Jordan University of Science and Technology
College of Computer Sciences & Information Technology

Project Title

A project submitted
in partial fulfillment of the requirements for the degree of
Bachelor in Software Engineering

by

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

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Supervised by

Supervisor’s First Name Middle Initial Last Name

Co-Supervisor’s Name (if any)

Committee Member Names

Committee Member’s First Name Middle Initial Last Name

Committee Member’s First Name Middle Initial Last Name

Month Year

ACKNOWLEDGEMENT

The acknowledgement is a statement of gratitude for assistance to accomplish the project. It may mention the names of the people the project members want to thank for their support in the project (usually parents, friends, instructors).

UNDERTAKING

This is to declare that the project entitled “Project Title” is an original work done by undersigned, in partial fulfillment of the requirements for the degree “Bachelor in Software Engineering” at Software Engineering Department, College of Computer and Information Technology, Jordan University of Science and Technology.

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

Student 2

Student 3

Note: sign across your name

ABSTRACT *(Optional)*

An abstract can be either descriptive or informative. A descriptive abstract summarizes the motivation, scope and methods used to attain the solution or findings. An informative on the other hand, is almost like the table of contents written in paragraph. It also includes the results, conclusions and recommendations. The abstract should not exceed 300 words and its contents are italicized.

Table of Contents

LIST OF TABLES

LIST OF FIGURES

CHAPTER 0: General format guidelines:

The physical layout and formatting of your final year project report is highly important, yet is very often neglected. A tidy, well laid-out and consistently formatted document makes for easier reading and is suggestive of a careful and professional attitude towards its preparation.

In effect, this document has been developed to give you the guidelines for preparing reports for your final year project. Use this document as a template if you are using Microsoft Word 2013 or later. Otherwise, use this document as an instruction set.

Typeface – Type size should be 12-point. Do not use script, or ornamental fonts, use Times New Roman. Print must be letter quality or near letter quality with dark black characters that are consistently clear, crisp, and easily read. Accent marks and other hand annotations must be done neatly in black ink.

Chapter title font size	16 bold / word first letter capital
Section font size	14 bold / word first letter capital
Sub-section font size	12 bold / word first letter capital
Text font size	12 Times New Roman

Margins – Left, Right: 25.4mm & Upper, Lower: 31.75mm.

Spacing– One and a half spacing is required in the main body of the manuscript except where conventional usage calls for single spacing; e.g., footnotes, indented quotations, tables, etc.

Word and Text Divisions– Words must be divided correctly at the end of a line and may not be divided from one page to the next. Use a standard dictionary to determine word division. Avoid any heading or subheading at the bottom of a page that is not followed by text.

Language– The report must be in English. However, some chapters could be in Arabic when necessary.

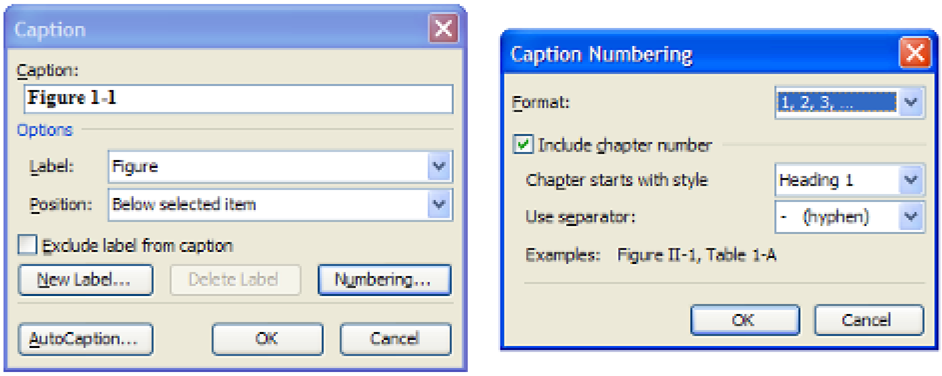
Paper- All copies must be on white, A4 or letter-size paper. Double-sided copies may be submitted.

Pagination– Each page of the manuscript, including all blank pages, and pages with photographs, table, figures, maps, and computer program printouts should be assigned a number. Consistent placement of pagination, at least one inch from the paper's edge, should be used throughout the manuscript.

The following pagination plan may be used:

- For the preliminary pages, use small Roman numerals (i, ii, iii, iv, etc.). The title page does not have a number but counts as page i; the following page is ii.
- For the remainder of the manuscript use continuous pagination for text, illustrations, appendices, and bibliography- use Arabic numbers (1,2,3, etc.).

Figures– Should be titled as well as numbered. The title should have <<"Figure" [chapter#]-[figure#]: "The title of the figure.">> and should appears under and middle its figure. (e.g. Figure 0-1 Setting caption numbering to include chapter number.).



Caption:
Figure 1-1
Options
Label: Figure
Position: Below selected item
☐ Exclude label from caption

Format: 1, 2, 3, ...
☑ Include chapter number
Chapter starts with style Heading 1
Use separator: - (hyphen)
Examples: Figure II-1, Table 1-A

Figure 0-1: Setting caption numbering to include chapter number.

Table– Should be titled as well as numbered. The title should have <<"Table" [chapter#]-[table#]: "The title of the table.">> and should appears above and middle its table. (e.g. Table 1-1 "just a table").

Table 0-1 just a table

Reproducing the Report– Final copies of the report must be clear and attractive. Review each copy for evenness and clarity of type, missing pages and crooked text.

Order and Content – see attached form**.**

CHAPTER 1: Introduction *(Heading 1)*

This chapter comprises background of the project, the reasons for taking it, problems addressed by the project and expected outcomes. A good report starts with an introduction to the title of project. The necessary background information is provided to establish context of the project. The motivation and significance of the project should be highlighted. A crisp problem statement is followed by scope of the project along with any limitation or exclusions. The specific objectives to be achieved should be stated. A roadmap or organization of report concludes the chapter.

1.1 Overview

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

1.2 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?

1.3 Problem Statement

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

1.4 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?

1.5 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.

1.6 Project Software and Hardware Requirements

List the prerequisites software and hardware requirement of this project.

1.7 Project Limitations

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

1.8 Project Expected Output

Describe the desired results of the project.

1.9 Project Schedule

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

1.10 Project, product, and schedule risks

Describe the risk that the project takes longer than scheduled.

CHAPTER 2: Related Existing System *(Optional)*

2.1 Introduction

2.2 Existing Systems

2.3 Overall Problems of Existing Systems

2.4 Overall Solution Approach

CHAPTER 3: Requirement Engineering and Analysis

3.1 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.).

3.2 Use Case Diagram

3.2.1 Use Case Section

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

3.2.1.1 Alternative flows

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

3.3 Non-functional 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.

3.4 Constraints

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

CHAPTER 4: Architecture and Design

4.1 Overview

4.2 Software architecture

4.2.1 Logical view

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

4.2.2 Process view

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

4.2.3 Physical view

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

4.2.4 Details of each component in a **separate section**.

4.3 Software design

4.3.1 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).

4.3.2 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.

4.3.3 ER diagram (*if any*)

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

4.3.4 State transition diagram

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

4.4 User interface design (prototype)

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

CHAPTER 5: Implementation Plan

5.1 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.

5.2 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.

5.3 part of implementation if possible

Provide pieces of code for major tasks and components.

CHAPTER 6: 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.

6.1 Black-box

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

6.2 White-box

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

6.3 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.

CHAPTER 7: 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.

CHAPTER 8: References *(Optional)*

Citations are numbered consecutively inside brackets. In writing the references, we follow American Psychological Association (APA) style. The references below show examples of how to include a book with 3 authors [1], a project report [2], a book with one author and cited 3 times [3-5], a book with 2 authors [6], an online book [7], an article in a journal [8], an article from an online newspaper [9], work with no author [10], an article in Wikipedia [11], a personal interview [12], a website [13], and a video found online [14].

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[13] Sebastian, B. (2010, July 25). Programming Style. PCPrograms.com. Retrieved July 25, 2010, from http://www.pcprograms.com.

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