## **Second Project Specification**

This file describes what I did for the second project.

The information for Project A, B can be found in '../ProjectABSpec'. The information for the first project can be found in

'../FirstProject\_SRS/RequirementsElicitationAndSpecification'. A Brief SRS of the first project that Vivian made can be found in '../References/VivianSRSProject1'.

We(Vivian and me) have been made responsible for developing the Implementation Planning and Initial Design for a major software project.

In the first Project, Vivian made a SRS for the Project A as a software engineer and I made a SRS for the Project B as a software engineer. For Second Project, now we switch the project and the role to thoroughly understand both projects and roles. Our job is to plan the development and testing for the project that our partner developed the requirements for. In other words, we are swapping projects now and proceed the second project.

## What should be included in the first project

- 1. My name and the name of my partner
- 2. A vision statement for the project on which I am the engineer(now it is project B)
- 3. System Design Document
- 4. Data Definitions
- 5. Analysis and Design Class Diagram
- 6. One or more State Diagrams for the more interesting objects in my design
- 7. Requirements Traceability Matrix
- 8. List of design assumptions (if any)
- 9. Test specifications
- 10. A report of difficulties I had in working with the provided SRS and what did I do to overcome them.

System Design Document: This will include the basic architecture of the system and the high level strategic decisions. Includes:

- system architecture
- storage/persistent data strategy
- noteworthy trade-offs and choices
- any concurrent processes and how they will be coordinated
- and a package diagram showing the subsystems

Data Definitions: Create a table showing what data will need to be stored in my system. For each item give the name of the field/attribute/variable, its type, its meaning in the problem domain expressed in natural language, and an example of valid data.

Analysis and Design Class Diagram:. The diagram must include, as appropriate:

- classes
- attributes
- associations
- inheritance and/or aggregation (if applicable)
- multiplicities

State Diagrams: I am required to consider the relevant states of each object in my system and to submit state diagrams for those that have interesting states or complex behaviour. One way to measure if a state is interesting is to consider whether I need to test that state before performing a particular action or if the state changes after an action is performed. What is interesting will depend on the application.

Requirements Traceability Matrix (RTM): Set up an RTM with the following columns:

- Requirement-ID (from SRS)
- Use Cases
- Classes
- Methods
- Packages
- Build Number

## List of Assumptions

Test Specifications should contain the following:

- 1. Test-case specifications, made up of test-case identifiers, test data (input specifications and output specifications)
- 2. Test plans, including for example a test schedule, testing resources required, testing milestones and test deliverables.

Acceptable documentation for Test Case Specifications would include:

- Test Case Identifier
- Test description
- Input specifications
- Output specifications
- Test plans, covering scheduling and resourcing of all testing processes