SOFTWARE DEVELOPMENT PROJECT TEMPLATE

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Contents

1 Revision History

Date	Version	Description	Author
2019-02-08	1.0		Rashed Qazizada

2 | General Information

Project Summary

Project Name	Project ID
Project Manager	Main Client

Key Stakeholders

Executive Summary

3 | **Vision**

The project of Hangman, I am assigned to create and develop the Hangman game in four iteration process. On the first iteration process I need to complete the documentation of my project (specification, development and validation) and to release the initial version to the collaborate teachers. Initial and later incremented versions are based on my teachers' feedback and the main functionality I am assigned to do is to add different ideas and improvements to the next incremented version. However, the process continues for 3 more iteration and I am supposed to evolve the software to pass the course.

Hangman, a game where you must guess words. Most of us may know the principle of the Hangman game. The game is to challenge your field of knowledge on the selected category. All you have to do is try to save the poor man from execution by guessing the right words, any mistake will expose a part of the poor man getting hanged. Execution of the man in each round has eight errors before the man is hanged. As the guesser enters wrong letter, a part of the stick figure will be appearing based on solely strategy. Starting from head, eye, mount, left arm, right arm, left leg, right leg and once you tried all your guesses and full body is drawn, the game is over. For instance, the word to be guessed is "Sweden" the word will be shown as _ _ _ _ _ _ if the guesser's first guess is 'e' then it is displayed as _ _ e_ _ _. However, for every wrong guess the game is building a part of a man getting hanged and the letter guessed by player also displays on the screen.

The game starts a bit easy and then gradually becomes difficult. First, you have to select the level easy or hard. Second, you will be given a list of categories to select. If the player guesses 10 words right, a congrats message will be displayed saying that s/he has a Good knowledge on the selected category. Subsequently, game randomly picks 5 difficult words among all categories. If the player guesses all the letters of the last words correctly on the given time s/he wins the game. Finally, the player will be given a chance to write their name on the top 5 best players.

4 Project Plan

The very beginning of the course, I assigned to create a project plan for the Hangman game. The course has three themes and each theme consist of theory, study material, online exam and lastly with an assignment.

Theme 1: Process and Planning consists of theory, study materials, online exam and two recorded lectures about software process models and on how to plan your project. In this assignment I am supposed to create the project plan for the Hangman project and to complete the first iteration of creating the Hangman game due to deadline on 8 of February 2019.

Theme 2: Modelling and Designing

4.1 Introduction

From the beginning to end, the theme of the course is to implement the game "Hangman" in four iteration versions based on my previous programming course language Java. The main principle is the documentation and the feedbacks from the respective teachers.

4.2 Justification

The main objective of creating such an application is the formal functionality of the software and the practical application of the theme of "Process and Planning".

4.3 Stakeholders

Teachers, developers, students.

4.4 Resources

Course materials and JDK version 11.0.1 and latest Eclipse

4.5 Hard- and Software Requirements

A computer and Eclipse

4.6 Overall Project Schedule

What are the important dates for deliverables?

The deadline for Hand -in Assignment 1 is 8th of February

The deadline for Hand -in Assignment 2 is 21st of February

The deadline for Hand -in Assignment 3 is 8th of March

4.7   Scope, Constraints and Assumptions

The main objective of creating such an application is the formal functionality of the software and the practical application of the theme of "Process and Planning". The theme of Process and Planning must work according to available resources, within a schedule.

5 Iterations

Plan for four iterations, including this. This is a fine-grained plan on what is to be done in each iteration and with what resources. To begin with, this is a plan of what I *expect* to do, I will update this part with *additions*. The first assignment is to complete iteration one.

5.1 Iteration 1

The first iteration in this project plan along with some degree of implementation is to complete the documentation so that the implementation goals are met in code. I have already implemented an idea and some skeleton code for my project to work with.

This is assignment one.

5.2 Iteration 2

In this iteration you need to add some features to the game *but* after you have first modelled them using UML. All diagrams need to be included in the project documentation and should be implemented in the way modelled.

5.3 Iteration 3

You may include additional features to the game in this iteration, but the main focus is on *testing*. Plan, perform and document your tests in this iteration.

5.4 Iteration 4

The outcome of this iteration is *the complete* game. Reiterate the steps in iteration 1 – 3 for a set of new features but also remember to see the project as a whole, not only its parts.

6 Risk Analysis

Indeed, in the process of developing a software you will face risks within the code itself or between the units that must interact inside the application. By identifying the risks, I as developer be able to proactively modify my codes and reduce the overall risk of my project. Risk is an expectation of loss a potential data that may or may not happen at the initial version.

6.1 List of risks

- I believe the project I am expected to do is not a complex one but still as beginner there will be many risks on the documentation as well as on the codes.
- Lack of experience
- Lack of new ideas
- Lack of time, due to other courses at the university.

6.2 Strategies

The main goal of process and planning is to begin the project by proper planning and proper documentation in order to minimize the risk of mistakes at the very beginning of your project.

7 | Time log

Each assignment must be accompanied with a time log. This time log should contain the date, time and task to be performed. The reason for doing this is for you to get some experience in estimating your own time – creating a time log is one of the best ways of doing this. Take into account the time for learning and understanding of the problem when you plan the time. Make your planning with 15 minutes as the minimum unit. In the time log you start by *planning* the amount of time you believe a task will take and after it is done you mark *the actual time*. If every entry that has a difference in planned and actual time spend, analyse the time difference.

Theme1	starting	Finishing	Duration	Total Estimated time/hour	
2019-02-01	10:00	11:45	01:45	05:00	
2019-02-06	12:30	15:00	02:30		
	18:00	22:00	04:00		
2019-02-07	09:30	12:00	02:30		
	12:20	14:45	02:25		
			00:00		
	21:30	23:20	01:50	**Overtime**	
		Total hours	15:00	**10:00**	
Theme2	starting	Finishing	Duration		

8 | **Handing in**

All assignments have a number of files to hand in. The overall advice is to *keep it simple*. Make it easy for the reciever to understand what the files are by using *descriptive* file names. Use as *few* separate documents as possi-ble. Always provide a *context*, that is *do not* send a number of diagrams in "graphics format", but always in a document where you provide the pur-pose and meaning of the diagrams. Remember that the "reciever" is in reality a customer and as such has very little knowledge of the diagrams and documents – always provide context that make anything you hand in understandable to a non-technical person.

To hand in an assignment, make a git release and hand in the link via Moodle to that release.