutes template please refer to section A.3 in SQAP. The replacement Chairperson shall print out a copy of the agenda, if he/she has not already obtained one.
5. If the quorum is not met after fifteen minutes of the proposed start time of the meeting, the meeting is automatically cancelled. Please refer to section 6.1.1.8 for procedure related to cancelling a meeting.
6. Any absent and late attendees must be recorded in the minutes. Please refer to section 6.1.1.9 and 6.1.1.10 respectively for documenting absence and lateness for meetings.
7. The Secretary is responsible for recording the discussions raised and any decisions made in the meeting minutes. Please refer to section A.3 in SQAP for the fields that the Secretary needs to fill in according to the minutes template.
8. The Secretary shall also be the time keeper and record time spent on each item.
9. If the meeting can not be concluded within the prescribed time, the Chairperson will either extend the meeting or postpone the rest of the agenda to the next meeting. If items are to be postponed to the next meeting, a <POSTPONED TO NEXT MEETING> tag needs to be inserted in the relevant minutes item.
10. At the end of the meeting, the Chairperson is responsible to confirm with the team members of the next meeting date, time, and venue if those information have already been decided. Please refer to the minutes template in section A.3 in SQAP.

6.1.1.7 Post-Meeting Procedures

1. The Secretary is responsible to type out the minutes of the meeting within twenty-four hours from the end of the meeting. For the minutes template please refer to section [A.3](#) in SQAP.
2. The Secretary shall check in the minutes into the following directory:

\$GROUPOCVS/Document/Meeting/[SubTeamName]

where [SubTeamName] is the name of the relevant sub-team.

3. The respective minutes is required to be emailed to the relevant team members to notify that the minute is available.
4. For Client meetings, the Requirement sub-team is required to allocate minutes review task to review the correctness and completeness of the information in the documented minutes. The minutes review task will need to be done within twelve hours after the minutes has finished. The minutes will need to be modified according to the review by the Secretary before it is emailed to the Client for confirmation.
5. For Client meetings, the Secretary is also responsible to modification the minutes if the Client has emailed to inform the team of any incorrect or misinterpreted information to keep the correct information documented in the minutes. After such modifications are done, the Secretary shall check in the latest revision of minutes into CVS.
6. As a guideline, hard copy of agendas used should be kept and will be collected by the Librarian from every sub-team leaders to be filed in the Design Notebook.

6.1.1.8 Cancellation of Meetings

1. The Chairperson may cancel a meeting when there is no additional meeting item to be addressed other than the fixed agenda items on the agenda template.
2. A meeting is automatically cancelled as a result of not meeting the quorum. For details of quorum, please refer to section [6.1.1.3](#).
3. The Chairperson must email the relevant team members to inform them about the cancellation of the meeting.
4. Minutes for the cancelled meeting must be produced. The minutes shall clearly state that the meeting was cancelled and the reasons for which it was cancelled. Refer to the minutes template in section [A.3](#) in SQAP.

6.1.1.9 Absence from Meetings

1. Any team members unable to attend the meeting shall inform the Chairperson prior to the meeting either in person or via email.
2. He/She must give the reason(s) for the absence.
3. The absentee and the reason(s) for absence will be documented in the meeting minutes. Please refer to the minutes template in section [A.3](#) in SQAP.

4. Team members that are absent from meetings are required to email their sub-team within twelve hours of the meeting containing the tasks that were completed by that team member and a response to any other item in the agenda related to him/her.
5. Those who are late for thirty minutes (or more) of the meeting will be considered as absent.
6. The Secretary for the particular meeting shall inform the HR Manager of the absentees without notification for the meeting using the [440 HR] email tag (as well as the email tag relevant to the sub-team who conducted the meeting) when he/she emails the meeting minutes to the team. For use of multiple email tags please refer to section 5.1.1 in SQAP.
7. HR Manager will issue bad point to the particular member according to the procedures stated in the Team's Motivation Plan in section 4.3. This is to encourage team members to be more professional in their attitudes towards meetings.

6.1.1.10 Lateness to Meetings

1. Attendees who are ten minutes late (or more) will be considered as late to meetings.
2. Lateness will be documented in the meeting minutes. Please refer to the minutes template in section A.3 in SQAP.
3. The Secretary for the particular meeting shall inform the HR Manager of the lateness to the meeting using the [440 HR] email tag (as well as the email tag relevant to the sub-team who conducted the meeting) when he/she emails the meeting minutes to the team. For use of multiple email tags please refer to section 5.1.1 in SQAP.
4. HR Manager will issue bad point to the particular member according to the procedures stated in the Team's Motivation Plan in section 4.3. This is to encourage team members to be more professional in their attitudes towards meetings.

6.2 Workshop Procedures

The purpose of conducting workshops is to have the team to work together in an informal manner on specific issues, and for the sub-team leaders to informally communicate to their team members. Such workshops may include, but not limited to, brainstorm sessions, design workshops or review and audit walkthroughs or training sessions. Workshop procedures are designed to be lightweight to complement the nature of this means of communication. Any working sessions that are to be over ninety minutes of duration shall be considered to be a workshop.

6.2.1 Pre-Workshop Procedures

1. Anyone may initiate workshops.
2. The conductor of the workshop may not be the initiator of the workshop.
3. The initiator shall send an email inviting the relevant members to the workshop. This email must be sent at least twenty-four hours prior to the intended time of the workshop. It shall include details and follows the workshop initiation email template at:

`$GROUPCVS/Template/template_workshop_email.txt`

6.2.2 Workshop Procedures

1. There are no formal procedures to conduct the workshop to allow the conductor the freedom to host the workshop in his/her preferred ways.
2. Notes may be taken to document what has been discussed in the workshop; these Notes do not have to be transformed into formal (soft copy) minutes.

6.2.3 Post-Workshop Procedures

1. The conductor of the workshop will need to fill in a workshop log form generalising the outcomes of the workshop. This workshop log is to be appended to the following file:

`$GROUPOCVS/Log/Workshop/workshop_log_[SubTeamName].txt`
where [SubTeamName] is the name of the relevant sub-team.

2. The template for the workshop log can be found at:

`$GROUPOCVS/Template/template_workshop_log.txt`

3. The conductor shall note down those who are absent or late to the workshop and email their logins to the HR Manager to [440 HR] tag (as well as the email tag relevant to the sub-team who conducted the meeting), so bad points can be issued by the HR Manager according to the Team's Motivation Plan in section 4.3. Similar to meetings this is to encourage professionalism amongst team members.

6.3 Decision Making Procedure

The decision making procedure aims to aid team members to come to a just and agreed decision on issues when opposing opinions arise. Decisions made during the course of the project will be formalised by being recorded in decision logs. Decision logs are categorised by sub-teams. Decisions shall be formalised into decision logs if the justification for the decision may potentially be referenced to in the future, or that there were several opposing but convincing rationales for the issue. Voting procedures may be used if a deadlock occurs.

6.3.1 Recording Decisions

Each sub-team leader will be allocated to perform regular maintenance and logging decisions for each decision log throughout the year. The decision logs shall reside in the following directory:

`$GROUPOCVS/Log/Decision/`

The personnel responsible for the particular decision logs are as follows:

- PM: administration decision log
- Configuration Manager: CCB decision log
- Code Leader: coding decision log
- Design Leader: design decision log

- Human Resource Manager: HR decision log
- Prototyping Leader: prototyping decision log
- QA Manager: QA decision log
- Requirements Manager: requirements decision log
- Research Leader: research decision log
- Risk Manager: risk decision log
- Test Manager: test decision log
- Web Master: web decision log

6.3.2 Voting Procedures

1. In a meeting, the Chairperson calls a majority vote on a topic. Outside a meeting, the person who initiated the decision calls a majority vote via email.
2. All participants shall indicate their stance to the others.
3. If the voting results in a deadlock, a third party (such as the Supervisor) shall be consulted.
4. Any participants may change their stance.
5. Voting concludes when majority has taken a stance.
6. The secretary of the meeting shall document the results of the voting into the meeting minutes for future references.

A Appendix

A.1 Change Log

Date	Section	Descriptions
DD/MM/YY	Section number	Description of the changes.
31/07/04	4.1.1	Added update of availability matrix procedures as approved in PIP 52

Table 3: Change Log

A.2 Task Tracking Timesheet Template

=====
= T a s k T r a c k i n g T i m e s h e e t =
=====

Task Name:

Allocated by:

Task Goal:

Start Date:

Finish Date:

Time Spent:

Comments:

=====

A.3 Sub-teams and Leaders History

=====
Sub-teams and Leaders History Log
=====

Administration Sub-team 10th Mar 2004 - 1st Nov 2004

Jian Alan Huang 10th Mar 2004 - 1st Nov 2004

Quality Assurance Sub-team 10th Mar 2004 - 1st Nov 2004

Nathaporn Eiamvittayakorn: 10th Mar 2004 - 5th Apr 2004

Wendy Tsang: 6th Apr 2004 - 20th Aug 2004

Saw Ai Soon: 20th Aug 2004 - 1st Nov 2004

Risk Sub-team 10th Mar 2004 - 1st Nov 2004

Mei Ling Leong: 10th Mar 2004 - 20th Aug 2004

Carol Poon: 20th Aug 2004 - 1st Nov 2004

Requirement Sub-Team 10th Mar 2004 - 15th Aug 2004

Quyên Quach: 10th Mar 2004 - 15th Aug 2004

Research Sub-Team 10th Mar 2004 - 28th Apr 2004

Dominic Mendonca: 10th Mar 2004 - 28th Apr 2004

Design Sub-Team 28th Apr 2004 - 19th Sep 2004

Dominic Mendonca: 28th Apr 2004 - 19th Sep 2004

Coding Sub-Team 28th Apr 2004 - 1st Nov 2004

Simon Youn: 28th Apr 2004 - 3rd Sep 2004

Glenn Maxwell Fry: 3rd Sep 2004 - 1st Nov 2004

Req-Research Sub-Team 28th Apr 2004 - 19th May 2004

Carol Poon: 28th Apr 2004 - 19th May 2004

Testing Sub-Team 13th May 2004 - 1st Nov 2004

Masyuri Tjhandana: 13th May 2004 - 1st Nov 2004
