CMP-5012B Software Engineering

Requirements and Design – Report

*Put your project title here*

Team ID: xxx

|  |  |  |
| --- | --- | --- |
| **Team Member Name** | **Email address** | **Student ID** |
| Name 1 (team leader) | [abc@uea.ac.uk](mailto:abc@uea.ac.uk) | 1234567 |
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| … | … | … |
|  |  |  |
|  |  |  |

Date:

**1. Introduction and Project Ideas [10% marks]**

1.1 Main objective and overview

1.2. Analysis of similar systems *(minimum of 5)*

We analysed five systems [1] …

1.3. Feature matrix of similar systems

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Feature name | *System Name 1* | *System*  *Name 2* | *System*  *Name 3* | *System Name 4* | *System Name 5* | ***Your System*** |
| User Login | Yes | Yes | Yes | Yes | Yes | Yes |
| Graph view | Yes | No | Yes | No | Yes | Yes |
| … |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

**2. Requirements Analysis [40% marks]**

2.1 Use Case Diagram *(make sure you cover all features in the project spec.)*

2.2 Use Case Table *(minimum of five use cases)*

|  |  |
| --- | --- |
| Use case name: |  |
| Scope: |  |
| Primary actor: |  |
| Secondary actors: |  |
| Summary: |  |
| Preconditions: |  |
| Main success scenario: |  |
| Alternatives: |  |
| Exceptions: |  |
| Postconditions: |  |

2.3 Shall-Statements

2.3.1 First Sprint Features (feature to be implemented in Weeks 6 – 8) *(must include minimum of* ***3*** *NFRs)*

S1.1: A new user shall be able to create an account (**FR**).

Description: …

S1.2: A new user shall be able to learn how to use the help feature in 10 minutes (**NFR**).

Description: …

…

2.3.2 Test Cases for First Sprint

|  |  |  |  |
| --- | --- | --- | --- |
| **Test ID** | **Feature ID and Brief Description** | **Input Operations (Sequence and data)** | **Expected Output (text and/or drawing of the outputs)** |
| T1.1 | S1.1: This feature is about … | 1. Click on the ‘new user’ button on the screen, when open a home screen.  2. Click… | … |
|  |  |  |  |
|  |  |  |  |

2.3.3 Second Sprint Features (feature to be implemented in Weeks 9 – 11) *(must include minimum of* ***2*** *NFRs)*

S2.1: The system shall provide a graph to compare abc. (**FR**)

Description: …

S2.2: The system shall update the graph with a new data set within 10 ms. (**NFR**)

Description: …

…

2.3.4 Test Cases for Second Sprint

|  |  |  |  |
| --- | --- | --- | --- |
| **Test ID** | **Feature ID and Brief Description** | **Input Operations (Sequence and data)** | **Expected Output (text and/or drawing of the outputs)** |
| T2.1 | S2.1: This feature is about … | 1. Click on the ‘new user’ button on the screen, when open a home screen.  2. Click… | … |
|  |  |  |  |
|  |  |  |  |

**3. Object Oriented Design [40% marks]**

* 1. Class Diagram (Abstract)

*(all identified classes and their relationships. Classify them into three group: Model, View, Controller)*

* 1. Message Sequence Diagram

*(for three use cases of 2.2)*

* 1. Detailed Class Description

*(for three major classes: attributes, methods)*

**4. Implementation Plan [10% marks]**

4.1 Task List and Team Member Allocation *(****Weeks 6 – 12****)*

(See Week 5 lecture slides)

4.2 Gantt chart

(See Week 5 lecture slides)

**References** *(Any external sources used in the document)*

Example:

[1] Ian Sommerville, Software Engineering, Addison-Wesley, 2010

[2]

**APPENDIX**

Any diagrams, screen shots, figures, tables etc. that do not fit into the previous sections.