SOFTWAREDEVELOPMENT PROJECTTEMPLATE

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Contents

Revision History

Date	Version	Description	Author
20190208	1.0	Project plan and Skelton code.	Sirwan Rasoul
20190222	1.1	Itration 2 and time log	Sirwan Rasoul

General Information

Project Summary	
Project Name	Project ID
Hangman	
Project Manager	Main Client
Sirwan Rasoul	Players who are interested in Hangman game.
Key Stakeholders	
End User, Manager, Tester and Developer.	
Executive Summary	
I create this game for the educational purpose in software technology course in under graduating program, and to understand the different stages in planning a software project. The result of this project is a Hangman game. The project should follow this plan to create the game.	

Vision

In this project, I am going to create a Hangman game in a text-based fashion, a game that the user guesses the right letters in a word to win, and the user has only 10 guesses to complete the word. Every wrong guess a part of a hanged man will be drawn. All parts of the hanged man are: ground, vertical pole, horizontal pole, head, body, left arm, right arm, left leg and right arm.
I should first start with a message greeting the user then he will see how many letters is the word that he will guess.
I should save all the words for guessing in separate file that can be edited when needed. I can use any kind of words as long they are in the English dictionary.
The game should have two levels of difficulties that the user can choose, one is easy with short words (not more than 4 letters) and one is hard with long words (at least 5 letters).
If the user loses he will get a message for that, but if he wins he will get nice looking message with hearts and trophies.
The game will be implemented by using Java programing language.

The vision is very important for the whole project, and everybody should understand the vision clearly before start working on the project. The vision should be simple as much as possible. We should not go into very specific details.
I found it was very interesting to write the vision of the project, and I felt the responsibility, but sometimes it could very hard to keep track of everything.
In big size projects I think that more members of the project should contribute to the vision, for the team work in vision will pay very much during the implementation of the project.

Project Plan

I have divided the plan for this Hangman game into different steps, and to achieve the requirements we should follow this plan.

1- Deadline is Friday, 8 February 2019, 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.
2- Deadline is Thursday, 21 February 2019, 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 that everything done correctly in this step.
3- Deadline is Friday, 8 March 2019, 11:55 PM: during this step we are going to test everything in the game. We should use JUnit test method in java. We should test the different Use Case. The tester which is me also responsible for this step. At the end of this step the game should be tested and ready for submission.

4.1 Introduction

The goal of this project is to create my own Hangman game for educational purpose, and to learn more about software projects. The expected time to finish the game is one month.

4.2 Justification

The main purpose of this game is to learn how to create and mange software projects.

4.3 Stakeholders

End User, Manager, Teacher, Developer, Tester.

4.4 Resources

Lectures, Tutoring Sessions, Software Engineering 10th ed by Ian Sommerville, and 20h time each week.

4.5 Hard- and Software Requirements

Hard- and Software requirement to create this game is Eclipse editor and my own laptop.

Hard- and Software requirement to run this game is any system that have Java Development Kit and Java Runtime Environment.

4.6 Overall Project Schedule

1- 8 February 2019: Deadline for the first step in project plan.

2- 21 February 2019: Deadline for the second step in project plan.

3- 8 March 2019: Deadline for the third step in project plan.

4.7 Scope, Constraints and Assumptions

What will be included?

1- Text-based fashion game.
2- Console Application.
3- Difficulty Level.
4- Word File including the words for the game.

What will not be included?

1- The game is not web application.
2- User log in.
3- Sounds.

In the game development I face these challenges:

1- Lack of experience, because it's my first project.
2- Time limit, because I have other courses along this project.

The following assumption are expected:

1- The player should know the overall idea of 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 system.

Iterations

In iteration 1:

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

Recourses are lectures 1 and 2 and chapter 2, 3, ,22, 23 in the course book.

Goal is to do all documentation and start with some implementation before 8 February 2019.

In iteration 2:

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

Recourses 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 21 February 2019.

In iteration 3:

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

Recourses are lectures in theme three and chapter 8 in the course book.

Goal is to test everything and add some features before 8 March 2019.

In iteration 4:

The task is to complete anything left behind from the previous iterations.

Goal is to have a complete functional Hangman game with its all features.

5.1 Iteration 1

ID	Description	Estimated Time	Actual Time	Due To
I11	Creating the whole project plan for the game.	9h	12h	8 February 2019.
I12	Creating the skeleton code for the game	1h	1h	8 February 2019.
Total Time		10h	13h	

5.2 Iteration 2

ID	Description	Estimated Time	Actual Time	Due To
I21	Create Use Cases using UML	9h	3h	21 February 2019.
I22	Great state machine diagram	5h	2h	
	Great class diagram	3h	1h	
I22	Finishing implementing the code needed for the game	9h	9h	21 February 2019.

Total Time	26h	15h	

5.3 Iteration 3

ID	Description	Estimated Time	Actual Time	Due To
I31	Testing the Whole Game	12h		8 March 2019
I32	Implementing the additional features like level difficulty.	5h		8 March 2019
Total Time		17h		

5.4 Iteration 4

ID	Description	Estimated Time	Actual Time	Due To
I41	Putting the final touches	5h		
I42	Do any work left behind from the pervious iterations	5h		

Total Time	10h		

ID	Decreption	Probabilty	Impact	Stratigey for The Risk	To Do if occured.
R1	Ilness	3	5	Stay at home as much as possible	Speak with the teacher.
R2	Unsaved Changes	1	5	Save everything before taking break	Try to use some recovery programs.
R3	Shortage of time	3	3	Plan every thing ahead	Try to work on weekend.

Risk Analysis

Time log

Itration	Estimated Time	Actual Time	Analysis
Itration 1	10h	13h	It was the first time for me working on software projects.
Itration 2	26h	15h	Attending lectures was very helpful to reduce spending time on tasks.