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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

December 13, 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

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COURSE & PROGRAM OUTCOME

The following course have course outcomes as following:.

Table 1: Course Outcome Statements

CO's	Statements
CO1	Apply data mining and machine learning concepts to preprocess, normalize, and analyze data from various domains.
CO2	Implement appropriate data mining and/or machine learning techniques such as classification, regression, prediction, clustering, association rule mining, and artificial neural network to solve complex problems.
CO3	Evaluate the social implications of data mining and machine learning applications and solutions.
CO4	Assess the sustainability and impact of data mining and machine learning solutions on the environment.
CO5	Collaborate effectively in diverse and multidisciplinary teams for data mining and machine learning projects.
CO6	Apply engineering management principles and economic decision-making to plan, execute, and manage data mining and machine learning projects.
CO7	Communicate the results and insights of data mining and machine learning projects using effective reports, design documentation, presentations, and instructions to various stakeholders.

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

CO	PO	Blooms	KP	CEP
CO1	PO4	C2, A2, P2	K2, K3, K4, K8	EP1, EP4
CO2	PO5	C3, A3, P3	K2, K3, K4, K6 K8	EP1, EP2, EP7
CO3	PO6	C5, A4, P4	KP7	EP1, EP4
CO4	PO7	C4, A4, P4	KP7	EP1, EP2
CO5	PO9	C3, A4, P4	K5, K6	
CO6	PO11	C3, A3, P3	K5, K7	
CO7	PO10	C4, A4, P4	K5, K6, K7	

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

Table of Contents

Chapter 1

Introduction

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

1.1 Introduction

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

1.2 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.

1.3 Objectives

Enumerate the objectives in clear and specific terms.

1.4 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].

1.5 Gap Analysis

Here summaries the gap where you intend to work.

1.6 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.

2.1 Requirement Analysis & Design Specification

2.1.1 Overview

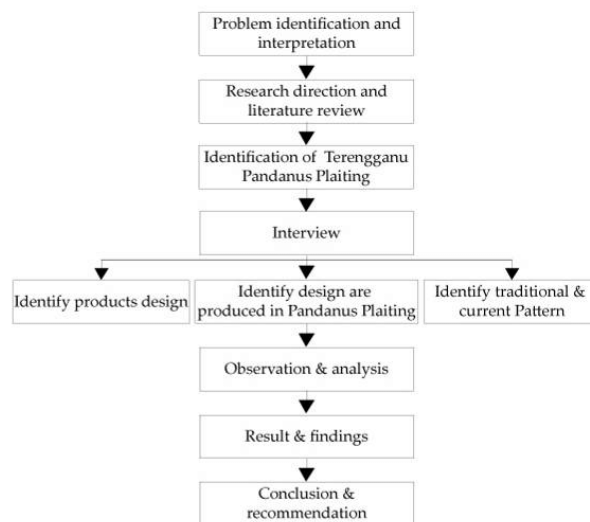### 2.1.2 Proposed Methodology/ System Design

Figure 2.1: This is a sample diagram

2.1.3 UI Design

2.2 Overall Project Plan

Chapter 3

Implementation and Results

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

3.1 Implementation

3.2 Performance Analysis

3.3 Results and Discussion

Chapter 4

Engineering Standards and Mapping

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

4.1 Impact on Society, Environment and Sustainability

4.1.1 Impact on Life

4.1.2 Impact on Society & Environment

4.1.3 Ethical Aspects

4.1.4 Sustainability Plan

4.2 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.

4.3 Complex Engineering Problem

4.3.1 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

4.3.2 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). For P1, you need to put another mapping with

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 Extent of Stakeholder Involvement	EP7 Inter-dependence
√	√					

4.3.3   Engineering Activities

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

Table 4.3: Mapping with complex engineering activities.

EA1 Range of resources	EA2 Level of Interaction	EA3 Innovation	EA4 Consequences for society and environment	EA5 Familiarity
√	√			

Chapter 5

Conclusion

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

5.1 Summary

5.2 Limitation

5.3 Future Work

References

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