**Title of Your Mini Lab Project**

### Submitted By

|  |  |
| --- | --- |
| **Student Name** | **Student ID** |
| Student-1 Name | Student-1 ID |
| Student-2 Name | Student-2 ID |
| Student-3 Name | Student-3 ID |
| Student-4 Name | Student-4 ID |
| Student-5 Name | Student-5 ID |

**MINI LAB PROJECT REPORT**

This Report Presented in Partial Fulfillment of the course **CSEXXX: Subject Name in the Computer Science and Engineering Department**



### DAFFODIL INTERNATIONAL UNIVERSITY

**Dhaka, Bangladesh**

**November 2, 2024**

## DECLARATION

We hereby declare that this lab project has been done by us under the supervision of **Name of the course teacher**, **course teacher’s Designation**, Department of Computer Science and Engineering, Daffodil International University. We also declare that neither this project nor any part of this project has been submitted elsewhere as lab projects.

**Submitted To:**

**Course Teacher’s Name**

Designation

Department of Computer Science and Engineering Daffodil International University

**Submitted by**

|  |
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| Student Name Student ID:Dept. of CSE, DIU |
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## COURSE & PROGRAM OUTCOME

The following course have course outcomes as following:.

Table 1: Course Outcome Statements

|  |  |
| --- | --- |
| **CO’s** | **Statements** |
| CO1 | **Define** and **Relate** classes, objects, members of the class, and relationships amongthem needed for solving specific problems |
| CO2 | **Formulate** knowledge of object-oriented programming and Java in problem solving |
| CO3 | **Analyze** Unified Modeling Language (UML) models to **Present** a specific problem |
| CO4 | **Develop** solutions for real-world complex problems **applying** OOP concepts whileevaluating their effectiveness based on industry standards. |

Table 2: Mapping of CO, PO, Blooms, KP and CEP

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CO** | **PO** | **Blooms** | **KP** | **CEP** |
| CO1 | PO1 | C1, C2 | KP3 | EP1, EP3 |
| CO2 | PO2 | C2 | KP3 | EP1, EP3 |
| CO3 | PO3 | C4, A1 | KP3 | EP1, EP2 |
| CO4 | PO3 | C3, C6, A3,P3 | KP4 | EP1, EP3 |

The mapping justification of this table is provided in section **4.3.1**, **4.3.2** and **4.3.3**.

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**Chapter 1**

# Introduction

Every chapter should start with 1-2 sentences on the outline of the chapter.

### Introduction

This section should present the background and a problem statement that your project aims to solve.

### Motivation

The computational motivation that encourages you to solve the problem should be stated here clearly. In addition, you can mention why solving this problem will benefit you.

### Objectives

Enumerate the objectives in clear and specific terms.

### Feasibility Study

Put a summary of similar research study, case study, methodological contribution of existing projects, web applications, and mobile apps similar to your work [[1].](#_bookmark36)

### Gap Analysis

Here summaries the gap where you intend to work.

### Project Outcome

What are or could be the possible outcomes of your work?

**Chapter 2**

# Proposed Methodology/Architecture

Every chapter should start with 1-2 sentences on the outline of the chapter.

### Requirement Analysis & Design Specification

#### Overview

#### Proposed Methodology/ System Design



Figure 2.1: This is a sample diagram

#### UI Design

### Overall Project Plan

**Chapter 3**

# Implementation and Results

Every chapter should start with 1-2 sentences on the outline of the chapter.

### Implementation

### Performance Analysis

### Results and Discussion

**Chapter 4**

# Engineering Standards and Mapping

Every chapter should start with 1-2 sentences on the outline of the chapter.

### Impact on Society, Environment and Sustainability

#### Impact on Life

#### Impact on Society & Environment

#### Ethical Aspects

#### Sustainability Plan

### Project Management and Team Work

Provide a cost analysis in terms of budget required and revenue model. In case of budget, you must show an alternate budget and rationales.

### Complex Engineering Problem

#### Mapping of Program Outcome

In this section, provide a mapping of the problem and provided solution with targeted Program Outcomes (PO’s).

Table 4.1: Justification of Program Outcomes

|  |  |
| --- | --- |
| **PO’s** | **Justification** |
| PO1 | Justification of PO1 attainment |
| PO2 | Justification of PO2 attainment |
| PO3 | Justification of PO3 attainment |

#### Complex Problem Solving

In this section, provide a mapping with problem solving categories. For each mapping add subsections to put rationale (Use Table [4.2).](#_bookmark29) For P1, you need to put another mapping with

Chapter 4. Engineering Standards and Mapping 4.3. Complex Engineering Problem

Knowledge profile and rational thereof.

Table 4.2: Mapping with complex problem solving.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **EP1**Dept of Knowledge | **EP2**Range of Conflicting Requirements | **EP3**Depth of Analysis | **EP4**Familiarity of Issues | **EP5**Extent of Applicable Codes | **EP6**ExtentOf Stakeholder Involvement | **EP7**Inter- dependence |
|  |  |  |  |  |  |  |

#### Engineering Activities

In this section, provide a mapping with engineering activities. For each mapping add subsections to put rationale (Use Table [4.3).](#_bookmark31)

Table 4.3: Mapping with complex engineering activities.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **EA1**Range of resources | **EA2**Level of Interaction | **EA3**Innovation | **EA4**Consequences for society andenvironment | **EA5**Familiarity |
|  |  |  |  |  |

**Chapter 5**

# Conclusion

Every chapter should start with 1-2 sentences on the outline of the chapter.

### Summary

### Limitation

### Future Work

# References

[1] Jon Kleinberg and Eva Tardos. *Algorithm design*. Pearson Education India, 2006.