

Hang Man Project

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Logo



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1 | Revision History

Date	Version	Description	Author
05/02/2019	1.0	Project Plan	Ahmad Anbarje
22/02/2019	1.0	Software Design	Ahmad Anbarje
08/03/2019	1.0	Software Testing	Ahmad Anbarje
22/03/2019	1.0	Final Project	Ahmad Anbarje

2 | General Information

Project Summary	
Project Name	Project ID
Hangman Game	1.0
Project Manager	Main Client
Ahmad Anbarje	For people above 13, who they are interested about the Hang man game.
Key Stakeholders	
End User, Project Manager, Teachers.	
Executive Summary	
<p>We have made hangman game because it's an assignment in the course, the game starts when the user tries to guess some characters to make a comprehensive word, there are limit numbers for the guesses, if the user has not guess the word, then will lose, otherwise the user wins.</p>	

3 | Vision

The vision is to make a hangman game, we start with a texted based fashion, we will put three points in the first interface:

- Start the game
- Result
- Quit the game

In Start the game we have also question which is asking the user to guess a word which contains i.e 8 characters, the number of characters will be differ depends on the word itself, if the user doesn't guess the word after 8 tries, then will get message " worng, you did not guess the word" otherwise, will get "Right, You guess the word ". Then the user can navigate to the result to see how many times have tried and how many times have passed or fail for each try. The number of wrongs that the player can have is about eight parts which are used to hang the man (vertical pole, horizontal pole, head, body, left arm, right arm, left leg and right leg).

Reflections on Vision:

The vision is a good part with the project, we could let all the stakeholders see what the project will be about to make them also understand some parts which they need to think about while designing and testing some code.

The vision is also useful for the end user to realize how to play the game also to give an information about how many times could he try to guess for each word before loose or win. In addition, the vision is good for the project manager to let him/her think and design about the whole idea.

4 | Project Plan

We are going to plan for the hang man game, we also want to define the Stakeholders, first we have project manager who is responsible on the entire plan of the project even about the hardware problems. we have a developer who is responsible to create the hang man application, writing the code, in addition debug and execute the code. We also have a tester who is responsible to make unit tests, unit use cases to make the game works as it should be, finding bugs if exists. In addition, the end user who is going to play the game. We are going to finish the project by doing some iterations, each iteration represents steps about how to build the entire game.

First iteration:

- will be about plan the entire project,
- the deadline for this iteration will be on **Tuesday, 5 February 2019.**

Second iteration:

The goal of this iteration is to make a playable version of the hang man game. let us put some steps:

- add use cases for each scenario.
- adding a scenario about how to play the game.
- Make a UML diagram to help us to understand and visualize all the parts of the system life-cycle.
- we also going to add class diagram to realize the structure of our classes in the system.
- the deadline for this iteration will be on **Friday, 22 February 2019.**

Third iteration:

This iteration will be on software testing here we have steps as well:

- We are going to make manual test cases.
- Unit test for the important methods in the code.
- the deadline of this iteration will be on **Friday, 08 March 2019.**

Fourth iteration:

will be about preparing the entire project to be runnable, some features will be added, we will focus on the documentation of this iteration to be as clear as possible.

- The deadline of this will be on **Friday, 22 March 2019.**

4.1 Introduction

The objective of this project is to make a simple hangman game with java programming language within 2 months.

4.2 Justification

We are doing hangman game because it is a project assignment in software technology course.

4.3 Stakeholders

Project Manager: who is responsible on the plan of the project.

Developer: who is going to implement the plan of the project, also is responsible to execute and debug the code.

Tester: who is responsible on the unit testing, finding the bugs.

End User: the person who is going to play the game.

4.4 Resources

Software engineering book 10 Edition.

4.5 Hard and Software Requirements

We are using Eclipse IDE to develop our project, we could run our project with any system which has Java development kit and Java runtime environment.

4.6 Overall Project Schedule

First Iteration: Tuesday, 5 February 2019.

Second Iteration: Friday, 22 February 2019.

Third Iteration: Friday, 08 March 2019.

Fourth Iteration: Friday, 22 March 2019.

4.7 Scope, Constraints and Assumptions

The scope: This game will be playable from Eclipse IDE or any different IDE, we will not make design for the game, so it will be a texted fashion game. This game is not a web application, it is just a console application. We will put a feature in the game which is the result, so the user after playing many rounds, could navigate to the result to see how many times Win and lose for each round.

Constraints: We could take longer time for each stage after the deadline because of the short time of the project.

Assumptions: the user should know how to run the game by any IDE, also the user should have JDK and JRE on his operating system to run the game.

Reflection on Project Plan:

The project plan is useful for the stakeholders

Even for developer who are going to add new features to the project, but I think It is difficult to manage all the ideas and features inside the project plan, so the Best think is that we need to focus on the time for each iteration and do our best To finish as we are planning to.

5 | Iterations

Iteration 5.1

It contains the project plan and how we are going to create the entire project, we will focus on the deadline for each iteration to make everything planned as possible, also it contains skeleton code of our project.

The deadline for this iteration on **Tuesday, 5 February 2019**.

The resources we going to use is the book, reading chapter **2,3,22,23**.

ID	Description	Estimated Time	Actual Time	Dead Line
D1	Documentation of the game	20 hours	26 hours	Tuesday, 5 February 2019
D2	Implementing skeleton code	2 hours	1 hour	Tuesday, 5 February 2019

Iteration 5.2

This iteration will contain the following:

- UML diagram
- Class diagram
- Play game scenario
- Use case scenario
- Time Log

The game should be playable in this iteration.

The deadline for this iteration on **22 February 2019**.

The resources we going to use is the book, reading chapter **6,7,15**.

ID	Description	Estimated Time	Actual Time	Dead Line
D1	Make a use case scenario	7 hours		22 February 2019
D2	Make a play game scenario	5 hours		22 February 2019
D3	Make a UML diagram	2 hours		22 February 2019
D4	Game implementation	2 days		22 February 2019
D5	Create class diagram	2 hours		22 February 2019

Iteration 5.3

This iteration is about testing the important methods which make the game run, finding bugs and fix it.

The deadline for this iteration on **Friday, 08 March 2019.**

task	Estimated Time	Actual Time	Dead Line
Manual TC	8 hours		Friday, 08 March 2019.
Unit Tests	7 hours		Friday, 08 March 2019.
Running manual tests	2 hours		Friday, 08 March 2019.
Code inspection	3 hours		Friday, 08 March 2019.
Test Report	1 hour		Friday, 08 March 2019.

Iteration 5.4

This iteration will be about making good looking documentation, testing, implementation for the entire project. In addition, adding some features for the game.

The deadline for this iteration on **Friday, 22 March 2019.**

	Estimated Time	Actual Time	Dead Line
Check and fix what we have done in the project.	2 hours		Friday, 22 March 2019.
Planning to add new feature.	2 hours		Friday, 22 March 2019.
Document, test, implement the new feature.	10 hours		Friday, 22 March 2019.

6 Risk Analysis

ID	Description	Impact	probability
R1	sickness	5/5	2/5
R2	Hard disk problems	4/5	2/5
R3	Viruses	5/5	2/5
R4	Software Failures	4/5	2/5

6.2 Strategies

We need to think about some strategies to avoid the risks which we could have.

Sickness Issue:

We need to protect our self as much as possible, by taking some vitamins, washing hands before eating food, don't share personal items with another people, avoid touching wild animals.

Hard disk problems Issue:

We could protect the hard disk by reduce the data load, monitor drive health, manage drive life cycle.

Viruses Issue:

We could protect our machine by keep our software's up to date, don't click links which comes from junk emails, make a backup plan each period of time, use a firewall.

Software Failures Issue:

It is difficult to prevent this kind of failures because, it is almost impossible to use a software which has no bug, but the best thing we can do is to make all software's up to date.

Reflection of Risk Analysis:

The risk analysis is useful to prevent our project to be failed, we need to make a good plan for the risks, analysis them, and present them to the stakeholders, to make all the team have a good idea about the possible risks, also, to protect them which will protect our project to get fail or damaged.

7 Time Log

ID	Description	Estimated Time	Actual Time	Dead Line
D1	Writing the plan for the project	20 hours	26 hours	Tuesday, 5 February 2019
D2	Implementing skeleton code	2 hours	1 hour	Tuesday, 5 February 2019