Project plan

Assignment-1

-Personal planning, Vision and Project plan

3. Vision

Application to be completed: Hangman game

In the given project, we are required to create a game called "Hangman". Hangman is a game which started out as a paper and pencil guessing game and eventually made its way to the virtual world. The motive of this game is to make enhance the players' knowledge in different fields. The vision of the game mainly focuses on one field, which is the English Language. The game can be played by one or more players. The player has to guess a word based on a given clue and the length of the word. If the player guesses a letter of the word correctly then he progresses further in the game. If he guesses a character wrong then the limbs of a man who is about to be hanged appears, and it almost means like he lost a life. The ultimate vision of the game is to enable the player to know more words, so he can use them in his real life, thus increasing the player's exposure in the language.

Our Task: There are four iterative process but the task of the assignment 1 is to create the first iterative process of the Hangman game. We need to complete the documentation first so that implementation goals are met. We need to implement an idea and make a skeleton code for the project to work with. However, the main functionality that we will implement in these iterations is to add different ideas to the project. Each iteration has a task which adds new features to the code and develops it incrementally.

4. Project plan

First the program chooses a random word from a text file. The selected word is stored in a separate space. The number of blank spaces is given to fill up the word is displayed to the user. The user inputs the first letter of the word. The program checks whether the input character matches the corresponding character of the word stored. If the input character matches the corresponding character of the stored word then the input continues (provided that the man is not hanged completely yet). If the input character does not match the characters in the stored word then a limb of the man appears in the display and the number of lives left is updated respectively. Then the loop continues either till the man is hanged or the user inputs the correct word.

4.1.Introduction

Hangman is basically a game that allows the player to guess a word based in the given hint. If the user guesses the word in less than a specific amount of trials then the player saves a man from getting hanged. If the player is unable to guess the word then he loses and the man is prosecuted.

4.2.Justification

This game enhances the player's knowledge of the world around him which is really a need in the virtually developing era like this.

The idea is to learn to make high quality software with the course.

4.3. Stakeholders

User: Plays the Hangman game designed by the developer. The user is given a limited number of chances to win the game.

Developer: Designs the game by constructing the code. Tests the functionality of the code and can adds features like user registration, time limit etc, as well as remove them.

4.4. Resources

The resources available to complete the development process are:

4.4.1. Man- Power

Role: Implementer

Worker: 1

Responsibility: Everything

4.4.2. Tools

JDK version 11.0.1 and Eclipse is used to construct the code and compile it.

Study material from MyMoodle.

4.5. Hard- and Software Requirements
4.5.1 Hardware

Any Personal Computer or Laptop from the past decade should run this game with ease.

4.5.2. Software

Eclipse.

4.6. Overall Project Schedule

The deadline for assignment 1 is 8 February 2019.

The deadline for assignment 2 is 21 February 2019.

The deadline for assignment 3 is 8 March 2019.

4.7. Scope, Constraints and Assumptions

This project plan applies to achieve the following requirements:

1.Construct a by game using optimized graphics that would run in almost all computers.

2.The theme of Process and Planning will be practically implemented in this assignment which can enhance the learning experience.

3.The idea is to learn to make high quality software with the course.

5. Iterations

This heading consists of various iterations done throughout the course of this project.

5.1. Iteration 1

The first iteration is this project plan along with some degree of implementation. The documentation should be completed first so that the implementation goals are met in code. An idea and some skeleton code need to be implemented for the project to work with. This is assignment one. In this first implementation, the basic Hangman game is implemented using a word that is defined and the result is displayed in Eclipse.

5.2. Iteration 2

The second iteration involves more detail into the project by actually starting to make the game for the 2nd assignment. This iteration involved extending the previous code to JavaFx and implementing newer ideas.

5.3. Iteration 3

5.4. Iteration 4

6. Risk Analysis

Project designing always comes with risks in various forms. Considering this project in particular, the risks associated are mainly project risks as there isn't a budget or business in this project nor a team. So some risks to take into account are, the accidental loss of JAVA code, loss of internet connection etc.

7. Time Log

1. Estimated time for planning the basic logic: 10 mins
   Estimated time for coding the logic into JAVA: 15 mins

2. Estimated time for making the layout for main menu in JavaFx : 1 hour
   Time consumed : 15 mins
   Estimated time for making the basic game layout in JavaFx : 1 hour
   Time consumed : Half an hour
   Estimated time for writing the usecases: 1 and half hours
   Time consumed : 1 hour(10PM - 11PM)
   Estimated time for making the UseCase diagrams: Half an hour
   Time consumed : 15 mins(10AM - 10:15AM approx..)
   Estimated time for making the State machine diagram : 45 mins
   Time consumed : 1 hour(12 Pm to 1 PM approx..)
   Estimated time for making the State Chart: 10 Mins
   Time consumed : Almost 15 mins(1PM to 1:15 approx…)
   Estimated time for making the Class diagram : 1 hour
   Time consumed : 1 and a half hours(6PM to 7:30 PM)