#### **Project Charter: Green University Database Management System**

# **Project Description**

The Green University Database Management System is a Java-Swing-based application that aims to connect all university staff and key stakeholders, including university administrators, faculty members, students, the Transportation Authority, and IT staff, in a single environment or community. The application will serve as a centralized database management system to streamline processes and enhance communication and collaboration among the university community.

#### **Problem Statement**

The existing systems used within the university lack a unified platform for effective communication and collaboration among the staff and key stakeholders. This leads to inefficiencies, miscommunication, and difficulty in accessing or sharing relevant information. The university needs a robust solution to address these challenges and improve overall coordination and data management.

# **Stakeholders**

- University administrators
- Faculty members
- Students
- Transportation Authority
- IT staff

# **Objectives**

The main objectives of the Green University Database Management System project are:

- 1. Establish a centralized platform for effective communication and collaboration among university staff and stakeholders.
- 2. Streamline administrative processes and enhance efficiency in data management.
- 3. Improve information accessibility and sharing among the university community.
- 4. Facilitate effective coordination between university departments and key stakeholders.
- 5. Increase transparency and accountability within the university administration.

6. Enhance overall user experience and satisfaction of the university community.

# **Project Scope**

The Green University Database Management System project will cover the following aspects:

- Development of a Java-Swing-based application with an intuitive user interface.
- Integration of modules for user registration, data management, communication, and collaboration.
- Implementation of secure authentication and authorization measures.
- Integration with existing university systems and databases, where applicable.
- Customization options for user preferences and access rights.
- Documentation of system functionalities and user guides.

# **Deliverables**

- 1. Java-Swing-based application with an intuitive user interface.
- 2. User registration and authentication module.
- 3. Data management module for staff and stakeholder information.
- 4. Communication and collaboration module to facilitate intra-university communication.
- 5. Integration with existing university systems, where feasible.
- 6. Customization options for user preferences and access rights.
- 7. System documentation and user guides.

# **Technical Requirements**

- Java programming language for application development.
- Swing framework for GUI development.
- Secure authentication and authorization mechanisms.
- Database management system to store and retrieve data.
- Integration capabilities with existing university systems and APIs.
- Compatibility with major operating systems (Windows, macOS, Linux).
- Robust error handling and logging mechanisms.

## Resources

The resources required for the Green University Database Management System project include:

- Project Manager
- Business Analyst
- Java Developers
- UX/UI Designers
- Database Administrator
- Testing Team
- Subject Matter Experts (university staff and stakeholders)
- Hardware and software infrastructure
- Financial budget for development, implementation, and maintenance.

# **Milestones**

- 1. Project Initiation and Planning:
- Defining project scope and objectives
- Resource allocation and planning
- Stakeholder identification and engagement
- 2. Application Development:
- User interface design and prototyping
- Backend development for necessary modules
- Database design and implementation
- 3. Integration and Testing:
- Integration with existing university systems
- Functional and compatibility testing
- User acceptance testing
- 4. Deployment and Training:
- Release and installation of the application

- Training sessions for staff and stakeholders
- User documentation and support
- 5. Project Closure and Evaluation:
- Evaluation of project success criteria
- Handover to maintenance and support team
- Lessons learned and project closure report

# **Success Criteria**

The success of the Green University Database Management System project will be evaluated based on the following criteria:

- 1. Increased efficiency in communication and collaboration among university staff and stakeholders.
- 2. Improved data management and accessibility.
- 3. Positive feedback and satisfaction from users.
- 4. Reduction in administrative inefficiencies and duplication of efforts.
- 5. Successful integration with existing university systems.
- 6. Adherence to project timeline and budget.

#### **Risks**

- 1. Resistance to change from university staff and stakeholders.
- 2. Technical challenges during integration with existing systems.
- 3. Inadequate resource allocation or availability.
- 4. Data security breaches or unauthorized access.
- 5. Potential delays in development and testing.
- 6. Insufficient user training and support.

## **Conclusion**

The Green University Database Management System project aims to address the challenges faced by the university community by providing a Java-Swing-based application that connects university staff and key stakeholders in a single environment. By streamlining processes and

enhancing communication, this project will improve overall coordination, data management, and collaboration within the university. Success will be measured by increased efficiency, improved satisfaction, successful integration, and adherence to project timelines and budget. Identified risks should be mitigated to ensure project success.