**SE\_17\_PM\_01 – Group 17 – Project Plan**

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# 1 Introduction

## 1.1 Purpose of this Document

This document lays out the deadlines and overall plan of the project.

## 1.2 Scope

This document goes in to the deadlines of the deliverables, software and documentation for the project. The document will also go in to the details of the project for the group (group 17). This document should be read by the whole group. This document will go through the tasks that need to be completed by the group. This document will also provide a gantt chart to represent the tasks that will be undertaken as a visual representation. Also, this document will provide a risk analysis for the project.

## 1.3 Objectives

The objectives of this document are:

* To list all deadlines for all deliverables and other specified material that is to be handed in.
* To indicate what the team should be working on and when that needs to be done.
* To have a breakdown of the tasks set out by the team.
* To list other dates that need to be done.
* To indicate the tasks that should be done throughout the duration of the project.

# 2 Deliverables

## 2.1 Deadlines

* Thursday 29th October – Interaction and high level design for the system. (Phase 1)
  + Reference: SE\_17\_DELIV\_01
* Thursday 12th November – Test specification for the final system. (Phase 1)
  + Reference: SE\_17\_DELIV\_02
* Thursday 26th November – Design specification for the final system. (Phase 1)
  + Reference: SE\_17\_DELIV\_03
* Thursday 10th December – Prototype 1 demo to manager. (Phase 1)
  + Reference: SE\_17\_DELIV\_04
* Friday 29th January (16:00) – Delivery of software. (Phase 2)
  + Reference: SE\_17\_DELIV\_05
* After 1st February – Acceptance Testing. (Phase 2)
  + Reference: SE\_17\_DELIV\_06
* Monday 15th February (16:00) – Hand over all documentation. (Phase 2)
  + Reference: SE\_17\_DELIV\_07

## 2.2 Review of Deliverable

Each deliverable will have a set review meeting, which should be attended by the project leader, quality assurance manager, the person(s) involved in creating the deliverable along with anyone else willing to contribute errors and improvements on the deliverable. Review meetings should be set in plenty of time to make alterations. Review meetings should be carried in accordance with SE.QA.07[1].

## 2.3 Breakdown

### 2.3.1 29th October – interaction and high level design

By this date we will have created a design of the user interface and be able to understand how the system will interact with the user. Also we should be able to see what needs to be done in terms of what components need to be developed.

### 2.3.2 12th November – test specification for the final system

By this date we will have an understanding of the system, including all its components. The group should have created a set of tests that will be carried out on the final system. The specification will have gone through a review meeting to make sure that they are up to the standards needed and have all the correct information.

### 2.3.3 26th November – design specification for the final system

The group should have created a document that goes through the system specifying what each component will do along with the correct diagrams to represent the system. This document should follow the structure laid out in document SE.QA.05A[2]. This deliverable should have a review meeting before submission.

### 2.3.4 10th December – prototype 1 demo to manager

By this date all main components of the system will be created and shown to the manager in a live demo. Not all aspects of the system are expected to be perfect or created but enough to get general feel of how the system works along with how the system will look as a final product.

### 2.3.5 29th February (16:00) – delivery of software

This is when the full working system is to be handed in. The system will be handed in on CD before 4pm. All code, testing and code documentation must be complete by this point. The system must meet all the functions laid out in the requirement specification SE.QA.RS[3]. The system must also meet all the functions laid out in the design specification for the final system.

### 2.3.6 From 1st February – acceptance testing

At this stage the team will have submitted all of the final system and will be going through all documentation to check that they are correct and present ready for the 15th February.

### 2.3.7 15th February – Hand in of all documentation

At this point the group will have completed all documentation and made sure that it conforms to all standards set out in the quality assurance documents. The group will make sure that all documentation is submitted on time and in the correct place. The group should have also complete the end of project report by this point.

# 3 Tasks

## 3.1 Major Tasks

The following list is all the major tasks that need to be taken up during the project. The items in this list are the overall task and they have multiple subtasks per major task.

* Project management (SE\_17\_PM\_*subtaskid*).
* Quality assurance (SE\_17\_QA\_*subtaskid*).
* Spike work (SE\_17\_SW\_*subtaskid*).
* Designing the system (SE\_17\_DS\_*subtaskid*).
* Writing the code (SE\_17\_CODE\_*subtaskid*).
* Testing the system (SE\_17\_TEST\_*subtaskid*).
* Producing maintenance information (SE\_17\_MAINT\_*subtaskid*).
* Producing the end of project report (SE\_17\_END\_*subtaskid*).

## 3.2 Minor Tasks

All tasks will be labelled with the above start and an appropriate subtask id which will comprise of a 2 digit number (to conform with Q.A. standards written in SE.QA.02[4]

### 3.2.1 Project Management

SE\_17\_PM\_01 – Project plan

This task is completed by this document. The plan should cover how the group will undertake the following software development project. It should lay out a set of tasks along with deadlines on how the project will progress.

SE\_17\_PM\_02 – Gantt Chart

This will be a Gantt chart that will list all the deadlines on a “high” level so that the group can see what they should be working on at that current moment. This may change and will not be fixed (except deadlines of deliverables). The chart shall go in to all major tasks and when they are expected to be to be completed.

SE\_17\_PM\_03 – Weekly report

This will be the report that the project leader will write each week. This report will include all tasks completed, worked on and tasks that should have been worked on. The report will document how many hours each member of the group has worked on the project along with the tasks that they were working on. The report will include a breakdown of the hours that have been spent on the entirety of the project in terms of each person and the whole group.

### 3.2.2 Quality Assurance

SE\_17\_QA\_01 – Minutes of meetings

This will involve either the Quality Assurance (Q.A.) manager or deputy taking the minutes for a particular meeting. Minutes will be taken for every formal group meeting (review meetings, group meeting with the group manager). The Q.A. manager (or deputy) is responsible for producing the minutes and publishing the minutes for access to all of the group. The minutes should conform to the standards laid out in the SE.QA.03[5].

SE\_17\_QA\_02 – Review of Documents

This will be an ongoing task that will run throughout the length of the project. This will be carried out with in review meeting or any document that is released between the team.

### 3.2.3 Spike Work

The following tasks are to be carried out as part of the risk analysis along with gaining information on the system and ways to implement the system with little risk.

SE\_17\_SW\_01 – Database research (TaskerSRV)

This will be a member of the team researching how to implement the database component of the tasker system. The member of group does not have to implement the actual database that is going to be used but will produce some notes on how the group could use the particular method for implementation so that the group can decide on whether to use that method in the actual implementation of the final system.

SE\_17\_SW\_02 – Interfacing research

For this task, a member of the group will produce a set of notes on possible ways that the system can be linked together (between the different interfaces and database of the system). The group will then decide on an appropriate method of implementation.

SE\_17\_SW\_03 – Desktop interface research (TaskerCLI)

This will be the members of the group that will be coding the java desktop interface, researching the libraries that they may need and if there are multiple libraries that can perform the same role then the group will decide on which to carry forward to implementation.

SE\_17\_SW\_04 – Website interface research (TaskerMAN)

This will be research in to what language the website will be written in and what procedures will need to be carried out to join the website to the database. The members of the group researching the interface implementation will have to produce notes on the implementations that may be used on the system. The group will decide on any discrepancies of implantation standards.

### 3.2.4 Designing the system

SE\_17\_DS\_01 – Interaction and high level design for the system

This is the first 2 sections of the Design Specification. The sections that must be followed are written in SE.QA.05A[2]. The team will review this document before the final release, so that errors can be fixed and to make sure the designs are up to standard in relation to sections 4 & 5 of the SE.QA.05A[2] document.

SE\_17\_DS\_02 – Design specification for the final system

For this task the group will be finishing the design specification that was started in task SE\_17\_DS\_01. This is to be completed so that it conforms to the standards specified in document SE.QA.05A[2]. The team will review the specification to make sure the standards are upheld.

SE\_17\_DS\_03 – TaskerCLI Design

This will be the user interface of the desktop application. The group will produce a set of designs that will show the system and how it will interact with the user (use-case diagrams and user interface designs).

SE\_17\_DS\_04 – TaskerMAN Design

This will be the user interface of the web application. The group will produce a set of designs that will show the system and how it will interact with the user (use-case diagrams and user interface designs).

### 3.2.5 Writing the code

SE\_17\_CODE\_01 – Creating the Database

This will be a coder creating a database that will conform to the group’s decision on which database implantation we have chosen.

SE\_17\_CODE\_02 – Creating the interface of the desktop interface (TaskerCLI)

This will be using Java to create the user interface that the end user will see and making sure that it looks visually appealing and easy to follow. This should be done off the designs produced in the design specification.

SE\_17\_CODE\_03 – Coding the functions of the desktop interface (TaskerCLI)

At this point the java coders will be coding the main functions behind the interface to make the desktop application work in the way that it should. The functions that should be coded are specified in the requirements document SE.QA.RS[3].

SE\_17\_CODE\_04 – Creating the webpage of the web interface (TaskerMAN)

Coders will be developing the webpage and making it have the functionality of the required functions (again from SE.QA.RS[3]) so that it performs the necessary tasks that the user will need.

SE\_17\_CODE\_05 – Coding the links between the database and the webpage (TaskerMAN)

Coders will be developing the interface link between the webpage and the database in the chosen way of implementation agreed by the group.

SE\_17\_CODE\_06 – Coding the links between the database and the desktop interface (TaskerCLI)

Coders will be developing the interface links between the database and the desktop interface in the chosen way that the group has agreed to implement this.

### 3.2.6 Integration of the system

SE\_17\_INTER\_01 – Integration of the system

The team will be integrating the system in to the final system.

### 3.2.7 Testing the system

SE\_17\_TEST\_01 – Test specification for the final system.

This will the document that specifies the tests that should be carried out on the system. This document should follow the standards set out in document SE.QA.06[6]. This will be deliverable, therefore the document should undertake a review meeting to be checked and altered before the final submission to the deliverable.

SE\_17\_TEST\_02 – Module/unit testing

This will be done by the coder of that section of code. It will make sure that the module is working correctly. The coder will follow the tests set out in the test specification. Tests may need to be carried out multiple times to make sure that the code is working as of release.

SE\_17\_TEST\_03 – Subsystem/Integration testing

This will be testing that different parts of the system work together. This has to follow the standards and tests specified in the test specification.

SE\_17\_TEST\_04 – System testing

System testing will be the completed system being ran through to see if the program works. The testing will see if the system works when the system is in its final form. The testing for this must be followed as of the tests in the test specification.

SE\_17\_TEST\_05 – Acceptance testing.

Here the group will be demonstrating the system to make sure that the system meets all requirements specified in SE.QA.RS[3]. This is making sure that system does what the system should do in accordance with the end users expectations.

### 3.2.8 Producing maintenance information

SE\_17\_MAINT\_01 – Manual for TaskerSRV

The team will produce a document in which will describe the processes of the Database and how to perform tasks such as installation…etc. This document must go through a review.

SE\_17\_MAINT\_02 – Manual for TaskerCLI

The team will produce a document in which will describe the processes of the Desktop interface and how to perform tasks such as installation…etc. This document must go through a review.

SE\_17\_MAINT\_03 – Manual for TaskerMAN

The team will produce a document in which will describe the processes of the webpage and how to perform tasks such as set up. This document must go through a review.

SE\_17\_MAINT\_04 – Manual for the final system

This will be the collection of the 3 manuals plus any additional information that hasn’t been covered. This document should go through a review.

### 3.2.9 Producing the end of project report

SE\_17\_END\_01 – End of Project Report

This section will be completed at the end of the project and will follow the standards published in SE.QA.11[7]. This document should be reviewed before final submission.

### 3.2.10 Deliverables

SE\_17\_DELIV\_01 – Interaction and high level design for the system.

SE\_17\_DELIV\_02 – Test specification for the final system.

SE\_17\_DELIV\_03 - Design specification for the final system.

SE\_17\_DELIV\_04 - Prototype 1 demo to manager.

SE\_17\_DELIV\_05 - Delivery of software.

SE\_17\_DELIV\_06 - Acceptance Testing.

SE\_17\_DELIV\_07 - Hand over all documentation.

# 4 Gantt Chart



# 5 Risk Analysis

For the risk analysis I have broken the project down in to tasks (above) and have considered whether these tasks pose a risk to the project or not. Also I have considered the possible ways to reduce the risk of failure.

Points that I consider that are risky:

* Creating the database (*SE\_17\_CODE\_01*) – to reduce risk in this task, the group will have researched a method of implementation, which will meet the standards needed so that the system works on the required systems.
* Creating the interface of the desktop interface (*SE\_17\_CODE\_02*) – to minimise the risk in this task we will use coders that have enough experience and research in to the interface implementation.
* Coding the links between the database and the web interface (*SE\_17\_CODE\_05*) – reducing risk in this task will be done by using experiences gained in other modules and online tutorials so that the coders are confident in the coding of the project.
* Coding the links between the database and the desktop interface (*SE\_17\_CODE\_06*) – risk in this task will be reduced by researching the implementation methods and using resources to gain experience to be able to perform the task.

# 6 Other Important Dates

* Work week – During first term (exact date unknown).
* Integration and testing week – Monday 25th January – Friday 29th January (inclusive).
* Informal meetings – Mondays at 3 (Think Tank – Llandinam)

# 7 References

[1] SE.QA.07 Software Engineering Group Projects - Review Standards

[2] SE.QA.05A Software Engineering Group Projects - Design Specification Standards

[3] SE.QA.RS Software Engineering Group Project Tasker Team Tasking System - Requirement Standards

[4] SE.QA.02 Software Engineering Group Projects - Project Management Standards

[5] SE.QA.05 Software Engineering Group Projects – General Documentation Standards

[6] SE.QA.06 Software Engineering Group Projects – Test Procedure Standards

[7] SE.QA.11 Software Engineering Group Projects – Producing a Final Report

# 8 Document History

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| --- | --- | --- | --- | --- |
| Version | CCF No. | Date | Changes made to document | Changed by |
| 1.0 | N/A | 22/10/2015 | Document created by Alexander Webb (ajw21) | AJW21 |
| 1.1 | N/A | 22/10/2015 | Additions added to minor task list and Gantt chart updated to reflect deliverables and additional tasks. | AJW21 |
| 1.2 | N/A | 11/11/2015 | Gantt chart updated to show physical points where the team are either submitting or reviewing | AJW21 |