Hacettepe University
Department of Computer Engineering
BBM478 - Software Engineering Laboratory

Project Plan Document

Group One

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Library Book Loan System
Project Plan

1 Introduction

The project described within this document is Library Book Loan System, a desktop application which uses a library system to provide help to both librarians and customers. This project plan document gives a preliminary plan for the project. This document has these titles which are Project organization, Project practices, and measurements, Project milestones and objectives, Deployment and Lessons learned.

2 Project organization

In the project, there are three team members: Ahmed Şamil Bülbül, Halil İbrahim Şener, Naciye Güzel. The team doesn't have enough members to distribute every one of task and role to one individual. Team members will have different roles throughout the process. Table of roles of team members play during the project, in general, is as follows:

Iteration	**Project Manager**	**Helpers**
I1	Naciye Güzel	Ahmed Şamil Bülbül, Halil İbrahim Şener
I2	Halil İbrahim Şener	Ahmed Şamil Bülbül Naciye Güzel
I3	Ahmed Şamil Bülbül	Halil İbrahim Şener Naciye Güzel
I4	Naciye Güzel	Ahmed Şamil Bülbül Halil İbrahim Şener
I5	Ahmed Şamil Bülbül	Halil İbrahim Şener Naciye Güzel

The more detailed explanation of roles is as follows:

Iteration	Project Manager	Software Analyst	Software Architect	Software Developer	Tester
I1	Naciye Güzel	Ahmed Şamil Bülbül	Halil İbrahim Şener	N/A	N/A
I2	Halil İbrahim Şener	Naciye Güzel	Ahmed Şamil Bülbül	N/A	N/A
I3	Ahmed Şamil Bülbül	N/A	Halil İbrahim Şener	Naciye Güzel	N/A
I4	Naciye Güzel	N/A	N/A	Ahmed Şamil Bülbül	Halil İbrahim Şener
I5	Ahmed Şamil Bülbül	N/A	N/A	Halil İbrahim Şener	Naciye Güzel

Table contains N/A, which means “not applicable” to show the distribution of work in general.

There might be different communication channels throughout the project, but the team’s main communication channel will be Slack.

For the introduction to the project and outline of the project, please read Project Vision document.

3 Project practices and measurements

We will use OpenUP. As it states “OpenUP targets small and collocated teams interested in agile and iterative development.”

Throughout this software development process, we will use iterative and incremental development. Iterative development will be main model to use. This might include modified Waterfall models and Agile software development.

We will use Git as our version control system and GitHub for tracking and hosting service.

Travis CI will be used as continuous integration service.

Management practices are giving maintaining responsibility, scheduling project, checking team members and providing better workspace for the team. As a team leader, communication will also be part of his/her job. Using iterative development will provide a better way to manage the project.

Java will be the programming language to use in the project. In technical practices part, Travis continuous integration will play role. Team members do not require an additional course or education to learn Java. Java provides powerful object-oriented programming approach. There are lots of integrated development environments for Java and one of them is Eclipse. Eclipse is in use by the team. Eclipse IDE also has got extensions provide easiness to complete the project such as GitHub extension.

For UML design, the team will use Visual Paradigm. Eclipse also has got UML tools. For different needs, these tools will be used by turn.

4 Project milestones and objectives

Iteration	**Primary objectives** (risks and use case scenarios)	**Scheduled start or milestone**	**Target velocity**
I1	Software Vision & Project Plan 1. Risk 1: Project development is estimated and planned. The dates of the tasks to done are determined. By doing this, we have secured the project phases. 2. Risk 2: Work is divided into parts. Roles of team members for these parts are assigned. All team members know what roles they will do. By doing this, disagreements over the project phase are minimized. 3. Risk 3: To know what we will achieve, detailed definition of what we will deliver is done in vision document part, so we start out on the right foot in the project.	February 27, 2017 / March 11, 2017	12 hours
I2	Software Requirements Document 1. Risk 1: If software requirements are not specified clearly, it might lead to complications. To reduce this, stakeholders shall contribute to this step clearly. 2. Risk 2: Not all software requirements are specified. This risk might lead to changes in requirements. Requirement changes are inevitable but a solution to this might be decreasing as much as possible.	March 7, 2017 / March 21, 2017	12 hours
I3	Architectural Notebook & System Test Case	March 14, 2017 /	36 hours

	Definitions & Release 1 1. Risk: By consulting to the whole team, system test case will be defined. This needs to be defined well. Otherwise, it might need to change and consume more time than planned. To minimize risks, communication will be essential.	April 4, 2017	
I4	Software Design Description & Coding Standard & Release 2 1. Risk: Design description should provide sufficient information about the project. It should be clear and enough. Otherwise, the project might have issues. To avoid this, peer reviews will help to provide a better design. 2. Risk: The programming language used throughout the project will define standards. By using Java, we basically say object-oriented programming will be achieved. Any other approach to the project might cause problems inside the team and the project.	April 4, 2017 / April 25, 2017	36 hours
I5	Software Test Report & Release 3 1. Risk: Completing test and providing test report is to improve experiences gained. By doing this we can decrease problems in iterations.	April 25, 2017 / May 16, 2017	36 hours

5 Deployment

After software development process is completed successfully, evaluation of the final product will be done by corresponding stakeholders, assistants. After positive review on the product, it will be available to acquire from our GitHub repository.

Another deployment tool which will help to development, build and testing is Travis CI.

Updates of software will also be held in GitHub.

6 Lessons learned

In the project plan and vision documents, we learned the following:

- How to start software project and make it better with respect to general problems encountered
- How to prepare a project more efficiently with respect to its domain
- The importance of vision and project plan documents in the project
- Pre-requirements steps of a software project
- Effects of the development environment such as operating system and operating system independence
- Advantages and disadvantages of programming languages

- Thinking details of needs and requirements
- How to prepare project plan document and detailed steps
- How to prepare vision document and detailed steps
- Importance of team collaboration
- What roles can be in a project and responsibilities of roles
- Picking appropriate communication channel is making disturb-free work environment.
- Team responsibility and balancing the workload