

Hangman Project

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1. General information

The project's name is the Hangman project and got the project id 1200678.

Project Manager is Mattias and the Main Client is www.games.com(made Up) and the Key Stakeholders is Top-manager of games.com and the owner of the company.

2. Vision

The project is to create an Hangman game, it shall contain all the required features for a working Hangman game as well as several others for a more flexible game. The basic features that you need is those that make you can play and win or lose by getting a random word you should guess on. In addition you should be able to add your own words to the list of words, if you want to you should be able to choose a word for another to play. There shall be some different levels of difficulty like word easy (5-6 letters) ,word medium (7-8 letters) and word hard (9-10 letters). Then as well the number of lives the player has easy, medium and hard.

You shall have different Users that saves the number of wins and losses. There will be a graphical interface as well as one for multiplayer where you guess on the same word.

The most features is pretty straight forward the different difficulties is already implemented.

Think i will be able to get all to be working except the graphical interface and the multiplier functionality.

3. Project plan

3.1 Introduction

This application is a Hangman game, in the game the player can login as an existing or a new player. The player can add words, play with standard difficulty or with specific rules. The rules that is changeable are the number of lives that can be low, average and high, this can be combined with the length of the word. There are 3 different sizes of words that can be picked with are easy (5-6 letters) , medium (7-8 letters) and hard (9-10 letters). The standard difficulty mean that the player has medium amount of lives and all words can be picked at random. The Software will be delivered in 3 increments.

3.2 Justification

The software is ordered from the Website [www.games.com\(made Up\)](http://www.games.com(made Up)) they have had an old Hangman software game available to be downloaded on there site. But there customers started to complain that the word library of words was to small and that they wanted different difficulties. So the purpose of this software was to replace the old software and asswell provide all the features that was requested.

3.3 Stakeholders

- Top-manager of games.com
- The owner of the company
- Adam “an end user of the software”

3.4 Resources

The resources for this software is one Software engineer that has 160 hours to complete the software with his computer. The Software engineer does also have the book Software Engineering 10th ed. by Ian Sommerville and the internet to make the software as good as possible. Of the 160 hours probably 40 will go to reading the book and on the internet. The code is only made of Java in version 1.8.0_171-b11

3.5 Hard-and software Requirements

Hardware Requirements

- Operating system: [Windows](#) 95 or NT or superior
- CPU; [Pentium](#) processor at 90 MHz or higher
- Memory; 16 MB [RAM](#)
- Hard Drive; 8 MB available in the [hard disk](#)

3.6 Scope and Constraints and Assumptions

The plan is to successfully complete all the requirements of the software.

So that all the functional requirements features shall be working as planned and the

Non-functional requirement shall as well be working although they are harder to evaluate.

But multiplayer is a little bit put to the side and will probably not be done in this project and probably the same with the user interface.

The biggest constraint on the software will be that it will be run in the terminal if the interface isn't done.

In a hangman game the most basic functionality is that you can get a random word each letter is represented with a *(or something else). Then when the player has a word he shall guess a letter that he thinks is in the word. If the player has right then all letters that was the same as the guess will be shown. If the player is wrong then he will lose a life and if he loses all his lives before he can see every letter in the word he will lose.

In addition to all that this Hangman game will have some additional functionality.

There will be possible to add words to the list to get an extended library of words. The player will be able to choose 9 different difficulties easy, medium and hard in both length of words and in amount of lives. There will also be a multiplayer mode where you go against each other and you don't have lives.

3.7 Software requirements

3.7.1 Functional requirements

- Start a game
- Win a game
- Lose a game
- Get random word
- Create new word
- Login to existing player
- Create a new player
- Choose different difficulties
- Choose the number of lives

3.7.2 Non-functional requirement

- Easy to use and learn
- It should take less than 15 seconds to add a new word
- The software should have low response time

4. Overall project schedule

The first iteration has its deadline on the 8 off Mars and the second iteration is on the 19 April

Iteration 1

1. Writing the general information estimated 15 min
2. Rewriting vision estimated 30 min
3. Rewriting Justification estimated 25 min
4. Rewrite project plan estimated 40 min
5. Rewrite risk analysis 50 min

Iteration 2

1. Rewriting the structure of the document 20 min estimated
2. Adding a first intro page and a second page for localising in the text estimated 10 min
3. Adding text to the project Introduktion 15 min
4. Adding text of the Scope constraints and Assumptions 30 min

5. Risk analysis

My strategy is to get a good ground to build the software on by carefully chosen classes to fit into the software. I will start with making it possible to run the game basically only getting a random word and then guessing what letters is in it and saves the letter if it is right.

Then adding that you can lose lives if you are wrong. Then that you dies when you have 0. And this will be how i gonna work, starting with the absolute necessary for the game to work and then working down to the lesser important features. So if something that is really important for the hole project comes up it probably do it early. The thing that might be the most likely to be a risk is the graphical interface since I have not worked so much with interfaces earlier but the rest is known area.

The most likely is that the multiplayer doesn't work thats is very likely because of the time constraints there is not a lot of time to implement multiplayer even throw the coding itself wouldn't be a problem. It is basically the same with the interface it's too time consuming better to put the effort on like adding a word to the word list. There is hard to see what can go wrong.

Impact

chance

extreme --Can't read the words in the list -- extremely small

large--Interface isn't done -- relatively high

small --multiplayer doesn't work -- relatively small

medium --Can't add words to the list -- extremely small

6. Time log

04-16 1. General information 20 min

04-16 2. Vision 35 min

04-16 3. Justification 25 min

04-16 4. Project plan 45 min

04-16 5. Risk analysis rewrite 50 min

08-21 6. Rewriting the structure of the document 40 min

08-21 7. Adding first and second page to the document 15 min

08-21 8. Adding text to the project Introduction 30 min

08-21 9. Adding text to the Scope constraints and Assumptions 40 min

7. Reflections

This Assignment was pretty fun because i like to code in java and it wasn't especially hard to get the Hangman program to work. I have before done similar programs like this so it was no new experience although i enjoyed coding very much. The Project plan was less fun then the coding but have to say that it probably was more educational to update the memory of how to make a Project plan.