**PROJECT TITLE HERE**

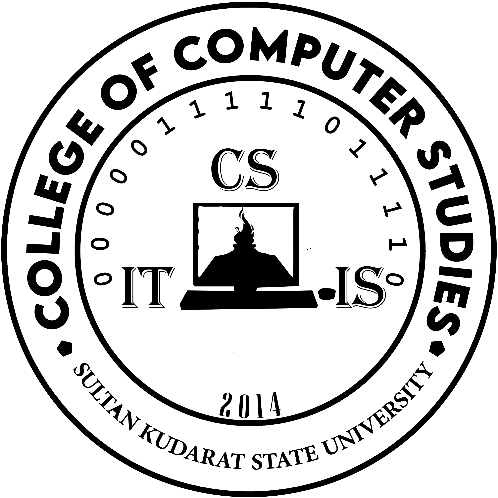
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**SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE SUBJECT IT221 – ADVANCED DATABASE SYSTEMS**

**BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY**

2nd Semester | A.Y. 2024-2025

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**INTRODUCTION**

***Background of the Project***

Discussion starts here.

***Statement of the Problem***

Discussion starts here.

***General Objective of the Project***

Discussion starts here.

***Specific Objectives of the Project***

*Specifically, this project aims to:*

1. Objective 1.
2. Objective 2.
3. Objective 3.
4. Objective 4.
5. Objective 5.
6. Objective 6.

***Significance of the Project***

Discussion starts here.

***To the End User:*** Discussion starts here.

***To the End User:*** Discussion starts here.

***To the End User:*** Discussion starts here.

**Scope of the Project**

Discussion starts here.

**Limitations of the Project**

Discussion starts here.

**Documentation of the Existence and Seriousness**

**of the Problem**

**Documentation of the Current System**

Discussion starts here.

Photos/Images

**Figure 1.** Screenshots of the Current System

**Problems Identified in the Current System**

Discussion starts here

***Problem Identified 1:*** Discussion starts here.

***Problem Identified 2:*** Discussion starts here.

***Problem Identified 3:*** Discussion starts here.

***Problem Identified 4:*** Discussion starts here.

***Problem Identified 5:*** Discussion starts here.

**Seriousness of the Problem**

Discussion starts here.

**Need for a Digital Solution**

Discussion starts here.

**Technical RequirementS**

Discussion starts here.

Table 1. *Hardware Requirements*

|  |  |
| --- | --- |
| ***ITEM*** | ***SPECIFICATION*** |
| **Processor** |  |
| **Memory** |  |
| **Hard Disk** |  |
| **Power Supply** |  |
| **Monitor** |  |
|  |  |
|  |  |
|  |  |

Table 1 shows the hardware requirements needed for the system; this includes the minimum hardware parts of computer to support the development process of the system.

**Table 2. *Software Requirements***

|  |  |
| --- | --- |
| ***ITEM*** | ***SPECIFICATION*** |
| **Programming Language (front-end)** |  |
| **Web Scripting Languages** |  |
| **Cross-platform web server** |  |
| **Web Designing Tools** |  |
| **Project Management Tool** |  |
| **Diagramming and vector graphics** |  |
| **Database Application (back-end)** |  |
| **Operating System** |  |

Table 2 shows the software requirements needed to develop the system. This includes the minimum operating system, front end and backend software as well as the domain name needed to deploy the system online.

**Methods to be used in Developing the System**



**Figure 3. Agile Software Development Methodology**

Agile Software Development Methodology was designed to ensure that system requirements are met efficiently in existing computerized systems. It provides a structured approach to requirement gathering, planning, development, implementation, and testing, ensuring a logical and systematic process. This methodology emphasizes flexibility, continuous feedback, and iterative development, allowing for adaptability to changes while maintaining technical accuracy and user satisfaction.

**PROJECT SCHEDULES OF THE PROJECT (GANTT CHART)**

**SPRINT 1 *(Objectives 1 & 2)***

**Figure 4. SPRINT 1 Project Schedules**

Figure 4 shows the timeline, tasks and duration of the project and the expected completion date of SPRINT 1.

**SPRINT 2 *(Objectives 3 & 4)***

**Figure 5. SPRINT 1 Project Schedules**

Figure 5 shows the timeline, tasks and duration of the project and the expected completion date of SPRINT 2.

**SPRINT 3** ***(Objective 5)***

**Figure 6. SPRINT 3 Project Schedules**

Figure 6 shows the timeline, tasks and duration of the project and the expected completion date of the SPRINT 3.

**SPRINT 4** ***(Objective 6)***

**Figure 7. SPRINT 5 Project Schedules**

Figure 7 shows the timeline, tasks and duration of the project and the expected completion date of the SPRINT 4.

**Database Implementation**

**Entities and Attributes**

|  |  |  |
| --- | --- | --- |
| **Entity Name** | **Primary Key** | **Attributes** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**Cardinality and Relationships**

|  |  |  |
| --- | --- | --- |
| **Entities Involved** | **Cardinality** | **Relationship** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**Entity-Relationship Diagram**

**Figure 2. Entity-Relationship Diagram of the System**

**Database Tables and Structure**

**Student Table**

Stores information about students who request credentials.

|  |  |  |
| --- | --- | --- |
| **Column Name** | **Data Type** | **Constraints** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**Credential Table**

Stores different types of credentials that can be requested.

|  |  |  |
| --- | --- | --- |
| **Column Name** | **Data Type** | **Constraints** |
|  |  |  |
|  |  |  |
|  |  |  |

**CredentialRequest Table**

Manages student requests for credentials.

|  |  |  |
| --- | --- | --- |
| **Column Name** | **Data Type** | **Constraints** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**Registrar Table**

Stores information about registrar staff who process credential requests.

|  |  |  |
| --- | --- | --- |
| **Column Name** | **Data Type** | **Constraints** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**Notification Table**

Stores notifications sent to students about request status updates.

|  |  |  |
| --- | --- | --- |
| **Column Name** | **Data Type** | **Constraints** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**Admin Table**

Stores administrator accounts who manage the system.

|  |  |  |
| --- | --- | --- |
| **Column Name** | **Data Type** | **Constraints** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**Database Schema**

**System Screenshots**

**Objective 1: Manage Administrative Staff Accounts**

**Objective 1: Manage Academic Tracks**

**Objective 1: Manage Credential Document Details**

**Objective 1: Manage Credential Requests**

**Objective 2: Students to Request Credentials**

**Objective 2: Generate Requests Slip with QR code**

**Objective 3: Students with Automated Status Updates via Email**

**Objective 4: Scan and Verify Request Slip with QR code**

**Objective 5: Data Dashboard**

**Objective 6: Generated Reports**

**APPENDIX A:** Approved Letter Permission to Data and Information Gathering

Scanned Copy of the Letter

**APPENDIX B:** Pictorials during the Conduct of Data and Information Gathering

Photos Here

Photos Here