Department of Computer Engineering

Sandip Foundation's
Sandip Institute of Engineering and Management, Nashik
Mahiravani, Trimbak Road, Nashik
Affiliated to Savitribai Phule Pune University, Pune

410248 & 410256: Project Work Book (Guidelines and Log)

2015 Course

Fourth Year of Computer Engineering

Year 20___-20___

Group/Project ID:

Team Members:　1.　..

　　　　　　　　2.　..

　　　　　　　　3.　..

　　　　　　　　4.　..

Project Title　:　..

Project Guide　:　..

Area of the Project:　..

Preamble

Project work is one of the most important components of the curriculum for the Engineering Graduate. From conceiving the idea to the materialization of it is a journey that has to be systematized, well defined and well documented to enjoy the full benefits of the efforts undertaken.

Every activity of the project development has its own importance and typical activities are like: Team formation, conceiving the idea, preparing the hypothesis, reporting the progress / development to the guide/ mentor, Interactions, suggestions and improvements, relevant documentations in proper format, schedule plans and visit logs.

Every institute is following their own best methods and techniques as per the guidelines and curriculum at the affiliated university. To bring the uniformity and standardization for the project work there is a need to come together and prepare the comprehensive guidelines regarding it.

This work book for the project work will serve the purpose and facilitate the job of students, guide and project coordinator. This document will reflect accountability, punctuality, technical writing ability and work flow of the work undertaken.

This document will definitely support the work undertaken.

General Instructions

1. Students should enter the correct information in the work book.

2. Get all entries verified by respective project guide. No changes are to be made without project guide's permission.

3. Students should report to their respective guides as per the schedule and its log is to be maintained in the work book.

4. Follow all deadlines and submit all documents strictly as per prescribed formats.

5. The work book should be produced at the time of all discussions, presentations and examinations.

6. The work book must be submitted to project coordinator/ guide/ department / College after successful examination at the end of year.

7. Submit hard as well as soft copy. Maintain one copy with each member.

Table of Contents

This booklet is supportive document to rules and a regulation provided by affiliated university curriculum providing recommendations, guidelines and is record of all related activities associated with project. This booklet is provided with the genuine intent to bring uniformity and to systematize the project work and to keep the audit of the work undergone by team members.

Review Committee

Technical Committee Members	
Date	

Sandip Institute of Engineering and Management, Nashik
Department of Computer Engineering

Program Educational Objectives

1. To prepare globally competent graduates having strong fundamentals and domain knowledge to provide effective solutions for engineering problems.

2. To prepare the graduates to work as a committed professional with strong professional ethics and values, sense of responsibilities, understanding of legal, safety, health, societal, cultural and environmental issues.

3. To prepare committed and motivated graduates with research attitude, lifelong learning, investigative approach, and multidisciplinary thinking.

4. To prepare the graduates with strong managerial and communication skills to work effectively as individual as well as in teams.

Program Outcomes

1. To apply knowledge of mathematics, science, engineering fundamentals, problem solving skills, algorithmic analysis to solve complex engineering problems.

2. To analyze the problem by finding its domain and applying domain specific skills.

3. To understand the design issues of the product/software and develop effective solutions with appropriate consideration of public health and safety, cultural, societal, and environmental issues.

4. To find solutions of complex problems by conducting investigations applying suitable techniques.

5. To adapt the usage of modern tools and recent software.

6. To contribute towards the society by understanding the impact of Engineering on global aspect.

7. To understand environment issues and design a sustainable system.

8. To understand and follow professional ethics.

9. To function effectively as an individual and as member or leader in diverse teams and interdisciplinary settings.

10. To demonstrate effective communication at various levels.

11. To apply the knowledge of Computer Engineering for development of projects, & its finance & management.

12. To keep in touch with current technologies and inculcate the practices of lifelong learning

Program Specific Outcomes
(PSO)

1. Professional Skills – The ability to understand, analyze and develop computer programs in the areas related to algorithms, system software multimedia, web design, big data analytics and networking for efficient design of computer based systems.

2. Problem Solving Skills - The ability to apply standard practices and strategies in software project development using open ended programming environments to deliver the quality product for business success.

3. Successful Career and Entrepreneurships – The ability to employ modern computer languages, environments and platforms in creating innovative career paths to be an entrepreneur and a zest for higher studies.

1. About Project Work

The Project is conceiving the idea and implementing it systematically by using the knowledge derived in the course of education mainly to innovate or facilitate.

The group of Under Graduate students at Final Year will undertake project over the academic year. Work involves, study the feasibility of the project, planning project, studying existing systems, tools available to implement the project and state of art software testing procedures and technology with use of case tools. Design is to be implemented into a working model (software or hardware or both) with necessary software interface as an executable package.

It is recommended to form a departmental review committee comprising of Head, Project Coordinator, Department Academic Coordinator and 2 to 3 senior guides to monitor project activities.

Course Objectives

- To Apply the knowledge for solving realistic problem
- To develop problem solving ability
- To Organize, sustain and report on a substantial piece of team work over a period of several months
- To Evaluate alternative approaches, and justify the use of selected tools and methods
- To Reflect upon the experience gained and lessons learned
- To Consider relevant social, ethical and legal issues
- To find information for yourself from appropriate sources such as manuals, books, research journals and from other sources, and in turn increase analytical skills.
- To Work in Team and learn professionalism

1.2. Course Outcomes:

On completion of the course, students will be able–

- Solve real life problems by applying knowledge.
- Analyze alternative approaches, apply and use most appropriate one for feasible solution.
- Write precise reports and technical documents in a nutshell.
- Participate effectively in multi-disciplinary and heterogeneous teams exhibiting team work
- Inter-personal relationships, conflict management and leadership quality.

Mapping of Course Outcomes (CO) of Project Work and Program Outcomes (PO):

Table 1

Mapping	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	√	√										
CO2	√	√	√	√								
CO3								√	√			
CO4										√	√	
CO5						√	√					
CO6												√
CO7					√							
CO8	√					√	√					

Guidelines for Selection of Project Work:

BE Project can be application oriented and/or will be based on some innovative work in recent technologies like IoT, Cloud Computing, Web Technologies, Bio-inspired Algorithms, Artificial Intelligence, Machine Learning, Natural Language Processing, Theoretical Computer Science fundamentals. In Project Phase-I the student will undertake project over the academic year, which will involve the analysis, design of a system or sub system in the area identified earlier in the field of Information Technology. The project will be undertaken preferably by a group of 3-4 students who will jointly work and implement the project. The group will select a project based on their internship or Guide can suggest based on recent technologies / Industrial Applications

Guidelines to Faculty and Students:

1) The Head of the department / Project coordinator shall constitute a review committee (preferably same committee needs to carry throughout the year) for project group; project guide would be one member of that committee by default.

2) For sponsored projects, an employee of the sponsoring organization may be one of the members of review committee.

3) There shall be TWO reviews in Project phase –I (in semester-I) by the review committee.

4) The Project Review committee will be responsible for evaluating the timely progress of the projects. It is suggested to evaluate the skills learned by the students in their PBL (in their previous years).

5) Student should identify project of enough complexity, which has at least 4-5 major functionalities.

6) Student should adopt skills learned in Software Engineering / Software Architecture to identify stakeholders, actors, Architectural Styles etc... and write detail problem statement for the system.

7) Review committee should finalize the scope of the project.

8) If change in project topic is unavoidable then the students should complete the process of Project approval by submitting synopsis along with the review of important papers which should be approved by review committee.

9) Every student of the project group shall make presentation on the progress made by them before the committee during each review. Each student/group is required to give presentation as part of review for 10 to 15 minutes followed by a detailed discussion and query session.

10) Students need to note down the queries raised during review(s) and comply the same in the next review session.

11) The record of the remarks/suggestions of the review committee (project dairy) should be properly maintained and should be made available at the time of university examination.

12) Project group needs to present / publish TWO papers (One in each semester, at least one paper should be in UGC – Care journal). a) Paper must be checked for Plagiarism by any open software. b) One paper during first semester which includes Literature Survey and Detailed design components of the Project Statement. c) One paper during second semester which includes Methodologies / Algorithms implemented, Results obtained, Analysis of results and conclusion.

13) Project report must also be checked for Plagiarism.

14) The examinee will be assessed by a panel of examiners of which one is necessarily an external examiner. The assessment will be broadly based on work undergone, content delivery, presentation skills, documentation, question-answers, and report

General Project Evaluation Parameters:

Following criteria and weightage is suggested for evaluation of Project-Phase I Term Work.

1) Originality of Problem Statement: 10% (05 Marks)
2) Depth of Understanding the Problem Statement: 10% (05 Marks)
3) Concrete Literature Survey with identified gaps in all referred papers: 10% (05 Marks)
4) Design and Analysis of Algorithm / Model / Architecture / System: 40% (20 Marks)
5) Representation of results using suitable tools like tabulation, graph etc: 10% (05 Marks)
6) Presentation Skill: 10% (05 Marks)
7) Report preparation and Paper publication: 10% (05 Marks)

Project Titles Finalization:

1. Students are provided with list of guides and list of earlier three years projects, and this logbook giving all guidelines.
2. List of project teams and their areas of interest in submitted to project Coordinator.

3. Project coordinator in consultation with review committee tentatively allots Project guides to teams
4. Teams in consultation with guide prepare project proposal(s) that are either sponsored or guide suggested or selected under guidance of current allotted guide.
5. Project titles are finalized by review committee

2. University Syllabus

Savitribai Phule Pune University
Final Year Computer Engineering (2015 Course)
410248: Project Stage-I

Term I

Teaching Scheme:	**Credit Scheme:**	**Examination Scheme:**
Practical : 02 hrs/week	**02 Credits**	**Term Work: 50 Marks**

Prerequisite Courses, if any: PBL, Seminar, Basic Knowledge of Latest Technologies in IT.

Companion Course, if any: NOT APPLICABLE

Course Objectives:
1. To build up their practical experience with implementation and hence develops self-confidence.
2. To generate the opportunities to experience practically the facts learned in various fields together.
3. To improve overall communication skill, Teamwork and Leadership Qualities, professionalism.
4. To apply the knowledge for solving realistic problems.
5. To evaluate alternative approaches and justify the use of selected tools and methodsCourse Outcomes:

Course Outcomes: On completion of the course, students will be able to–
CO1. To apply knowledge of mathematics, science, and engineering to formulate the Problem statement.
CO2. To design and conduct experiments, as well as to analyze and interpret data.
CO3. Understand the professional and ethical responsibility.
CO4. To communicate effectively.
CO5. Get broad education which is necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.
CO6. Recognition of the need for, and an ability to engage in life-long learning.
CO7. To use the techniques, skills, and modern engineering tools necessary for engineering practices.
 CO8. To design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.

 There shall be TWO reviews in Project phase –I (in semester-I) by the review committee. The Project Review committee will be responsible for evaluating the timely progress of the projects. It is suggested to evaluate the skills learned by the students in their PBL (in their previous years)

Review 1: Synopsis –
Points to be covered:
1) The precise problem statement/title based on literature survey and feasibility study.
 2) Motivation, objectives, and scope of the project.
3) List of required hardware, software, or other equipment for executing the project, test

Environment/tools, cost and software measurement/human efforts in hours.
4) System overview- proposed system and expected outcomes.
5) Architecture and initial phase of design (DFD).

Review 2: Requirement and Design Specification
Points to be covered:
1) User and System Requirements.
2) Functional and Non-functional Requirements.
3) SRS Document, Writing structures SRS as per Problem Statement.
4) Requirement Analysis / Models.
5) UML/ER Diagrams.
6) Detail architecture / System design/ Algorithms with analysis / Methods / Techniques.
7) Need to discuss Design models and Component level designs.
8) Detailed Design (DFD levels as per the problem statement).
9) At least 30-40% coding documentation with at least 3 to 4 working modules.
10) Identification of test to be essential and appropriate (to be implement later).
11) Project plan.

Term II

Teaching Scheme:	Credit Scheme:	Examination Scheme:
Practical: 6 hrs/week	06 Credits	Term Work : 100 Marks
		Oral : 50 Marks

Prerequisite Courses:

Course Objectives:

- To follow SDLC meticulously and meet the objectives of proposed work

- To test rigorously before deployment of system

- To validate the work undertaken

- To consolidate the work as furnished report

Course Outcomes:

On completion of the course, student will be able to–

CO1: Show evidence of independent investigation

CO2: Critically analyze the results and their interpretation.

CO3: Report and present the original results in an orderly way and placing the open questions in the right perspective.

CO4: Link techniques and results from literature as well as actual research and future research lines with the research.

CO5: Appreciate practical implications and constraints of the specialist subject

BE Project Phase-II is the continuation of Project Phase-I for implementation, and analysis of results to arrive a valid conclusion with justification.

There shall be TWO reviews in Project phase –II (in semester-II) by the review committee. The Project Review committee will be responsible for evaluating the timely progress of the projects. It is suggested to evaluate the skills learned by the students in their PBL (in their previous years).

Review 3: Implementation –

Points to be covered:

1. Detailed study of Algorithm(s) / Model / Hardware specification (As applicable).

2. Confirmation of Data set used (As applicable)

 3. Detailed ER Diagram / DFD diagrams.

 4. Detailed UML Diagrams.

5. Sample results (module based).

Review 4: Testing and Result Analysis.

 Points to be covered:

1. Appropriate test cases and results of test cases.

2. Representation of results with analysis.

3. Conclusion over performance parameters (as applicable)

4. Conclusion and future work suggested.

5. Knowledge of references utilized.

Evaluation Criteria:

Following criteria and weightage is suggested for evaluation of Project-Phase II Term Work.

1. Availability of standard Data set / Input parameters: 10%

2. Depth of Understanding of implemented Technology / Algorithm / Domain / Model: 40%

3. Test cases / Validation and Verification process: 10%

4. Justification of Algorithm / Model / Architecture / System: 10%

5. Analysis of results and conclusion: 10%

6. Presentation Skill: 10%

7. Report preparation and Paper publication: 10%

3 .Undertaking by Students

<u>Sandip Institute of Engineering and Management, Nashik</u>

<u>UNDERTAKING BY STUDENT</u>

We, the students of B.E. Information Technology hereby assure that we will follow all the rules and regulations related to project activity for the academic year 20   -20.The Project entitled-

_____

will be fully designed/ developed by us and every part of the project will be original work and will not be copied/ purchased from any source.

Name of the student   **Signature**

1. _____   _____

2. _____   _____

3. _____   _____

4. _____   _____

4. Instructions Regarding Project Proposal and Finalization

1. The project work may involve the designing a system/subsystem or upgrading / improving an existing system. The design is to be implemented into a working model (software or hardware or both) with necessary software interface as an executable package (installable package or hardware model) along with

   - User and system manual and quick reference guide.
   - A project report including all necessary documents.

2. Group may come up with sponsored project. Sponsorship may not be in terms of money or resources. It might be in terms of just suggesting problem definition and associated guidance. Students may collect the letter required for applying the Institute/Industries for the project sponsorship from project coordinator

3. Students may contact respective staff along with synopsis for the guidance.

4. Meet Project Coordinator for project title registration.

5. Synopsis must include project title, group members, sponsor details (if any), detailed problem definition, area, Type of Project [Sponsored/Non Sponsored, AND viz- 1. Framework, 2. System as - Application/ Systems Software with or without Hardware 3. Research, 4. Survey, abstract, details of existing similar systems if any, scope of the project and software-hardware requirements. Sponsorship details include name of sponsoring authority, address, name of guide, sponsorship terms & conditions and respective documents certifying the same from authorities.

6. A panel of experts will approve the project group and title only after presentation as per schedule. Presentation will cover details mentioned in the synopsis as above.

5. Schedule of Project Work
Semester I

Sr. No.	Activity Scheduled	Date
1.	Registration of Project groups	First week of August
2.	Submission of Project Synopsis	Third week of August
3.	Project presentations	Last week of August
4.	Finalization of projects & allotment of guide	First week of September
5.	Submission of final synopsis	Second Week of September
6.	First presentation about progress of project work (Review I)	**Third Week of** September
7.	Second presentation about progress of project work (Review II)	First week of October
8.	Submission of partial project report	Second week of October
9.	Project work Examination	As per SPPU Notification

Semester II

Sr. No.	Activity Scheduled	Date
1.	Third presentation about progress of project work	Second week of Jan
2.	Fourth presentation about progress of project work	Second week of Feb
3.	Fifth presentation about progress of project work	Last week of March
4.	Submission of final project report and Project Work book to the project Coordinator	First week of April
5.	Project Examination	As per SPPU Notification

6. Copy of Proposal / Synopsis as per format (Annexure I)

1. Log Record Semester-I

Time Recording Log / Phase Semester I

Project	Start Date:	1. Requirement Analysis	3. Project Planning	6. Design Review
	Due Date :		4. Risk Analysis	7. Modeling
		2. Design & Estimation	5. Detailed Design	8. Modeling Reviews

Sr. No.	Date	Phase	Interrupts / Progress	Comments & Grade (To Be Filled by Guide)

8. Review for (Semester I)

The group members are expected to present their work undertaken during the semester. Journey of development has to be rationally presented with thorough literature survey.

Internal Evaluation Sheet (Semester I)Review

1: Synopsis

Roll. No	Name of Students	Title of Project	Originality of Problem Statement (5)	Depth of Understanding the Problem Statement(5)	Concreate Literature Survey with identified gaps in all referred papers (5)	Presentation Skil(5)	Total Marks (20)

Review 2: Requirement and Design specification

Roll. No	Name of Students	Title of Project	Design and Analysis of Algorithm / Model / Architecture / System (20)	Representation of results using suitable tools like tabulation, graph (5)	Report preparation and Paper publication (5)	Total Marks (30)

Feedback and Suggestions:

Signature of Guide
[Name of Guide]

1

9. Log Record Semester-II

Time Recording Log / Phase Semester II

Project	Start Date:	1. Modular Implementation	4. Integration Testing	7. Software Costing
	Due Date :	2. Modular Testing	5. Final Verification and Testing	8. User/ Operational manuals if any
		3. Integration of modules	6. Deployment	9. Final project report

Sr. No.	Date	Phase	Interrupts / Progress	Comments & Grade (To Be Filled by Guide)

1.   Project Review: (Semester II)

The group members are expected to present their work undertaken during the semester. Journey of development has to be rationally presented.

Internal Evaluation Sheet (Semester II)

Review3: Implementation

Roll .No	Name of Students	Title of Project	Availability of standard Data set / Input parameters (15)	Depth of Understanding of implemented Technology / Algorithm / Domain / Model (60)	Total (75)

Review 4: Testing and Result Analysis

Roll. No	Name of Students	Title of Project	Test cases / Validation and Verification process (15)	Justification of Algorithm / Model / Architecture / System (15)	Analysis of results and conclusion (15)	Presentation Skill (15)	Report preparation and Paper publication (15)	Total (75)

Feedback and Suggestions:

Signature of Guide
[Name of Guide]

2. Publications/ Contest Participation/IPR

: Publications

The work undertaken is appreciable and recognized by the significant publications and/or IPR. The quality of the publications reflects the efforts and recognition of the work. Project group needs to present / publish TWO papers (One in each semester, at least one paper should be in UGC – Care journal). Paper must be checked for Plagiarism by any open software. One paper during second semester which includes Methodologies / Algorithms implemented, Results obtained, Analysis of results and conclusion.

: Contest Participation Details.
1. Participation in project Competition / Contest

Sr. No.	Name and Place of Project Competition and Exhibition	Date	Certificates prizes won if any
1.			
2.			
3.			
4.			

Attach attested copy of certificate(s)

2. Paper Publication/ Presentation/IPR

Sr. No.	Name of Organizer	Date	Certificates/ Prizeswon if any
1.			
2.			
3.			
4.			

Attach attested copy of certificate(s)

3. Rubrics

A. Idea Inception

Grade (Grade Point) Parameter	Excellent (10-9)	Very Good (6-8)	Fair (3-5)	Poor (1-2)
Problem Definition and Scope of the Project				
Literature Survey				
Software Engineering Approach				
Requirement Analysis				

B. Implementation

Grade (Grade Point) Parameter	Excellent (10-9)	Very Good (6-8)	Fair (3-5)	Poor (1-2)
Implementation- Design, platform, coding				
Optimization considerations(Memory,				
Thorough Testing of all modules				
Integration of modules and project as whole				

C. Documentation

Grade (Grade Point) Parameter	Excellent (10-9)	Very Good (6-8)	Fair (3-5)	Poor (1-2)
Synopsis				
Project Report				
Quick references				
Work Book				

D. Demonstration

Grade (Grade Point)	Excellent (10-9)	Very Good (6-8)	Fair (3-5)	Poor (1-2)
Parameter				
Project Presentation and Demonstration(User Interface, ease of use,usability)				
Understanding individual capacity & involvement in the project				
Team Work (Distribution of work, intra-team communication and togetherness)				
Outcomes / Usability				

E. Contest Participation / Awards, Publications and IPR

Grade (Grade Point)	Excellent (10-9)	Very Good (6-8)	Fair (3-5)	Poor (1-2)
Parameter				
Participation in various contests				
Appreciation and Awards				
Publications				
Copyright				
Patent				
Commercial value/Product conversion of Work				

Annexure I: Final Synopsis (after approval of the project work)

Title Page
- Project Group ID/ group Details
- Title of the project
- Domain such as databases, image processing, network based, web technology based etc.
- Team Members (List with Signatures)
- Sponsorship details if any(Name, External Guide name and Designation with Signature, e- Mail ID)
- Internal Guide(with signature of approval)

Inner Pages:
- Relevance and Introduction
- Literature review
- Motivation
- Problem statement
- Objectives
- Scope of Project
- List of required hardware, software, or other equipment for executing the project
- Proposed system and expected outcomes
- Architecture and initial phase of design (DFD)
- References
- Base papers (IEEE Transactions or good reputed journals)

Annexure II: Partial Project Report (Semester I)

A preliminary report of project work (Partial Project Report) is to be prepared as per the guideline given below and is to be submitted at the end of semester I.

Project report must have:

i.   Certificate from the institute
ii.   Certificate sponsoring organization (If any)
iii.   Acknowledgement
iv.   Abstract
v.   Contents
vi.   List of Abbreviations (As applicable)
vii.   List of Figures (As applicable)
viii.   List of Graphs (As applicable)
ix.   List of Tables (As applicable)

1. Introduction and aims/motivation and objectives.
2. Literature Survey (with proper citation).
3. Problem Statement/definition.
4. Software Requirement Specification (In SRS Documentation only).
5. Flowchart
6. Project Requirement specification.
7. Proposed system Architecture.
8. High level design of the project (DFD,UML, ER Diagrams).
9. System implementation-code documentation: Algorithm style, Description of detailed methodologies, protocols used etc.as applicable.
10. Test cases.
11. Proposed GUI/Working modules/Experimental Results (Module wise if available) in suitable format.
12. Project Plan.
13. Conclusions.
14. Bibliography in IEEE format.

Appendices:

A. Plagiarism Report of Paper and Project report from any open-source tool.
B. Base Paper(s) [If any].
C. Tools used / Hardware Components specifications [If any].
D. Published Papers and Certificates.

Use appropriate plagiarism tools, reference managers, Latex for efficient and effective project writing.

Annexure III: Project Report (Semester II)

Project report must have:

i.   Certificate from the institute.

ii.   Certificate sponsoring organization (If any).

iii.   Acknowledgement.

iv.   Abstract.

v.   Contents.

vi.   List of Abbreviations (As applicable).

vii.   List of Figures (As applicable).

viii.   List of Graphs (As applicable).

ix.   List of Tables (As applicable).

1) Introduction and aims/motivation and objectives.

2) Literature Survey (with proper citation).

3) Problem Statement/definition.

4) Software Requirement Specification (In SRS Documentation only).

5) Flowchart

6) Project Requirement specification.

7) Proposed system Architecture.

8) High level design of the project (DFD , UML , ER Diagrams).

9) System implementation-code documentation: Algorithm style, Description of detailed methodologies, protocols used etc..as applicable.

10) Test cases.

11) GUI/Working modules and Experimental Results in suitable format.

12) Project Plan.

13) Analysis and Conclusions with future work.

14) Bibliography in IEEE format.

Appendices

a) Plagiarism Report of Paper and Project report from any open source tool.

b) Base Paper(s) [If any].

c) Tools used / Hardware Components specifications [If any].

d) Published Papers and Certificates (Both Papers).

Use appropriate plagiarism tools, reference managers, Latex for efficient and effective project writing.

Annexure IV: Project Report Formatting Guidelines

1) **Report Size:** Limit your Project report to preferably 25- 40 pages for partial project report. Limit your Project report to preferably 80-100 pages for final project report.

2) **Footer:** The footer —Department of Information Technology, MCERC Nashik should be included. It should be TIMES NEW ROMAN 10 pt and centrally justified.

3) **Header:** Project Title centered and page nos. on right should be included. **Start numbering from introduction.**

4) **Paper Size:** A4 Size, bond paper.

5) **Margins: Mirrored.**
   1. **Top   : 1 inch**
   2. **Bottom   : 1 inch**
   3. **Inside :1.25 inch**
   4. **Outside   :1 inch**

6) **Line Spacing:** 1. 5 lines

7) **Title of Chapter:**
   1. **Font   : Arial (Bold face, Capital,)**
   2. **Size   :16 pt, Alignment:** centered

8) **All Topics heading:**
   i.   First order Heading: (for example -**1. Introduction**)
      1. Font   : Times New Roman(Bold Face)
      2. Size   : 14 pt
   ii.   Second order Heading: (for example -**1.1 Evolution)**
      1. Font : Times New Roman(Bold Face)
      2. Size   : 12 pt

   iii. Third order Heading: for example -1.1.1 Image Processing
      1. Font   : Times New Roman(Normal Face)
      2. Size   : 12 pt
      3.

9) **Text:**
   1. Font   : Times New Roman(Bold Face)
   2. Size   : 12 pt

10)   **Figures and Tables:**
      1. **Caption:**(for figures below the figure and for tables above the table)
      2. Font: Garamond(Bold)
      3. Size:11 pt
      4. Alignment: Center

11)   **References :**
      . Book
   Author name(s), Book Title, Publisher, Copyright Year, page nos. if any.
      . Journal/ Magazine/ Periodical
   Author name(s), paper name, Journal/ Magazine/ Periodical name, issue   no., page nos.
      .Web Resources
      Complete URL including File name.
   Plagiarism Check Report

Annexure V: Project Report Cover page/ Title page

(Partial) Project Report
On

Title of Project

by

Name of Student 1 (Exam NO:)
Name of Student 2 (Exam NO:)

Under the guidance of

Name of the Guide

Department of Computer Engineering
Sandip Institute of Engineering and Management, Nashik, Pin – 422213

SAVITRIBAI PHULE PUNE UNIVERSITY
20__-__

Annexure VI: Report Documentation

<table>
<tr><td colspan="5" align="center"><h2>Report Documentation</h2></td></tr>
<tr><td colspan="3">Report Code: COMP-BE-Project 20___ - 20____</td><td colspan="2">Report Number: <roll_no></td></tr>
<tr><td colspan="5">Report Title:</td></tr>
<tr><td colspan="5">Address (Details):
Sandip Institute of Engineering and management, Nashik Pin -
422 213, M.S. INDIA.</td></tr>
<tr>
<td>Author 1 [with Address, phone, E-mail]:
Address

E-mail :
Roll: <Roll Number>
>
Cell No</td>
<td>Author 2 [with Address, phone, E-mail]:
Address

E-mail :
Roll: <Roll Number>
Cell No</td>
<td>Author 3 [with Address, phone, E-mail]:
Address

E-mail :
Roll: <Roll Number>
Cell No</td>
<td colspan="2">Author 4 [with Address, phone, E-mail]:
Address

E-mail :
Roll: <Roll Number>
Cell No</td>
</tr>
<tr><td colspan="5">Year:
Branch: Computer Engineering</td></tr>
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