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| **Sukkur IBA University**  **Software Design Specification (SDS)**  **For**  **A Web-based Final Year Project (FYP) Management System**  **Version 1.4**   |  |  | | --- | --- | | **Project Code** | **F17133** | | **Supervisor** | **Sir Khalid Hussain** | | **Project Team** | **Suhail Ahmed**  **Tarique Hassan**  **Muhammad Ahsan** | | **Submission Date** |  | |

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| *Project Code* |  |
| *Supervisor* |  |
| *Co-Supervisor* |  |
| *Project Manager* |  |
| *Project Team* |  |
| *Submission Date* |  |

1. Introduction of Design Document

2. Entity Relationship Diagram (ERD)

3. Sequence Diagrams

4. Architecture Design Diagram

5. Database Diagram

6. Class Diagram

7. Interface Design

8. Test Cases

**FYP Mid Defense SRS/SDS Evaluation Form and Rubrics**

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| **Criteria** | **1 (Marks 0-1)** | **2 (Marks 2-4)** | **3 (Marks 5-7)** | **4 (Marks 8-9)** | **5 (Marks 10)** |
| **R1**  **Project Scope** | Not written | Project Scope is identified and written in vague way and is it very hard to understand | Project scope is identified and written in ordinary way and conveys the massage | Project scope is identified and written in good way and it clearly defines the scope, however it can be improved to achieve excellency | Project scope is identified and written in excellent and concise way. No further improvements are required |
| **R2**  **Overall Description** | Not written | Overall description is written in vague way and is it missing any of the two required points i.e. Product perspective and design constraints | Overall description is written in ordinary way and defines the required points i.e. Product perspective and design constraints in normal way. Product perspective is not formulated and analyzed accurately | Overall description is written in good way. Product perspective does not lack any required information. All the necessary design constraints are well derived and formulated | Overall description is written in excellent and concise way. No further improvements are required in this regard |
| **R3**  **External Interface Requirements** | Not written | Software, user, hardware and communication interface requirements are not satisfactory. Either all of them are not properly defined or mentioned in vague way | These external interface requirements are satisfactory. They have been defined in ordinary way with a lot of improvements required to meet the criteria | All these external requirements are described in good way. All required information is properly conveyed. However, still there is room for improvements | Overall external interface requirements are written in excellent and concise way. No further improvements are required in this regard |
| **R4**  **Functional Requirements** | Not written | System features which covers the functional requirements of the product are not satisfactory. Very difficult to understand. Did not cover all the functional requirements of the system. They have been defined in vague way | All the identified functional requirements are satisfactory; however they have been described with ordinary details. However, there is repetition in these requirements and includes ambiguities. There are many errors in UML notations. | All the functional requirements are identified and written in good way; including the important details. There is no repetition in these requirements. However these can be further improved by removing the inconsistencies and ambiguities. There are very few UML notation issues | Functional requirements have been covered in excellent and clear way with all the needed details. There exists no repetition. All the ambiguities and inconsistencies have been removed. All the UML notations have been used in correct way |
| **R5**  **Non-Functional Requirements** | Not written | Non-functional requirements of the system have not been covered in proper way. There are a lot of deficiencies and does not achieve the basic level of satisfaction. Very difficult to understand | The non-functional requirements are identified and described in satisfactory way. . However, there is repetition in these requirements and includes ambiguities. There is no proper categorization of various types of non-functional requirements | Non-functional requirements are identified and classified properly and written in a good way. Performance, Reliability, Security, Efficiency, Robustness and maintainability etc. are clearly defined. However, there is still room for improvement. | Non-Functional requirements have been covered in excellent and clear way with all the needed details. There exists no repetition. All the ambiguities and inconsistencies have been removed. They are well-organized, prioritized and written in testable form |
| **R6**  **Grammar, and spelling** | Very Serious mistakes in grammar and language. There are a lot of spelling mistakes and typos | Serious mistakes in grammar and spelling. | Some grammar and spelling mistakes. Also not appropriate wording at some places. | Very minor grammar, spelling and language issues. The improvements are possible by using more appropriate wording | Excellent grammar used. No spelling mistakes at all |
| **R7**  **Expression Tone** | Very hard to understand. Tone not at all appropriate | Hard to follow or poor word choices. Tone also non-professional | Easy to read and understandable. However, still the tone is not professional | Easy to read and understandable. Good expression tone is used. Professional tone is used. However, there is room for improvements | Pleasure to read. Tone is concise, clear and highly professional. No further improvements are needed. |

**SRS/SDS Evaluation Form**

Project Title \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| **PLO** | **S No** | **Description** | **Weight** | **Performance**  **(1 – 5)** | **Marks** |
| **PLO-2: Problem Analysis** | R1 | **Project Scope** | **10** | **1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐** |  |
| **PLO-2: Problem Analysis** | R2 | **Overall Description** | **10** | **1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐** |  |
| **PLO-3: Design/ Development of Solution** | R3 | **External Interface Requirements** | **10** | **1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐** |  |
| **PLO-4: Investigation** | R4 | **Functional Requirements** | **10** | **1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐** |  |
| **PLO-4: Investigation** | R5 | **Non-Functional Requirements** | **10** | **1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐** |  |
| **PLO-10: Communication** | R6 | **Grammar, and spelling** | **10** | **1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐** |  |
| **PLO-10: Communication** | R7 | **Expression Tone** | **10** | **1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐** |  |

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**FYP Mid Defence Presentation Evaluation Form and Rubrics**

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| **Criteria** | **1 (Marks 0-1)** | **2 (Marks 2-4)** | **3 (Marks 5-7)** | **4 (Marks 8-9)** | **5 (Marks 10)** |
| **R1**  **Analysis and approach** | Unable to plan and set objectives for the realization of the project.  Correct approach to solve the project is not followed | In between | Adequate analysis of the project. Objectives have been set, but strategies to follow are not clearly stated.  Approach taken to solve the problem is satisfactory. | In between | Complete analysis of the project has been done. Objectives have been set. Strategies to follow have been defined.  Approach taken to solve the problem has been chosen after thorough analysis. |
| **R2**  **Novelty and Creativity** | Description of unmet need or problem the project caters to is missing.  The proposed solution is not novel.  The project appears trivial. | In between | Details of the project novelty are briefly discussed.  The novelty of the proposed solution is marginal. | In between | Details of unmet needs the project caters to are there. Potential customers have been identified.  The proposed solution is novel  The project solves complex engineering problem.  The project can be included in the startup stream |
| **R3**  **Subject Knowledge** | Student has no knowledge of both problem and solution. Cannot answer basic questions. | In between | Student is uncomfortable with information. Seems novice and can answer basic questions only. | In between | Student has presented full knowledge of both problem and solution. Answers to questions are strengthen by rationalization and explanation |
| **R4**  **Timeline and Implementation Progress** | Timeline as defined in the project proposal is not followed.  Milestones have not been achieved. | In between | Timeline as defined in the project proposal is followed for the most part.  Some of the milestones have been achieved | In between | All milestones are completed according to the timeline defined in project proposal |
| **R5**  **Team work** | Only one member appears to be actively working on the project. | In between | Not all members have contributed to the project. Work division is not clearly mentioned. | In between | All members contributed.  Work division clearly mentioned |

**FYP Mid Defence Presentation Evaluation Form**

Project Title \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| **PLO** | **S No** | **Description** | **Weight** | **Performance**  **(1 – 5)** | **Marks** |
| **PLO-4: Investigation** | R1 | **Analysis and Approach** | **10** | **1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐** |  |
| **PLO-12: Lifelong Learning** | R2 | **Novelty and Creativity** | **10** | **1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐** |  |
| **PLO-1: Computing Knowledge** | R3 | **Subject Knowledge** | **10** | **1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐** |  |
| **PLO-11: Project Management** | R4 | **Timeline** | **10** | **1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐** |  |
| **PLO-9: Individual & Team Work** | R5 | **Team work** | **10** | **1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐** |  |
|  |  | **Understanding of the domain & Quality of work completed up till now?** | **10** | **1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐** |  |
|  |  | **Implementation Progress: Has the team achieved the milestones up till the mid-defense?** | **10** | **1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐** |  |

Evaluator Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Signature with Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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