
SOFTWAREDEVELOPMENT PROJECT

Amina Hamza
Linneaus
University
2020-01-30

| Contents

1	Revision History	2
2	General Information	3
3	Vision	4
4	Project Plan	5
4.1	Introduction	5
4.2	Justification	5
4.3	Stakeholders.....	5
4.4	Resources.....	5
4.5	Hard- and Software Requirements.....	5
4.6	Overall Project Schedule	5
4.7	Scope, Constraints and Assumptions.....	5
5	Iterations	6
5.1	Iteration 1	6
5.2	Iteration 2	6
5.3	Iteration 3	6
5.4	Iteration 4	6
6	Risk Analysis	7
6.1	List of risks.....	7
6.2	Strategies	7
7	Time log	8
8	Handing in	9

1 | Revision History

Date	Version	Description	Author
2020-01-30	001	Building the hangman game with Java.	Amina Hamza
2020-02-02	001.1	Writing plan after reading the book	Amina Hamza
2020-01-03	001.2	Final look.	Amina Hamza

2 | General Information

Project Summary	
Project Name	Project ID
Project-Hangman	001
Project Manager	Main Client
Amina Hamza	Computer Science Department
Key Stakeholders	
Project Owner Developer Tester Promoter	
Executive Summary	
<p>This project is called the Hangman. Hangman is a guessing game where the player guesses a word, letter by letter. The player is then presented with the number of letters in the word but for every wrong guess, the game is building a part of a man to be hanged. The number of wrongs that the player can have is about eight or ten depending on how many parts are used to hang the man.</p> <p>In the first version, the player will be greeted with a menu and when the game begins a word from a predefined list of nouns should randomly be picked and the number of letters displayed with equally many underscore signs, and avatar images for each player.</p> <p>The upcoming versions , the game will add a high score list, user registration, persistence, multiplayer, time limit, point systems, the ability to add and remove words and much more.</p>	

3 | Vision

This game will encapsulate anything around software development, including the iterative process, documentation, and testing. The Hangman game will be improved continuously with each iteration.

Basic functions will be implemented in the first version. It will provide the player a menu that shows the start button and quit button. When the game begins, a word from a predefined list of nouns should randomly picked and the number of letters, underscore signs, and avatar images will be displayed for each player.

The game will be updated to include high score list, user registration, persistence, multiplayer, time limit, point systems, the ability to add and remove words and much more.

The **main vision** for this project is to develop the most entertaining game to players and also to meet the laid down requirements.

4 | Project Plan

1- Deadline is Friday, 7 February 2020, 11:55 PM: during this step everything regarding the requirements, plan and early documentation should be done carefully. The project manager is responsible to make sure that everything in the planning and requirements meet the client and software requirements. At the end of this step a fully field project plan and some some skeleton code for the game should be in place.

2- Deadline is Thursday, 20 February 2020, 12:00 PM: during this step we are going to create some Use Case in UML and do designing for the whole game. At the end of this step we should have an early version of the game that can run the Use Case. We should also keep working with the documentation of this game and fill everything we done in the project plan. The programmer which is me should make sure all the steps are followed.

3- Deadline is Friday, 6 March 2020, 11:55 PM: Testing is going to take place during this time. We will primarily use JUnit test method in java. The test should cover different Use Case. The tester which is also me responsible for this step. We expect the game to be ready for submission at the end of this step.

4.1 Introduction

As a requirement of the course, I am to create a Hangman game by applying the knowledge I have acquired in Java and Software technology.

4.2 Justification

The purpose of this exercise is to be able to individually create and manage software projects.

4.3 Stakeholders

Generally, the **goal** of stakeholders is to facilitate the smooth running of a project. **Product Owner** needs a a complete and good game with no bugs. **Developer** wants to develop this game and as much as possible make it stable. Tester's job is to find as many bugs as possible and report it to the development team. And the **promoters** are going to market and make the game known to as many people and players as possible .

4.4 Resources

Pre-recorded video lectures and Tutoring Sessions provided by the department, Software Engineering 10th ed by Ian Sommerville, and 20hrs a week for the development.

4.5 Hard- and Software Requirements

The resource for this project is my laptop and the development will be done using JAVA 8, and Eclipse IDE. And to run and play the game, the hardware must have JDK 1.8 at least and minimum memory of 1G.

4.6 Overall Project Schedule

7th February 2020: Deadline for the first step in project plan.

20th February 2020: Deadline for the second step in project plan.

6th March 2020: Deadline for the third step in project plan.

4.7 Scope, Constraints and Assumptions

Scope

1. Text-based fashion game.
2. Console Application.
3. Difficulty Level.

Constraints.

1. The game is not a web application.
2. The game will not require User log in.
3. It will have no Sounds.
4. Inexperience on my part, because it's my first project.
5. Not enough time, because I have other courses along this project.

Assumptions.

1. The player should have an overall idea about the game.
2. The player should know how to use console to run the game.
3. The user should have JDK and JRE installed on his/her system.

5 | Iterations

This section holds the details of each iteration of the project.

5.1 Iteration 1

The task is to draft the documentations needed for the project, such as the project plan and project vision.

Resources used are lectures 1 and 2 and chapter 2, 3, 22, 23 of the course book. Goal is to do all documentation and start with some implementation before week 6.

5.2 Iteration 2

The task is to create the different Use Case and start implementing them.

Resources are lectures in theme two and chapter 6, 7, 15 in the course book. Goal is to do all the implementation needed with the Use Case before week 9.

5.3 Iteration 3

The task is to test all the parts of the game and the features left from the previous iterations.

Resources are lectures in theme three and chapter 8 in the course book. Goal is to test everything and add some features before week 11.

5.4 Iteration 4

The task is to complete anything left behind from the previous iterations. Goal is to have a complete and fully functioning Hangman game with its all features.

6 | Risk Analysis

Risk is anything that has the tendency to influence the smooth flow of the project. It is important to be prepared to tackle them at any time this is termed as Risk management. Risk analysis is really difficult for me. To do the risk analysis, I must know the details of the rules, as well as and asses every step of the game in other to find the risks. Since I just have skeletal design and code, I implemented the basic version as and when I know more, I will update it.

ID	Type of Risk	Probability	Impact	Strategies	To Do if occurred
R1	Illness	4	5	Stay home and get drugs	Get permission from lecturer.
R2	Unsaved Changes	3	4	Save everything before taking breaks	Employ the use of recovery programs.
R3	Shortage of time	5	5	Plan ahead	Work during holidays and weekends.

7 | Time log

Task	Start Date	End Date	Estimated time (hours)	Actual time Used (hours)
Reading the course book	2020-01-28	2020-02-04	8	14
Lear about rules of the game	2020-01-30	2020-01-31	2	1.5
Plan for code	2020-01-31	2020-02-01	2	4
Vision	2020-02-03	2020-02-03	1	1.15
Risk Analysis	2020-02-02	2020-02-02	2	2.5
Reflections	2020-02-03	2020-02-03	1	1

8 | Handing in