

**The Hashemite University, Zarqa, Jordan**

**Faculty of Prince Al-Hussein Bin Abdallah II For Information Technology**

**Software Engineering Department**

**YOUR PROJECT TITLE**

**A project submitted**

**in partial fulfillment of the requirements for the**

**B.Sc. Degree in Software Engineering**

**By**

Student’s First Name Middle Initial Last Name (Student’s ID Number)

Student’s First Name Middle Initial Last Name (Student’s ID Number)

Student’s First Name Middle Initial Last Name (Student’s ID Number)

**Supervised by**

Supervisor’s First Name Middle Initial Last Name

**Committee Member Names**

First Committee Member’s First Name Middle Initial Last Name

Second Committee Member’s First Name Middle Initial Last Name

**Month Year**

# CERTIFICATE

It is hereby certified that the project titled <***project title comes here, bold and italicized***>, submitted by undersigned, in partial fulfillment of the award of the degree of “Bachelor in Software Engineering” embodies original work done by them under my supervision.

All the analysis, design and system development have been accomplished by the undersigned. Moreover, this project has not been submitted to any other college or university.

***Student 1 Name*** (student number)

***Student 2 Name*** (student number)

***Student 3 Name*** (student number)

**Signature**

**Signature**

**Signature**

# ABSTRACT

Usually one to two paragraph(s), 200 words max. Should state the problem being investigated, outline the method of investigation, the results obtained, the conclusions reached, and the potential impact. It should provide enough information for the readers to understand the significance of your work.

# ACKNOWLEDGEMENTS

This page is optional. It is where you may put your personal word of thanks to anyone who has helped you in your work.

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# ABBREVIATIONS

In this section, all abbreviation and acronyms used in the text must be properly defined.

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# Introduction

Each chapter should begin with an introduction that tells what will be covered in the chapter. Add it directly below the chapter heading, and it should tell the chapter’s importance to the overall report.

## Overview

In this section, you should write about the general review or summary of this project.

## Project Motivation

In this section, you should write about the answer the following questions:

Q1: What is the reasons behind your choice to develop this project?

Q2. Why your project is important?

Q3. What is the new idea that have been proposed by this project?

## Problem Statement

write about the issues that have been addressed by this project and the conditions to be improved upon

## Project Aim and Objectives

Write about the overall purposes of this project, should be clearly and concisely defined. In this section you should answer the following questions:

Q1. What is the goal that this project wants to achieve?

Q2. How this project can achieve this goal?

## Project Scope

Explains the boundaries (specified features and functions) of this project, establishes responsibilities for each team member and sets up procedures for how completed work will be verified and approved.

## Project Software and Hardware Requirements

List the prerequisites software and hardware requirement of this project.

## Project Limitations

you should clarify the limitations or parameters of the project and clearly identify any aspects that are not to be included.

## Project Expected Output

Describe the desired results of the project.

## Project Schedule

Listing of a project's milestones, activities, and deliverables, with intended start and finish dates.

## Project, product, and schedule risks

Describe the risk that the project takes longer than scheduled.

## Report Organization

Here you are to give your reader a guided tour of the remainder of the document. Following is an example.

The rest of the report is organized as follows. Chapter 2 introduces …………. Chapter 3 lists the ………………... Chapter 4 presents …………... The design and architecture components are described in Chapter 5. Chapter 6 presents the future work and concludes the report.

# Literature Review

A literature review is a search and evaluation of the available literature in your given subject or chosen topic area. It documents the state of the art with respect to the subject or topic you are working.

main tasks:

* summarizes prior research and says how your project is linked to it.
* integrates and summarizes what is known about a subject.
* demonstrates that you have learnt from others and that your project is a starting point for new ideas.

## Introduction

## Existing Systems

## Overall Problems of Existing Systems

## Overall Solution Approach

# Requirement Engineering and Analysis

## Stakeholders

List the individuals, groups, or organizations, who may affect, be affected by, or perceive itself to be affected by a decision, activity, or outcome of this project. And specify the type of each stockholder (e.g. Primary stakeholders, Secondary stakeholders, etc.).

FIGURE 1 GOES HERE (Above the caption)

Figure 1: Caption for Figure 1 via *References-> Insert Caption*

## Use Case Diagram

* + 1. Use Case Section

Normal Flow for each use case including action, precondition, post-condition and other sections as you learnt in requirements engineering course.

* + 1. Alternative flows

An alternate flow describes a scenario other than the normal flow for each use

case.

Table 1: Caption for Table 1 via *References-> Insert Caption*

TABLE 1 GOES HERE (below the caption)

## 3.3 Non-Functional User Requirements

Specify the non-functional requirements of this project that can be divided into two main categories:

1. Execution qualities, such as safety, security and usability, which are observable during operation (at run time).

2. Evolution qualities, such as testability, maintainability, extensibility and scalability, which are embodied in the static structure of the system.

## Constraints

List the conditions and restrictions of this project that must be satisfy.

# Architecture and Design

## Overview

## Software Architecture

* + 1. Logical view

Provide the software-architecture logical view for the major components as UML component diagram (or class diagram).

* + 1. Process view

Provide the software-architecture process view for the major components as UML sequence diagram (or communication diagram).

* + 1. Physical view

Provide the software-architecture physical view as UML deployment diagram.

* + 1. Details of each component in a separate section.

## Software design

* + 1. UML sequence/communication diagram

Provide UML sequence/communication diagram for each use case scenario. You should show concurrent objects and the messages type (i.e. synchronous or asynchronous).

* + 1. Class diagram

Provide class diagram to show classes’ relationship, internal classes data, and methods. This should be based on the use case scenarios, problem description, and use case scenarios sequence/communication diagrams.

* + 1. ER diagram (if any)

Provide the ER diagram for your data structure in the database (if any).

* + 1. State transition diagram

Provide state transition diagram of the system and if needed for some components/classes

## User interface design (prototype)

Provide snapshots for the graphical user interface screens of the system.

# Implementation Plan

## Description of Implementation

This subsection of the Project Implementation Plan describes Solution in more details. Describes how the information system will be deployed, installed and transitioned into an operational system. It contains a brief description of the major tasks and components involved in the implementation, the overall resources needed to support the implementation effort (such as hardware, software. facilities, materials, and personnel), and any site-specific implementation requirements.

## Programming language and technology

This section provides a list of programing languages, technologies, software and databases required to support the implementation. Identify them by name, code, or acronym. Identify which software is commercial off-the-shelf and which is State-specific. Identify any software used to facilitate the implementation process.

## part of implementation if possible

Provide pieces of code for major tasks and components.

# Testing Plan

Describe the scope, approach, resources and schedule of intended test activities. It identifies amongst others test items, the features to be tested, the testing tasks, test coverage, degree of tester independence, the test environment, the test design techniques and entry and exit criteria to be used, and the rationale for their choice.

## Black-box

Provide the black-box techniques that are used to test this project including test cases.

## White-box

Provide the white-box techniques that are used to test this project including test cases (test case if code is available).

## Testing automation

This section should provide:

1. The automation tools that have been used to control the execution of tests and the comparison of actual outcomes with predicted outcomes.

2. Decide what test cases to automate.

# Conclusion and Results

The conclusion is a required part that closes the document with a brief summary of the study including the problems found and the proposed solution. Most importantly, it should recommend to the readers the benefits of pursuing the project based on the researcher’s analysis.

## Summary of accomplished project

## Future Work

# References

All listed alphabetically according to the first author.

1. Periodical

Hourani, M., and Wedian, F. (2000). The effect of adatoms on the corrosion rate of copper. Corrosion Science, 42, 2131-2144.

1. Books

Mitchell, T.R, and Larson, J. R., Jr. (1987). People in organizations: An introduction to organizational behavior; (3rd ed.). New York: McGraw-Hill.

The references should be cited in the text as follows:

Hourani and Wedian (2000) developed a theoretical .........

Hourani et al is used if more than two authors.