Project Plan

Introduction

The main purpose of this project is to build a fully functional library system. This document is created to plan this project and document it properly.

Assignment Tasks / Milestones

The implementation is split into four big steps, and each big step is divided into subtasks for a better structure. Estimated time for completing each milestone is listed below. The estimated time for completing each subtask is documented in the separate document called Time log.

Milestones and estimated time

Assignment 1 - 2 weeks
Assignment 2 - 2 weeks
Assignment 3 - 2 weeks
Assignment 4 - 1 week

Work Breakdown Structure

Assignment 1

Task 1 – Personal Planning

- planning the subtasks A, B and C

Subtask A - Books

- Creating a list of books and a function or method to get them. Each book should handle the information *id, title, author, genre, publish date, price and description.*

Subtask B - Json

- Converting the created object Book and converting it into a Json String

Subtask C - Web

- Answering the request in the web browser. We have to implement the GetBooksResources. This subtask is done when we see the JSON object representing a List of Book Objects on the screen.

Task 2 – Vision

- Writing a Vision document

Task 3 – Project Plan

- Creating the Project Plan document (this document). This document will be updated until the whole project and library system is finished.

Assignment 2

Task 1 – Analysis

- Focusing on what to do rather than how to implement it. Starting to use UML

Subtask A - Identify Use Cases

- Identifying and documenting the use cases used in the system

Subtask B - Robustness Diagrams

- Creating Robustness Diagrams for our Use Cases to analyze and validate the business logic for them.

Subtask C - Use case realization

- Creating a sequence diagram for the implemented Use Case “List Books” and for the Use Case “Delete Book”.

Task 2 – Design

- Designing the logic to fetch books in XML format. After reading the XML file it should be converted into objects and lastly translated into Json for the web browser.

Task 3 – Implementation

- Implementing Task 2 and “Delete Book” without designing it, in the system.

Assignment 3

Task 1 – Test Plan

- Creating a test plan and identifying objectives, objects and showing how the testing will be done.

Task 2 – Test Cases

- Creating test cases for the two Use Cases from Assignment 2

Task 3 – Unit tests

- Implementing unit tests for the test cases developed in task 2

Task 4 – API test

- Testing the API by creating tests for all the resources that are available in the API specification

Assignment 4

Task 1 – Planning

- Planning the work in iterations. Updating this document and planning time with accurate hours planned for each iteration.

Task 2 – Iteration #1

- Creating an iteration report on our detailed planning for the iteration and reflect on the outcome after its completion

Task 3 – Iteration #2 and #3

- 2nd and 3rd iteration should be done in a similar way. The iterations should be an increment to the previous iteration

Summary

The customer ordered a library system for a university library. We have 2 months to finish it. Starting right away we will implement everything that is found in the API-specification and all methods in the folder resources. Every method should have a correct return value so that we can make good use of what we already have and for giving it a good structure so that it can be reused in the future. Later we will focus on testing the resources.