Thesis Title

Submitted in partial fulfillment of the requirements

for the degree of

Bachelor of Engineering

Synopsis Report - Stage-I

by

Name of the Student

Roll No.

Name of the Student
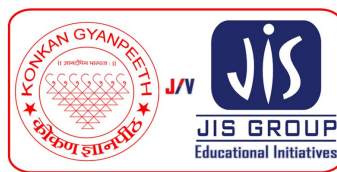
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Under the Supervision of

Name of Supervisor

DEPARTMENT OF INFORMATION TECHNOLOGY

KONKAN GYANPEETH COLLEGE OF ENGINEERING

KARJAT-410201

September 2018

Certificate

This is to certify that the project entitled **Title of project** is a bonafide work of **Name of students (Roll No.)** submitted to the University of Mumbai in partial fulfillment of the requirement for the award of the degree of **Undergraduate** in **DEPARTMENT OF INFORMATION TECHNOLOGY**.

Supervisor/Guide

Professor

Department of Information Technology

Head of Department

Professor

Department of Information Technology

Principal

Professor

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Project Report Approval

This thesis / dissertation/project report entitled **Title** by **Name of students (Roll No.
)** is approved for the degree of **DEPARTMENT OF INFORMATION TECHNOL-OGY**.

Examiners

1..

2..

Date.

Place.

Declaration

I declare that this written submission represents my ideas in my own words and where others' ideas or words have been included, I have adequately cited and referenced the original sources. I also declare that I have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in my submission. I understand that any violation of the above will be cause for disciplinary action by the Institute and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed.

Signature

(Name of Student) Roll No

Signature

(Name of Student) Roll No

Signature

(Name of Student) Roll No

Date.

Abstract

Enter Abstract Content here.........This should be one/two short paragraphs (100-150 words total), summarizing the project work. It is important that this is not just a re-statement of the original project outline. A suggested flow is background, project aims and main achievements. From the abstract, a reader should be able to ascertain if the project is of interest to them and, it should present results of which they may wish to know more details.

Acknowledgements

I would extend my sincerest gratitude........This should express your gratitude to those who have helped you in the preparation of your project.

Contents

List of Figures

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Abbreviations

FEA   **F**inite **E**lement **A**nalysis

FEM   **F**inite **E**lement **M**ethod

LVDT   **L**inear **V**ariable **D**ifferential **T**ransformer

RC   **R**einforced **C**oncrete

Symbols

D^{el} elasticity tensor

σ stress tensor

ε strain tensor

For/Dedicated to/To my. . .

Chapter 1

INTRODUCTION

1.1 Introduction

The introduction has several parts as given below: Background: A description of the background and context of the project and its relation to work already done in the area. Summarise existing work in the area concerned with your project work.

1.2 Objectives

Objectives: Concise statement of the aims and objectives of the project. Define exactly what you are going to do in the project; the objectives should be about 30 /40 words.

1.3 Purpose, Scope, and Applicability

Purpose, Scope and Applicability: The description of Purpose, Scope, and Applicability are given below:

1.3.1 Purpose

Purpose: Description of the topic of your project that answers questions on why you are doing this project. How your project could improve the system its significance and theoretical framework.

1.3.2   Scope

Scope: A brief overview of the methodology, assumptions and limitations. You should answer the question: What are the main issues you are covering in your project? What are the main functions of your project?

1.3.3   Applicability

Applicability: You should explain the direct and indirect applications of your work. Briefly discuss how this project will serve the computer world and people.

1.4   Achievements

Achievements: Explain what knowledge you achieved after the completion of your work. What contributions has your project made to the chosen area? Goals achieved describe the degree to which the findings support the original objectives laid out by the project. The goals may be partially or fully achieved, or exceeded.

1.5   Organisation of Report

Organization of Report: Summarizing the remaining chapters of the project report, in effect, giving the reader an overview of what is to come in the project report.

Chapter 2

LIRERATURE SURVEY

In this chapter Survey of Technologies you should demonstrate your awareness and under-
standing of Available Technologies related to the topic of your project. You should give
the detail of all the related technologies that are necessary to complete your project. You
should describe the technologies available in your chosen area and present a comparative
study of all those Available Technologies. Explain why you selected the one technology
for the completion of the objectives of your project.

Chapter 3

SURVEY OF TECHNOLOGIES

In this chapter Survey of Technologies you should demonstrate your awareness and understanding of Available Technologies related to the topic of your project. You should give the detail of all the related technologies that are necessary to complete your project. You should describe the technologies available in your chosen area and present a comparative study of all those Available Technologies. Explain why you selected the one technology for the completion of the objectives of your project.

Chapter 4

REQUIREMENTS AND ANALYSIS

4.1   Problem Definition

Define the problem on which you are working in the project. Provide details of the overall problem and then divide the problem in to sub-problems. Define each sub-problem clearly.

4.2   Requirements Specification

In this phase you should define the requirements of the system, independent of how these requirements will be accomplished. The Requirements Specification describes the things in the system and the actions that can be done on these things. Identify the operation and problems of the existing system.

4.3   Planning and Scheduling

Planning and scheduling is a complicated part of software development. Planning, for our purposes, can be thought of as determining all the small tasks that must be carried out in order to accomplish the goal. Planning also takes into account, rules, known as constraints, which, control when certain tasks can or cannot happen. Scheduling can be

thought of as determining whether adequate resources are available to carry out the plan. You should show the Gantt chart and Program Evaluation Review Technique (PERT).

4.4 Software and Hardware Requirements

Define the details of all the software and hardware needed for the development and implementation of your project.

Hardware Requirement: In this section, the equipment, graphics card, numeric co-processor, mouse, disk capacity, RAM capacity etc. necessary to run the software must be noted.

Software Requirements: In this section, the operating system, the compiler, testing tools, linker, and the libraries etc. necessary to compile, link and install the software must be listed.

4.5 Preliminary Product Description

Identify the requirements and objectives of the new system. Define the functions and operation of the application/system you are developing as your project.

4.6 Conceptual Models

You should understand the problem domain and produce a model of the system, which describes operations that can be performed on the system, and the allowable sequences of those operations. Conceptual Models could consist of complete Data Flow Diagrams, ER diagrams, Object-oriented diagrams, System Flowcharts etc.

Chapter 5

SYSTEM DESIGN

Describes desired features and operations in detail, including screen layouts, business rules, process diagrams, pseudo code and other documentation.

5.1   Basic Modules

You should follow the divide and conquer theory, so divide the overall problem into more manageable parts and develop each part or module separately. When all modules are ready, you should integrate all the modules into one system. In this phase, you should briefly describe all the modules and the functionality of these modules. **Elements of Project Development**

5.1.1   Logic Diagrams

5.1.2   Data Structures

5.1.3   Algorithms Design

5.2   User interface design

Define user, task, environment analysis and how you intend to map those requirements in order to develop a "User Interface". Describe the external and internal components

and the architecture of your user interface. Show some rough pictorial views of the user interface and its components.

5.3 Security Issues

Discuss Real-time considerations and Security issues related to your project and explain how you intend avoiding those security problems. What are your security policy plans and architecture?

Chapter 6

CONCLUSIONS

6.1 Conclusion

The conclusions can be summarized in a fairly short chapter (2 or 3pages). This chapter brings together many of the points that you would have made in the other chapters.

6.2 Limitations of the System

Explain the limitations you encountered during the testing of your software that you were not able to modify. List the criticisms you accepted during the demonstrations of your software.

6.3 Future Scope of the Project

describes two things: firstly, new areas of investigation prompted by developments in this project, and secondly, parts of the current works that were not completed due to time constraints and/or problems encountered.

Appendix A

Appendix A

Write your Appendix content here.....These may be provided to include further details of results, mathematical derivations, certain illustrative parts of the program code (e.g., class interfaces), user documentation etc.

PROJECT REPORT STRUCTURE

INTRODUCTION

The project report should be documented with an engineering approach to the solution of the problem that you have sought to address. The project report should be prepared in order to solve the problem in a methodical and professional manner, making due references to appropriate techniques, technologies and professional standards. You should start the documentation process from the first step of software development so that you can easily identify the issues to be focused upon in the ultimate project report. You should also include the details from your project notebook, in which you would have recorded the progress of your project throughout the course. The project report should contain enough details to enable examiners to evaluate your work. The details, however, should not render your project report as boring and tedious. The important points should be highlighted in the body of the report, with details often relegated to appendices

IMPORTANCE OF PROJECT/PROJECT REPORT

The Mini Project is not only a part of the coursework, but also a mechanism to demonstrate your abilities and specialisation. It provides the opportunity for you to demonstrate originality, teamwork, inspiration, planning and organisation in a software project, and to

put into practice some of the techniques you have been taught throughout the previous courses. The Mini Project is important for a number of reasons. It provides students with:

- opportunity to specialise in specific areas of IT;

- future employers will most likely ask you about your project at interview;

- opportunity to demonstrate a wide range of skills and knowledge learned, and

- encourages integration of knowledge gained in the previous course units.

The project report is an extremely important aspect of the project. It serves to show what you have achieved and should demonstrate that:

Elements of Project Development

- You understand the wider context of computing by relating your choice of the project, and the approach you take, to existing products or research.

- You can apply the theoretical and practical techniques taught in the course to the problem you are addressing and that you understand their relevance to the wider world of computing.

- You are capable of objectively criticising your own work and making constructive suggestions for improvements or further work based on your experiences so far.

- You can explain your thinking and working processes clearly and concisely to others through your project report.

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