**NITTE MEENAKSHI INSTITUTE OF TECHNOLOGY**

(AN AUTONOMOUS INSTITUTION, AFFILIATED TO VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELGAUM, APPROVED BY AICTE & GOVT.OF KARNATAKA

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**PHASE-II REPORT**

on

**PROJECT TITLE**

*Submitted in partial fulfilment of the requirement for the award of Degree of*

*Bachelor of Engineering*

*in*

*Computer Science and Engineering*

*Submitted by:*

|  |  |
| --- | --- |
| NAME1  NAME2  NAME3  NAME4 | USN1  USN2  USN3  USN4 |
|  |  |
|  |  |

Under the Guidance of

GUIDE NAME

DESIGNATION, Dept. of CS&E, NMIT



Department of Computer Science and Engineering

**(Accredited by NBA Tier-1)**

2021-22

**NITTE MEENAKSHI INSTITUTE OF TECHNOLOGY**

(AN AUTONOMOUS INSTITUTION, AFFILIATED TO VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELGAUM

, APPROVED BY AICTE & GOVT.OF KARNATAKA)

Department of Computer Science and Engineering

**(Accredited by NBA Tier-1)**

****

**CERTIFICATE**

This is to certify that the Phase 2 Report on **Project Title** is an authentic work carried out by NAME1 (USN1), NAME2 **(USN2),** NAME3 **(USN3)** and NAME4 **(USN4)** bonafide students of **Nitte Meenakshi Institute of Technology**, Bangalore in partial fulfilment for the award of the degree of ***Bachelor of Engineering*** in COMPUTER SCIENCE AND ENGINEERING of Visvesvaraya Technological University, Belagavi during the academic year ***2021-2022.*** It is certified that all corrections and suggestions indicated during the internal assessment has been incorporated in the report.

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| **Internal Guide** | | **Signature of the HOD** | | **Signature of Principal** | |
|  | |  | |  | |
| NAME  Designation, Dept. CSE,  NMIT Bangalore | | Dr. Saroja Devi.H  Professor & Head, Dept. CSE, NMIT Bangalore | | Dr. H. C. Nagaraj  Principal,  NMIT, Bangalore | |
| **Signature of Examiners** | | | |
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**DECLARATION**

We are hereby declare that

(i) The project work is our original work

(ii) This Project work has not been submitted for the award of any degree or examination at any other university/College/Institute.

(iii) This Project Work does not contain other persons’ data, pictures, graphs or other information, unless specifically acknowledged as being sourced from other persons.

(iv) This Project Work does not contain other persons’ writing, unless specifically acknowledged as being sourced from other researchers. Where other written sources have been quoted, then:

a) their words have been re-written but the general information attributed to them has been referenced;

b) where their exact words have been used, their writing has been placed inside quotation marks, and referenced.

(v) This Project Work does not contain text, graphics or tables copied and pasted from the Internet, unless specifically acknowledged, and the source being detailed in the thesis and in the References sections.

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**ACKNOWLEDGEMENT**

The satisfaction and euphoria that accompany the successful completion of any task would be incomplete without the mention of the people who made it possible, whose constant guidance and encouragement crowned our effort with success. I express my sincere gratitude to our Principal **Dr. H. C. Nagaraj**, Nitte Meenakshi Institute of Technology for providing facilities.

We wish to thank our HoD**, Dr. Saroja Devi H** for the excellent environment created to further educational growth in our college. We also thank him for the invaluable guidance provided which has helped in the creation of a better project.

I hereby like to thank our ***Guide Name, Designation***, Department of Computer Science & Engineering on **his/her** periodic inspection, time to time evaluation of the project and help to bring the project to the present form.

Thanks to our Departmental Project coordinators. We also thank all our friends, teaching and non-teaching staff at NMIT, Bangalore, for all the direct and indirect help provided in the completion of the project.

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Date:

**ABSTRACT**

**An abstract is a summary of your project work. This abstract must highlight the achievements of your project.**

**(Maximum 250 words)**

**GUIDELINES FOR REPORT WRITING**

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**CHAPTER 1: INTRODUCTION**

* 1. Background
  2. Brief history of Technology/concept
  3. Applications
  4. Research motivation and Problem statement
     1. Research Motivation
     2. Statement of the Problem
  5. Research objectives and contributions
     1. Primary objectives
     2. Main contributions
  6. Organization of the report
  7. Summary

**CHAPTER 2: LITERATURE SURVEY**

* 1. Introduction
  2. Related work
  3. Study of Tools/Technology
  4. Summary

**CHAPTER 3: SYSTEM REQUIREMENTS SPECIFICATIONS**

3.1 General Description

3.1.1 Product Perspective

3.2 System Requirements

3.2.1 Hardware Requirements

3.2.2 Software Requirements

3.2.2.1 Functional Requirments&Non-functional Requirements

3.2.2.2 User Requirements

<This template illustrates organizing the functional requirements for the product by system features, the major services provided by the product. You may prefer to organize this section by use case, mode of operation, user class, object class, functional hierarchy, or combinations of these, whatever makes the most logical sense for your product.>

REQ-1:

REQ-2:

:

REQ-N:

3.3 Summary

**CHAPTER 4: DESIGN**

4.1 Architectural Design

4.2 Dataflow Diagram

4.3 Class Hierarchy Diagram

4.4 Usecase Diagrams

4.5 Sequence Diagrams

4.5 Activity Diagram

**CHAPTER 5 : IMPLEMENTATION**

**REFERENCES**

**GUIDELINES FOR PROJECT WORK-II REPORT WRITING**

**1 ORGANIZATION OF THE REPORT:** Size of report shall be of minimum 20 pages. The report shall be presented in different chapters introduction and Literature survey. Each of the chapters should be given precise title reflecting the contents of that chapter. A chapter can be divided and subdivided into sections and subsections so as to present the content discretely and with due emphasis. In addition to main material of the report; preliminaries, references, appendices etc should be included in the report.

**1.1. Sequence of Contents:** The material should be placed and bound in following order:

**i) Preliminaries:** The following information should be furnished in the given sequence.

Top Sheet of transparent plastic

Title page

Certificate

Declaration

Acknowledgement

Abstract

Table of Contents

**ii) The Chapters (Main material):**

Itshall be presented in number of chapter’s introduction and Literature survey

**iii) References:**

**2 PRELIMINARIES:**

**2.1. Title Page:** It is a first page of report. Try to find a title that clearly describes the work you have done and be as precise as possible. Mention Project Work-I, your name, guide’s (and co-guide’s) name, name of the department (i.e. Computer Science and Engineering etc), name of the institute, place, month and year of the submission of report.

**2.2. Abstract: This is the summary of your work i.e.** Project Work-I ,Summarize the main points of the report separately on one page. Interested persons should be able to judge from the abstract whether the report is really interesting for them. So, briefly formulate your work that has been implemented, the solutions derived, the results that have been achieved, and your conclusions. The abstract should not occupy more than one page (about 150 to 250 words). It must contain the context/ relevance of your idea or implementation or study at hand, a description of what was done and a gist of the significant studies, observations. It’s noteworthy that the abstract shall be prepared after project work is over and report is completed in all respect. This page should precede the ToC page.

**2.3 Certificate and Declaration:** Both pages shall be in the unique format provided with this report writing manual and duly signed by student, guide and all the authorities in relation to your work with date.

**2.4 Acknowledgement:**  here you have to acknowledge all the personalities who helped

you in your work. Please keep this brief . Do include all those who helped you,

e.g. other faculty / staff you consulted, colleagues who assisted etc.

**2.5 Table of Contents (ToC):**

* It should list items in the following order.

**-** Certificate (before ToC)

**-** Declaration (before ToC)

- Acknowledgement

- Abstract (before ToC)

- The chapters (1, 2, … N, followed by the name of the chapter),

- Sections within chapters (e.g. 1.1, 2.4, etc. + name)

- Subsections within sections (e.g. 1.1.1 + name)

- References

* Do not include the table of contents itself in the ToC.
* Use borderless table for ToC

**2.6 Numbering of Report:** Every page of the report other than the title page should be numbered. Pages of Certificate, Declaration ,Acknowledgement, Abstract Table of Contents should be numbered with lower case Roman numerals (i, ii, iii, iv, …etc.). From the first page of the first chapter onwards, all the pages should be numbered using numerals (1, 2, 3, … etc.). The page numbers should appear at the bottom center as it is appearing in this document.

**3 THE CHAPTERS:** In general the following chapters may be included

Introduction.

Literature survey.

you have to structure report according to the flow of overall logic of your work.

**3.1 General Guidelines:**

* Each chapter, section, subsection, etc. should have a title. An identical entry should exist in the ToC. Each chapter is numbered using numerals: 1, 2, 3, ..
* Title with interrogative sentence should be avoided.
* The chapters may be structured in to sections and subsections. Sections within a chapter are numbered using a two-level numbering scheme, (chapter no).(section no); for example, sections in chapter 3 are numbered 3.1, 3.2, ... Subsections within a section are numbered using a three-level scheme, (chapter no).(section no).(subsection no); for example, subsections in chapter 3, section 2 are numbered 3.2.1, 3.2.2, ... The sections and sub-sections must carry titles. Use different fonts for section titles and sub-section titles as specified in section 7.3.2 on page no 7.

**3.2 Introduction:** In this chapter give introductory information about your project work I. The purpose of this section is to let reader know briefly about your work. Apart from introduction mention about need of taking this work, problem that you want to address, the statement of a problem and its relevance, the initial goals you had, etc. without going into details. Here you also describe the structure of the rest of your report, indicating which chapter will address which issue.

**3.3 Literature Survey: While implementing any new idea or delivering a seminar on new technology, there is need to refer previous technical material available on this issue. you have to read books or technical papers available on your topic or idea. Referring the technical material related to your topic you have to do literature survey.** It should be as exhaustive as possible but related to your work. The discussion on the literature may be organized under a separate heading & titled suitably. Summarize the literature that you have read. Rather than literally copying the texts that you have read, you should present your own interpretation of the theory. This will help you in developing your own thinking discipline and technical language. The last part of this section must contain a brief mention of the gaps in the literature and a justification for undertaking your seminar/minor project. Do not be too general. Avoid writing essays on historical developments.

**4 REFERENCES:** This chapter is also referred as “Literature used”. Each entry in the reference has a label. All references cited in the text-body should be there in the Reference list and vice versa. Established acronyms may be used. e.g. AC, DC, ASME, ASTM, IIT, Jnl, etc., provided there is no likelihood of any confusion.

* **Labeling:** One of the following systems can be used for labeling the cited entries.

**System 1:** A numeric label arranged in an order of citation in the main text. This label is used in square brackets or as superscript at the point of citation, e.g. [34]. The references should be arranged together in the order of this numeric label.

**System 2:** A label derived from the authors name and the year of publication. For entries with 2 authors, include the surnames of both the authors followed by the year of publication. For entries with multiple authors, include the surnames of the first author followed by ‘et al.’ and the year of publication. This label is used in round brackets at the point of citation, e.g. (Taylor, 1982) or (Taylor et al., 1982) or (Taylor and Morgan, 1982).

* The references should be arranged together in the alphabetical order of the author surname (1st priority) and the year of publication (2nd priority).
* The reference list thus compiled together should be included after Appendices. In the reference list, you should provide the details of each entry in the following manner. These details differ depending on the type of bibliographic entry.

**- For a book:** name of the authors, title, publisher, city of publication and year of publication, page numbers. (Taylor J. R., An Introduction to Error Analysis, Oxford University Press, Mill Valley, CA,USA, 1982, pp. 34-67)

**- For an article in a journal:** name of the authors, title, name of the journal, volume (issue number), year and range of pages. (Bandyopadhyay S., Bera N.C. and Bhattacharyya S., ‘Thermoeconomic Optimization of Combined Cycle Power Plants’, Energy Conver. Mgmt., 42(3), 2001, pp. 34-67)

**- For an article in conference proceedings:** name of the authors, title, name of conference, editors (if present), year range of pages. (Kedare S.B. ‘Optics, Design, Performance and Economics of the Dynamic Fresnel Paraboloid Reflector Concentrator Dish with Point Focus for High Temperature Solar Thermal Applications’, Proceedings of National Renewable Energy Convention ’99, Sawhney R.L. (Ed.), 1999, pp. 34-67.)

**- A chapter in a book:** authors of the chapter, title of the chapter, editors of the book, title of the book, publisher, city of publication, year of publication and range of pages.(Bilgen E., Industrial Solar Power Stations, Veziroglu T.N. (Ed.), Solar Energy and Conservation: Technology, Commercialization, Utilization, Volume2, Pergamon Press, NY, USA,1978, pp. 34-67)

**- A report:** authors, title, university/company, report number, year. (Ahmed K., Renewable Energy Technologies, World Bank Technical Paper Number 240, 1994)

**- A Ph.D. or Masters Thesis:** author, title, department, university, year. (Kedare S.B.,

'Investigations on a Reciprocating Wind Machine', Ph.D. Thesis, Dept. of Mechanical Engineering, IIT, Mumbai, 1991)

**- A manual / handbook / standards :** company name (if there are no authors), title, reference number, year. (British Standards Institution, Specification for Steel girder bridges, BS153 : Parts 3B & 4 : 1972, 1972)

**- A web-site :** Author or Organization, name of the site, complete address of the site, date visited (Danish Wind Industry Association, Aerodynamics of Wind Turbines: Lift, http://www.windpower.org /tour/wtrb/lift.htm, Aug 16, 2002)

* **Bibliography:** In a few exceptional cases, it is useful to suggest a list of publications for background reading. These are not cited anywhere in the text. This list can be included as ‘Bibliography’. It should follow ‘References’ on a fresh page.

**5 ADDITIONAL GUIDELINES FOR PROJECT Work-II REPORT:** Following are the additional important guidelines which shall be followed by all students.

**5.1 Interaction With Guide:** It is recommended that you meet your guide regularly during the course of the seminar/project. You should maintain a record notebook/file where you can include a record of your discussions with your guide, literature survey details, derivations etc. Such a system will allow easy and quick access to the details and chronology of your work. The final responsibility for producing an error-free report lies with student.

**5.2 Submission:** Before the end of semester, student shall deliver a seminar and submit the seminar report

Students shall follow the following guidelines for final submission.

* First, get draft copy of your report approved and certified by your guide.
* Submit two copies per group for project work-I (Guide and department)
* The bound copies of your report should be submitted within the given deadline. Late submission may not be acceptable. Make sure that the certificate in your report is signed by concerned authorities before you make the final submission of the report.

**5.2.1 Binding:** The report shall be Soft bound.

**6. Format:**

**6.1 Paper :** use plain A4 sized (height 297 mm, width 210 mm) good photocopying paper sheets, 70 to 90 gsm (16 to 20 pounds), whiteness 95% or above, smooth finish.

**6.2 Typesetting, Text Processing and Printing:**

* All material should be typed in 1.5 line spacing using times new roman and the vertical space between paragraphs shall be 2.5 line spacing. The first line of each paragraph should normally be indented by six characters.
* The recommended margins are 25 mm (1 inch) for top, bottom, right and left with an extra 13 mm (0.5 inch) for binding on the left. Other than page numbers, no material should intrude into these margins.
* **Headings.** Headings should be capitalized (i.e., nouns, verbs, and all other words except articles, prepositions, and conjunctions should be set with an initial capital) and should, with the exception of the Chapter title, be aligned to the left. Only the first two levels of section headings should be numbered, as shown in Table 1. The respective font sizes are also given in Table 1. Kindly refrain from using “0” when numbering your section headings.
* **Table 1.** Font sizes of headings. Table captions should always be positioned *above* the tables.

|  |  |  |
| --- | --- | --- |
| Heading level | Example | Font size and style |
| Heading level 1 (centered) | **INTRODUCTİON** | 16 point, bold |
| Heading level 2 | **1.1 Background** | 14 point, bold |
| Heading level 3 | **1.1.1 History** | 12 point, bold |

* All the Contents should be in Times New Roman and Font Size 12

.

**6.3 General Guidelines**

* Do not make spelling or grammatical mistakes in your report.
* Use the passive voice ("was done") in technical writing.
* A paragraph should normally comprise of more than one line.
* Only one line of any paragraph should not be left at the top or bottom of the page.
* Pay attention to detail and accuracy.
* Be clear, but concise.
* **Sincerely avoid typographical errors. Remember, these mistakes will result in a re-submission.**
* Read report carefully before submission

**Project Co-Ordinators: HOD(CSE)**

Ramya Srikanteswara, Jagadevi N Kalshetty, Ushashree P