



Green University of Bangladesh

*Department of Computer Science and Engineering (CSE)
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Student Management system

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Group 4

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<u>Lab Project Status</u>	
Marks:	Signature:
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Chapter 1

Introduction

1.1 Overview

This project is designed to develop a complete software system using the knowledge and tools learned during our academic courses. The system aims to solve a real-life problem by using programming, logical design, and user-friendly interfaces. The project includes all major development phases such as planning, designing, coding, testing, and evaluation. By completing this project, we will gain practical experience in building a functional application that can be used in real situations.

1.2 Motivation

In today's world, technology plays an important role in making daily tasks faster and easier. Many manual systems are time-consuming and often contain errors. This motivated us to develop an automated system that can help users complete their tasks more efficiently. As students of Green University of Bangladesh, it is important for us to apply theoretical knowledge to real software development. This project gives us the opportunity to improve our technical skills and contribute to solving a practical problem.

1.3 Problem Definition

1.3.1 Problem Statement

Many existing systems are still manual, slow, unorganized, or not user-friendly. Users face difficulties such as missing information, long processing time, and dependency on paperwork. To solve these issues, a digital platform is needed that can store data properly, process tasks quickly, and provide easy access to information.

1.3.2 Complex Engineering Problem

The project deals with a complex engineering problem because it requires handling multiple tasks such as data storage, data validation, user authentication, error handling, and secure access. The system must also manage different types of users, ensure accuracy, and deliver reliable performance. Designing such a system requires knowledge of algorithms, programming, data structure, and system architecture.

1.4 Design Goals / Objectives

The main objectives of this project are as follows:

- To design a simple, clean, and user-friendly interface for all users.
- To develop a functional system capable of solving a real-life problem effectively.
- To ensure accurate data handling and secure user authentication.
- To implement efficient algorithms for processing and validating user input.
- To maintain clear documentation for future updates.
- To test the system thoroughly to ensure smooth operation with minimal errors.

1.5 Application

The project can be used in different real-life applications depending on the chosen topic. Examples include education systems, management systems, record-keeping systems, or any platform that needs automated data handling. The system can be used by students, teachers, administrators, or general users to complete tasks easily and quickly. With further development, the application can be expanded into a larger system with more advanced features.