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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING   
SCHOOL OF SCIENCE AND ENGINEERING   
UTTARA UNIVERSITY

SPRING 2019



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A thesis/project submitted in partial fulfilment of the requirement for the degree of Bachelor/Master of Science in Computer Science and Engineering

Department of Computer Science and Engineering   
School of Science and Engineering   
Uttara University, Uttara, Dhaka, Bangladesh

Spring 2019

**ABSTRACT**

This manuscript presents the template as a guideline of writing report book for undergraduate research/project at the department of CSE, Uttara University. This template will explain all the points in preparing the document as a technical report book. To prepare the manuscript, there are several points which need to be presented clearly and includes Abstract, Keywords, Approvals, Declaration, Copyright, Dedication, Acknowledgements, Table of content, List of Tables, List of Figures, List of Symbols, Chapter one: Introduction (Overview, Problem statement, Objectives, Methodology, Gantt chart & milestone, Chapter summary, and Outline of the thesis/report), Chapter two: Literature review/Background study (Overview, Background of the study, Literature review, Comparative analysis, and Summary), Chapter three: System analysis, modeling, and design (Overview, Analysis, Design, Modeling, and Summary), Chapter four: System setup, Implementation, and testing (Overview, System setup, Implementation, Testing, and Summary), Chapter five: Result analysis and benchmarking (Overview, Result analysis, discussions, and Summary), Chapter six: Conclusion and Recommendations (Conclusion, outcomes, limitations, and recommendations), Bibliography/References, and Appendix (Appendix A, Appendix B, etc.). All the points of writings and formatting of the document should be followed strictly and correctly. This document will also provide the formatting detail of the document including font, font sizes, line spacing, text alignment, page margin, header & footer, and so on. For preparing the individual report book, it is recommended to use this document and write in your own words by replacing the texts under each header. For copy and paste, it is recommended to use ‘Keep text only’ or ‘Merge formatting’ or ‘Paste special → Unformatted text’ to maintain the exact formatting of this document. It is mandatory to follow the exact formatting of the document in preparing the report book. The word limit to write an abstract is **350** **words**.

***Keywords:*** *Report book, Template, Project report, Thesis, CSE, Uttara University.*

**APPROVAL**

I certify that I have supervised this study/project and read this manuscript. In my opinion, it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a thesis/report for the degree of BSc. in Computer Science and Engineering.

Md.

Supervisor

Md.

Co-Supervisor

I certify that I have read this study. In my opinion, it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a thesis for the degree of BSc. in Computer Science and Engineering.

Md Akhtaruzzaman

Coordinator/Internal Examiner

This thesis/project report was submitted to the Department of Computer Science and Engineering and is accepted as a fulfilment of the requirement for the degree of BSc. in Computer Science and Engineering.

Md. Mijanur Rahman

Chairman, Dept. of CSE

**DECLARATION**

I/we hereby declare that this dissertation/report is the result of my/our own investigations, except where otherwise stated. I/we also declare that it has not been previously or concurrently submitted as a whole for any other degrees at Uttara University or any other institutions. I/We also declare that the formatting of the manuscript is same as the provided template. We also do not have any objections for the further use of the manuscript as Uttara University has all the rights to update, publish, or conduct further research of the submitted work.

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**DEDICATION**

*I/we dedicate this thesis/report to*

*My/our honorable parents, and my/our younger brother(s)*

*for their meticulous support, continuous inspiration, and unconditional love*

*till the very end of this journey.*

**ACKNOWLEDGEMENTS**

Firstly, it is my/our utmost pleasure to dedicate this work to my dear parents and my family, who granted me the gift of their unwavering belief in my/our ability to accomplish this goal: thank you for your support and patience.

I wish to express my appreciation and thanks to those who provided their time, effort and support for this project. To the members of my dissertation committee, thank you for sticking with me.

Finally, a special thank to ***Assist. Prof. Dr. Md Akhtaruzzaman*** for his continuous support, encouragement, and leadership, and for that, I will be forever grateful.

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**LIST OF SYMBOLS/ACRONYMS**

**‎** Complexity Order of

Phi (Golden ratio)

‎ Theta (angular distance)

‎ Angular Velocity

‎ Angular Acceleration

FYP Final Year Project

CSE Computer Science and Engineering

**CHAPTER ONE**

**INTRODUCTION**

**1.1 OVERVIEW (HEADING LEVEL 1, JUSTIFIED,FONT 12, UPPERCASE, BOLD, INDENTATION LEFT 0.0 INCH, HANGING 0.5 INCH)**

A thesis/project report book is the detail explanation of the conducted work/study in meaningful, understandable, and well-organized way. It outlines the overall area of study within which the topic covers by referring the current state of knowledge, recent research outcomes, latest technologies, and updated debates. It also demonstrates the originality of the proposed research.

Research/Project report book is the most important document that is submitted at the completion of the Final Year Project (FYP). It is mandatory to participate in the final defense where an opportunity is given to present the study/research verbally to make the clear view of the conducted project/research. It also gives an opportunity to demonstrate the aptitude for conducting undergraduate level research. The whole process is to develop the communication skills, presentation skills, understanding complex ideas clearly, growing strength to face challenges, and perform critical analysis.

Throughout this document, the **font style** is used as **‘Calibri’ or ‘Calibri (Body)’** and the English is used as **‘English (United States)’**.

**1.1.1 Document Margin (Heading level 2, Justified, Font 12, Capitalized Each Word, Bold, Indentation left 0.0 inch, Hanging 0.5 inch)**

Document margin is very important in formatting the document. Please follow the margin formatting as follows.

1. Top: 1” (One inch)
2. Bottom: 1” (One inch)
3. Left: 1.5” (One and half inch)
4. Right: 1” (One inch)

**1.1.2 Header and Footer (Heading level 2, Justified, Font 12, Capitalized Each Word, Bold, Indentation left 0.0 inch, Hanging 0.5 inch)**

***1.1.2.1 Header (Heading level 3, Justified, Font 12, Sentence case, bold, italic, Indentation left 0.5 inch, Hanging 0.63 inch)***

Header formatting criterion are presented below.

1. Header from top: 0.4 inch
2. Cover page should not contain any text at the header or footer
3. Please tick “Different first page” from the option

***1.1.2.2 Footer (Heading level 3, Justified, Font 12, Sentence case, bold, italic, Indentation left 0.5 inch, Hanging 0.63 inch)***

Footer formatting criterion are pointed out as,

1. Footer from bottom: 0.4 inch
2. Cover page(s) should not contain any text at the footer not even page numbers
3. **Footers** of all the other pages should contain the page numbers (***i, ii, iii, …, and 1, 2, 3, …***) where font size will be 11, **Center** aligned, ***italic***.
4. Footer for the front-matter section (index pages/pages before the main texts) should contain page numbers in Roman Number systems and in italic form (***i, ii, iii, …, etc.***)
5. Footer for the main texts (starting from Chapter One) should contain page numbers in English Digits and in italic form (***1, 2, 3, …, etc.***)
6. Please tick “Different first page” from the option

**1.1.3 Book Cover Page (Heading level 2, Justified, Font 12, Capitalized Each Word, Bold, Indentation left 0.0 inch, Hanging 0.5 inch)**

The contents of the cover page (1st page of this document) should be in the following format exactly.

1. All the texts of the top cover should be UPPER CASE
2. First line should be UU Logo only (Size: Height 1.3 inch & Width 1.1 inch), font 16, single line spacing, font Calibri (Body), align middle
3. Next line should be the name of the University as “UTTARA UNIVERSITY” (font 16, single line spacing, font Calibri (Body), align middle, UPPERCASE)
4. Next: Five (5) single line space (new line), font 16
5. Next **two lines** should contain the Title of the Research/Project, font 16, single line space. Lines must be adjusted if the title contains more/less than two lines.
6. Next: Five/Six (5/6) single line space (new line), font 16, depending on the lines of the Book Title
7. Next line: should contain, “BY” (Single spacing, font 16)
8. Next line: One (1) single line space, font 12
9. Next lines: write group member names, Id, Batch, and sections with font 12
10. Next: Seven (7) single lines, font 12. Must be adjusted depending on the number of the group members.
11. Next: Three lines (3) (single line space, font 16) should contain department, school, and university
12. Next: Three (3) blank lines, font 16, single spacing
13. Next line: Should contain “SPRING 2019”, font 12, single line spacing

**1.1.4 Inner Cover Page (Heading level 2, Justified, Font 12, Capitalized Each Word, Bold, Indentation left 0.0 inch, Hanging 0.5 inch)**

The contents of the internal cover page (2nd page of this document) should be in the following format exactly.

1. First line should be UU Logo only (Size: Height 1.3 inch & Width 1.1 inch), font 16, single line spacing, font Calibri (Body), align middle
2. Next line should be the name of the University as “UTTARA UNIVERSITY” (font 16, single line spacing, font Calibri (Body), align middle, UPPERCASE)
3. Next: Five (5) single line space (new line), font 16
4. Next **two lines** should contain the Title of the Research/Project, font 16, single line space. Lines must be adjusted if the title contains more/less than two lines.
5. Next: Five/Six (5/6) single line space (new line), font 16, depending on the lines of the Book Title
6. Next line: should contain, “BY” (Single spacing, font 16)
7. Next line: One (1) single line space, font 12
8. Next lines: write group members’ names, Id, Batch, and sections with font 12 (the given table style should be followed strictly)
9. Next: Four (4) single lines, font 12. Must be adjusted depending on the number of the group members.
10. Next: Two lines (2) should contain the statements of the fulfillment of the degree (please keep the text as it is) (single line spacing, font 12)
11. Next: Four blank lines (4) (single line space, font 12)
12. Next: Three (3) blank lines, font 16, single spacing
13. Next: Three lines (font 14, single line spacing) containing name of the department, school, and university
14. Next: Two blank lines (font 14, single spacing)
15. Next line: Should contain “SPRING 2019”, font 14, single line spacing

**1.2 PROBLEM STATEMENTS AND ITS SIGNIFICANCE (HEADING LEVEL 1, JUSTIFIED,FONT 12, UPPERCASE, BOLD, INDENTATION LEFT 0.0 INCH, HANGING 0.5 INCH)**

A problem statement of a research or project is the description of currently existing issue (or issues) related to the proposed topic. It provides the context of the research study and generates the questions that the proposed research/study/project aims to answer. Mainly problem statement is the focal point of the proposed study/research/project. A good problem statement could be just one sentence with several paragraphs of elaboration. For example, the problem statement of preparing this document could be stated in the following paragraph.

For the Final Year Project (FYP) in the department of CSE, Uttara University, does not have any standard guidelines or templates to prepare research/project proposal and final thesis report. Because of that both the students and corresponding supervisors are facing trouble and sometimes confused about the formatting and style of the documents. There should be a unique template and guidelines so that all the research/project report books can be prepared with unique style and formatting. In solving this problem this template is designed for the preparation of research/project proposal.

Some related styles are presented in the following subsections which will cove paragraph and bullet point styles.

**1.3 RESEARCH/PROJECT OBJECTIVES (HEADING LEVEL 1, JUSTIFIED,FONT 12, UPPERCASE, BOLD, INDENTATION LEFT 0.0 INCH, HANGING 0.5 INCH)**

Primary focus of a research project is usually expressed in terms of aims and objectives. While the problem statement helps to define the aim of the project/research, the objectives describe the accurate formulation of specific actions which need to perform to reach the aim. In general, research objectives reflect the expectations that need to be achieved by a project to fulfill the aim or goal. The overall objective should be framed in a single sentence. In the academic context the distinction between aim and objective can be defined as, Aim refers to the level that is expected to achieve; and Objective is the action or actions that need to be taken to achieve the aim.

Aims are statements of intent and usually written in broad terms. It sets out the expectations which are going to be achieved at the end of the project. Objectives, on the other hand, should be specific and concrete statements that define measurable outcomes, which means the defined steps to achieve the desired outcome. When writing the objectives, it is necessary to use strong positive statements. Each objective can be started with some common strong verbs, such as, to collect, to construct, to classify, to develop, to design, to devise, to measure, to produce, to revise, to select, to synthesize, etc. Some weak verbs which needs to be avoided, such as, appreciate, consider, enquire, learn, know, understand, be aware of, appreciate, listen, perceive, etc.

Objectives should also be smart (S.M.A.R.T.) which indicates the following important terms.

* S (Specific): Be precise about what is going to be done.
* M (Measurable): Define the deadline and milestone to reach the goal. It should be known when a specific objective will reach to its target.
* A (Achievable): Objective should be achievable. It is foolish to attempt too much. A less ambitious but completed objective is better than an over-ambitious but incomplete action.
* R (Realistic): A objective should be realistic and without barrier to implement. In that case it is necessary to ask the question, is the necessary resources (in terms of time, money, skills, workforces, tools, technologies, etc.) are available to achieve the objective.
* T (Time constrained): It is necessary to determine the specific time of each stage to be completed. Also, it is necessary to determine the **times for any unexpected delay** in achieving the expected target.

For example, the aim or goal of this document is to define a unique guideline for preparing a research/project proposal for the Final Year Project (FYP) assigned to the CSE students in the department of CSE, Uttara University. This aim can be divided into the following objectives.

1. To define specific points in preparing a constructive structure of a Final Year Project/Research (FYP).
2. To explain all the individual points so that each of the items become clear to the students with proper understanding.
3. To ensure a unique formatting style in preparing a project/research report book.

Another example for **Software Development Project**: The aim or goal of the proposed project is to design and develop of a web application software for notice management system for the department of CSE, Uttara University. The goal of this project can be split into the following objectives.

1. To analyze various types and behavior of academic notices (ex: student notices, departmental meeting notice, notices from higher authority, holiday notices, etc.) to understand and design a conceptual flow and constrains.
2. To design User-friendly Interfaces to generate and create various notices and to circulate among faculties, office staffs, and students.
3. To design database for the system with necessary table normalizations.
4. To implement and integrate the GUI and database through coding, testing, and debugging.

One more example for **FYP research**: Main aim or goal of this research is to detect human faces through image processing. The aim can be divided into several objectives which are presented below.

1. To identify a suitable algorithm for detecting the edges of human face images by applying various edge detection algorithms and comparative analysis.
2. To extract necessary features from the images of human face based on the results of identified/selected algorithm.
3. To design a novel algorithm based on the extracted features to detect human faces in an image.
4. To determine the performances of the proposed algorithm through comparing the results of existing algorithms.

**1.4 PROJECT/RESEARCH METHODOLOGY (HEADING LEVEL 1, JUSTIFIED,FONT 12, UPPERCASE, BOLD, INDENTATION LEFT 0.0 INCH, HANGING 0.5 INCH)**

Methodology is the theoretical and systematic analysis of the methods, procedures, or processes which are applied to achieve the objectives and goal of the project/research. Basically, it incorporates paradigm, theoretical model, phases, and quantitative or qualitative techniques. A methodology is not a setup to provide solutions of the project challenges, not even the same as the strategies applied in the project/research, rather, a methodology offers the theoretical support to present the structural formats of using set of methods or best practices which can be applied for a smooth project development life cycle.

There are differences between Methods and Methodologies. Basically, methods are the tools used to face the challenges of any research/project. On the other hand, methodology presents the general flow to conduct research/project that outlines the way in which the methods and strategies are to be used. Methods define the means or modes of data collection, how a specific result is to be calculated, how an algorithm can be adapted, or how a technology can be applied. On the other hand, methodology does not define specific methods, not even a procedure to attain an objective, rather it defines the way and steps of the project/research to be completed.

**Example one:** The proposed temple is aimed to define a unique guideline to prepare project/research proposal for CSE undergraduate students. In preparing the document, background study will be conducted to gather related information through comparison among various templates of research/project proposal templates. Then document page format will be defined, and the major points will be explained in detail with necessary examples. After preparing the overall template, the content and the formatting of the pages will be examined. If any updates are needed, the document will be reviewed again. On satisfaction of the formatting and content of the document, the template will be published. The major steps of the methodology in preparing the template are presented as follows. Figure 1.1 presents the flow diagram of the methodology.

1. Background study on the formats and styles of various report book templates through comparative analysis
2. Formatting the document and point out major sections which need to be included for a project/research report
3. Explaining all the identified points with proper examples
4. Checking and reviewing the overall document
5. If the formatting, styles, and content of the proposed template are satisfactory, the proposal template will be published

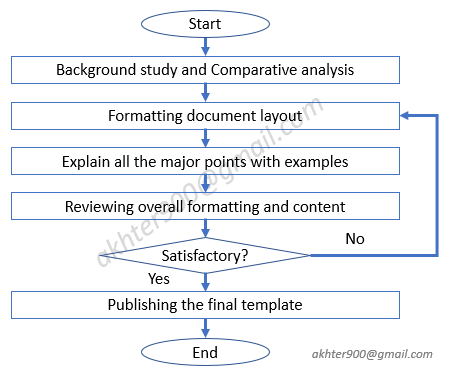


Figure 1.1 Flow diagram of the activities in preparing the project/research   
report book template

**Another Example (software development project):** The project will start with background study and requirement collection. Then system analysis will be conducted to extract required data and information and identification of process flow model. Software design will be conducted in two steps, GUI design and Database design. Several modules of the overall design will also be identified. The implementation of the proposed project will be conducted through coding. Validation of the overall development will be conducted through Unit testing, Integration testing, System testing, Acceptance testing. The major steps of the project development methodology are presented as follows. Figure 1.2 presents the flow diagram of the methodology for this Example.

1. Background study and requirement collection
2. System analysis and design of conceptual model
3. Design of the proposed software through GUI design and Database design
4. Module designed of the proposed software
5. Implementation of the designed softer through coding and integration of GUI and Database
6. Unite testing
7. Integration testing
8. System testing
9. Acceptance testing

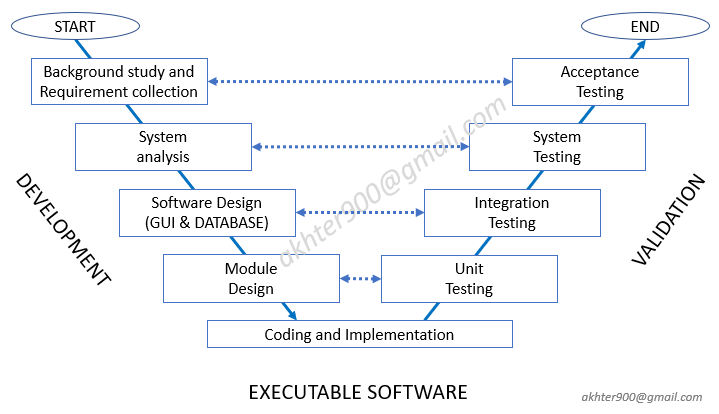


Figure 1.2 Flow diagram (V-Model) of the activities in the development process of the proposed software

**One more Example (FYP Research):** The research will start with an extensive literature review to formulate the recent problems and challenges in face detection strategies and to identify the recent algorithms used in this field of study. A conceptual model of the overall system will be designed at this stage. Next will be the experimental setup with necessary equipment. After this step various algorithms will be applied in detecting the edges and performing the feature extraction process. The extracted features will be analyzed for classification. Then the classified features will be used in the newly proposed algorithm for the detection of human faces. Finally result will be analyzed and benchmarking will be conducted by comparing the results with existing system found in the literature review. The research steps can be presented in the following list. Figure 1.3 presents the flow diagram of the methodology of the proposed research.

1. Extensive literature review by studying the available articles and journals not older than 5 years to formulate the existing problems and challenges of this fields
2. Design a conceptual model of the overall system setup and experimentation
3. Experimental setup for the proposed research.
4. Experimentation on edge detection of human faces in an image by applying various strategies to identify the suitable edge detection algorithm
5. Feature extraction from the results of the applied algorithms and classification of the extracted features.
6. Formulation of a novel algorithm through mathematical modeling for detecting human faces in an image
7. Applying the proposed algorithm in various images for the detection of human faces
8. Result analysis and benchmarking

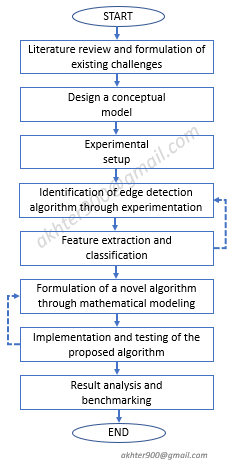


Figure 1.3 Flow diagram of the methodology of the proposed research in third example

**1.5 GANTT CHART AND RESEARCH MILESTONE (HEADING LEVEL 1, JUSTIFIED,FONT 12, UPPERCASE, BOLD, INDENTATION LEFT 0.0 INCH, HANGING 0.5 INCH)**

Any suitable software can be used in designing the Gantt chart and Milestone chart of the proposed research/project. For preparing this document template, MS-Word is used. The principal activities and milestones of this document preparation work have been identified as shown in Figure 1.4 and Figure 1.5.

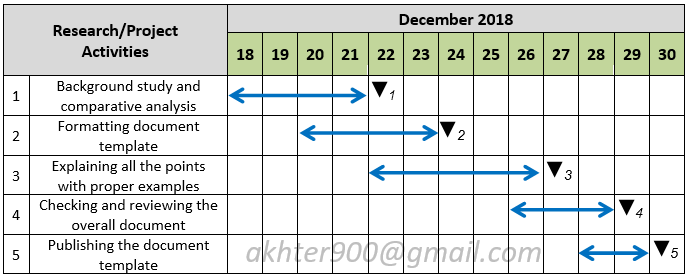
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Figure 1.4 Gantt Chart of the proposed research/project Activities

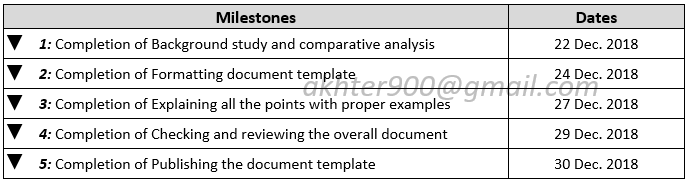


Figure 1.5 Project/Research Milestones and dates

**1.6 SUMMARY AND OUTLINE (HEADING LEVEL 1, JUSTIFIED,FONT 12, UPPERCASE, BOLD, INDENTATION LEFT 0.0 INCH, HANGING 0.5 INCH)**

Present your chapter summary here. This section should present an overall view of the current chapter. This should be presented differently than the Overview of the chapter. End of this section must contain the outline of the thesis/report book. The outline of the book presents brief explanation of each of the chapters. For example, the outline of this template is presented below.

**Chapter 1:** Chapter one presents the motivational and introductory statements of the project/research. The chapter also presents problem statements, objectives, methodology, and Gantt chart of the project/research.

**Chapter 2:** This chapter presents in depth Literature review or Background study of the conducted research or project.

**Chapter 3:** In this chapter, detail analysis of the project/thesis, modeling and design of the overall system or conducted project or research are presented.

**Chapter 4:** This chapter presents a detail description about system setup, implementation, and testing of the system/prototype.

**Chapter 5:** Result analysis and benchmarking of the conducted research or project are presented in Chapter 5.

**Chapter 6:** Conclusion and Recommendations are presented in this chapter.

**CHAPTER TWO**

**LITERATURE REVIEW / BACKGROUND STUDY**

**2.1 OVERVIEW (HEADING LEVEL 1, JUSTIFIED,FONT 12, UPPERCASE, BOLD, INDENTATION LEFT 0.0 INCH, HANGING 0.5 INCH)**

In this chapter, in depth study on recent literatures is conducted. This chapter presents the available projects, algorithms, techniques, and studies of the relevant project/research. Comparative analysis of the available strategies is also presented in this chapter with recent limitations and potential applications of the proposed project/research.

**2.2 LITERATURE REVIEW/BACKGROUND STUDY (HEADING LEVEL 1, JUSTIFIED,FONT 12, UPPERCASE, BOLD, INDENTATION LEFT 0.0 INCH, HANGING 0.5 INCH)**

A literature review or Background study is a kind of search, study, and evaluation of available literatures, research papers, articles, and system’s features within the area of chosen or proposed topic or title. It documents the important points related to the proposed field and makes comparisons among the related researches or systems to provide a clear view of the available strategies, their advantages, disadvantages, applications, and potential or future studies/works/research. A reach study on literatures or backgrounds helps to generate research philosophy, hypothesis, research questions, and most importantly the recent problems of a system or research. Recent problems will lead to define the problem statements and to identify the project objectives. A literature review has four main objectives as presented below.

1. It surveys the literature within chosen area of study
2. It synthesizes the information found in the literature into a summary
3. It critically analyzes the gaps in current systems or knowledge by showing limitations of theories and point of views through formulating further research and reviewing areas of controversy
4. It presents the literature in an organized way

Through a good literature review, researchers even readers will know in-depth ideas about the grasp of the proposed subject; knowledge of recent and potential applicable technologies and strategies, and the areas where the proposed study/project can be fits into. The four main focuses of a literature or background study can be described in another way. A literature or background study:

1. demonstrates a familiarity about knowledge and establishes the credibility of the work
2. summarizes prior research and says how the project is linked to it
3. integrates and summarizes the acquired knowledge about the subject
4. demonstrates the learning from other works through which the proposed research will be in starting of new ideas

**2.2.1 Abstract and Keywords (Heading level 2, Justified, Font 12, Capitalized Each Word, Bold, Indentation left 0.0 inch, Hanging 0.5 inch)**

An abstract is a self-contained, short, and powerful statement that describes a larger work. An abstract of a social science or scientific work should contain the motivation, scope, purpose & objective, applied methods and design concept, outputs and results, and concluding sentences. An abstract is not a review, even it does not evaluate the work being abstracted. The abstract is an original writing rather than an excerpted passage and may contain keywords found in the larger work. The word limit to write an abstract for FYP research/project proposal is set to **350** **words**. The formatting of the abstract page is presented below.

1. First line contains the word “**ABSTRACT**” which should be Capitalized, centered, font size 14, single spacing.
2. Next should be two new lines, font 12, single spacing.
3. Next line is the starting of the abstract. Abstract should be written in a single paragraph, font Calibri or Calibri (Body), font size 12, single spacing, justified.
4. At the end of abstract, there should be a newline.
5. Next line will contain the keywords where the word ***“keywords”***should be bold italic, font size 12, and single spacing followed by a clone **“:”** and 5 to 6 keywords.

**2.2.2 Table of Contents (TOC) Formatting Rules (Heading level 2, Justified, Font 12, Capitalized Each Word, Bold, Indentation left 0.0 inch, Hanging 0.5 inch)**

Table of contents (TOC) is a list which usually found on a page before the starting of a written document. TOC mainly contains chapter titles, section titles, sub-section titles (or brief descriptions) with their commencing page numbers. TOC must follow a suitable format to present all the headings, titles, and subtitles. Please do not use any Table for the table of content. Strictly follow the formatting as provided in this document. Below are the points which needs to be followed to prepare the TOC for the project/research proposal.

1. First line will be the heading **“TABLE OF CONTENT”**, Font size 12, Bold, line spacing 1.5. For table of content, line spacing will be 1.5.
2. Next two blank lines (new line), font 12, line spacing 1.5
3. Then continue with the headings starting from Abstract, Table of Content, Heading 1 (Ex. 1. Introduction), Sub heading, Sub-sub heading, References, and Short biography.
4. Main heading with heading number should be bold and Uppercase.
5. Headings without number and sub, sub-sub headings will not in bold
6. The sub-sub headings should be in italic.
7. After text there should be Tab with dots (……) until the right margin where the page numbers will be written.
8. Page numbers should be right aligned.
9. Indentation for heading will be 0.00 inch from left.
10. Indentation for Sub heading will be 0.38 inch from left.
11. Indentation for Sub-sub heading will be 0.88 inch from left.
12. There should be a new line (1.5 spacing) in between two main sections.

**2.2.3 Main Content Writing (Heading level 2, text alignment Justified, Font size 12, Capitalized Each Word, Bold, Indentation left 0.0 inch, Hanging 0.5 inch)**

Main content of the book writing will start from page number 1. Each of the chapter should contain Chapter Overview at the beginning and Chapter Summary at the end of the chapter except the Conclusion chapter. The title of each chapter will be “Chapter One (Introduction)”, etc. in two lines, UPPER CASE, Bold, font 14, single space, center aligned. Next will be four blank lines, font 12, single line spacing. All the texts of the chapters should be as font size 12 points. First level heading should be with number 1.1, hanging 0.5, Uppercase, Ex. “**1.1 OVERVIEW**“. For all the Headings, Sub headings, Sub-sub headings, and Sub-sub-sub headings, line spacing will be single (0.00 inch). Some other formatting styles, such as Main heading (Level 1), Sub-heading (Level 2), Sub-sub heading (Level 3), Paragraphs, Bullets and Numbers, etc. are described below.

***2.2.3.1 Main heading (level 1) (Heading level 3, Justified, Font 12, Sentence case, bold, italic, Indentation left 0.5 inch, Hanging 0.5 inch)***

Styles for Headings (heading level 1) are pointed out as follows.

1. All the headings will start with numbers, such as 1.1, 1.2, …, 2.1, 2.2, …, 3.1, 3.2, …, etc.
2. All the headings will be Bold, Uppercase, font size 12, single line spacing, and space after paragraph will be 12 points.
3. Hanging should be **0.5 inch** and there will be a tab after the heading number.

***2.2.3.2 Sub-heading (level 2) (Heading level 3, Justified, Font 12, Sentence case, bold, italic, Indentation left 0.5 inch, Hanging 0.5 inch)***

Styles for Sub-Headings (heading level 2) are pointed out as follows.

1. All the sub-headings will start with numbers, such as 1.1.1, 1.1.2, 1.1.3., 1.2.1, 1.2.2, 1.3.1, 1.3.2, 1.3.3, etc. based on the corresponding **heading** numbers.
2. All the sub-headings will be Bold, capitalized each word, font size 12, single line spacing, and space after paragraph will be 12 points.
3. Hanging of the sub-heading should be **0.5 inch** and there will be a tab after the **heading** number.

***2.2.3.3 Sub-sub-heading (level 3) (Heading level 3, Justified, Font 12, Sentence case, bold, italic, Indentation left 0.38 inch, Hanging 0.63 inch)***

Styles for Sub-sub-Headings (heading level 3) are pointed out as follows.

1. All the sub-sub-headings will start with numbers, such as 1.1.1.1, 1.1.1.2, 1.1.1.3, 1.2.1.1, 1.2.1.2, 1.3.1.1, 1.3.2.1, 1.3.2.2, 1.3.2.3, etc. based on the corresponding **sub-heading** numbers.
2. All the sub-sub-headings will be Bold *italic*, sentence case, font size 12, single line spacing, and space after paragraph will be 12 points.
3. Indentation from left is 0.5 inch, hanging of the sub-sub-heading is **0.63 inch** and there will be a tab after **sub-sub-heading** number.
4. The style for **sub-sub-sub-heading (if any)** should follow the styles of sub-sub-heading, described in ***2.1.3.3 Sub-sub-heading (level 3)***.

**2.3 PARAGRAPH STYLE (HEADING LEVEL 1, JUSTIFIED,FONT 12, UPPERCASE, BOLD, INDENTATION LEFT 0.0 INCH, HANGING 0.5 INCH)**

All the paragraphs of the document should be in the same style except the first paragraph of each section or sub-section. Which means, there is a little difference between the first paragraph and any other paragraph of a section. Paragraph style is described as follows.

1. **Font:** Calibri (Body)
2. **Font size:** 12 points
3. **Line spacing:** double (2.0 points)
4. **Alignment:** Justify
5. **First paragraph of a section:** No indentation and no TAB at the beginning of the first line of the paragraph.
6. **Rest of the paragraphs of a section:** No indentation but **TAB at the first line as 0.5 inch**.

**2.4 BULLETS AND NUMBERING STYLE (HEADING LEVEL 1, JUSTIFIED,FONT 12, UPPERCASE, BOLD, INDENTATION LEFT 0.0 INCH, HANGING 0.5 INCH)**

Bullets and numbering styles are defined as follows. It is mandatory to follow the style as indicated in this template.

1. **Numbering:** use roman numbering format with ending bracket (Ex: i), ii), iii), etc.).
2. **Font and sizes:** Calibri (Body) 12 points
3. **Line spacing:** Double (2.0)
4. **Indentation:** Left 0.5 inch
5. **Hanging:** 0.5 inch
6. There will be a new line at the end of the bullets and numbering portion of the writings.

**2.5 FIGURE/IMAGE STYLE (HEADING LEVEL 1, JUSTIFIED,FONT 12, UPPERCASE, BOLD, INDENTATION LEFT 0.0 INCH, HANGING 0.5 INCH)**

While using any figure in the report, the figure should be mentioned and explained a little with the figure number in the text before the appearance of the figure. Figure/Image styles should be same as presented in Figure 1.1, Figure 1.2, and Figure 1.3. The styles can be pointed out as follows.

1. All the figures should be at center. There will be no hanging and no indentation. Font size of the image line will be 12, double spacing.
2. Figure title should be at the bottom side of the specific figure, at the center, no indentation, no hanging, font Calibri (body), font size 12, line spacing single (1.0).
3. Paragraph spacing for the figure title will be 12 points.
4. There should be a new line after the figure title with font size 12, line spacing double.

**2.6 TABLE STYLE (HEADING LEVEL 1, JUSTIFIED,FONT 12, UPPERCASE, BOLD, INDENTATION LEFT 0.0 INCH, HANGING 0.5 INCH)**

For the usages of any table, the table should be mentioned with the table number just before the appearance of the table. Table styles should be same as presented in example table, Table 2.1. The styles can be pointed out as follows.

Table 2.1 Example table styling

|  |  |  |  |
| --- | --- | --- | --- |
| **Heading**  **Values** | **Heading 1** | **Heading 3** | **Heading 4** |
| **Value set 1** | 0.12 | 1.22 | 2.13 |
| **Value set 2** | 0.11 | 1.20 | 2.10 |
| **Value set 3** | 0.09 | 1.18 | 2.05 |

1. All the tables should be at the center. There will be no hanging and no indentation. Font size of the table content will be in **between 11 and 8 points** depending on the content and size of the table.
2. All the text content of the table should be in single spacing and vertical align should be in the middle.
3. All the headings and first column should be in bold and standard font size could be 11 points but not mandatory.
4. Font size of the other texts or values of the table could be 10 points but not mandatory.
5. Table title should be at the top side of the specific table, at the center, no indentation, no hanging, font Calibri (body), font size 12, line spacing single (1.0).
6. Paragraph spacing for the table title will be 12 points.
7. There should **not** be any **new line after the table title**.
8. After the table there should be a new line (12 font, double spacing) just before the starting of the next paragraph.

**2.7 REFERENCE STYLE (HEADING LEVEL 1, JUSTIFIED,FONT 12, UPPERCASE, BOLD, INDENTATION LEFT 0.0 INCH, HANGING 0.5 INCH)**

Most of the references are normally cited in the literature review or background study section. But references may come at any part of your writings **except the abstract** and sometimes for the conclusion. For the usages of references in the REFERENCE section, each reference should be cited in-text of the writings. In the REFERENCE section, the references should be in sorted chronological order based on alphabet sequence. There should be no numbering for the reference list not even for the REFERENCES section itself. Basically, APA format is followed in formatting the reference styling.

Basic APA format of reference list is **“Author1 Last Name, First and Middle Initials, Author2 Last Name, First and Middle Initials, and Author3 Last Name, First and Middle Initials (Year). *Basic APA Style Only (italic).* Name of the Journal/Conference, City, State Abbreviation: Publisher. pp. Page Numbers”**. For the intext citation, after any sentence or comment the corresponding reference should be cited in bracket, for example: **(Author1 Last Name, Author2 Last Name, & Author3 Last name, Year of the publication)**. For **more than three authors**, the intext citation should be as, **(Author1 Last Name et al., Year of the publication)**. If any sentence starts with or uses any author name, then no need to use the bracket for the author names but the above styles should be followed. Next paragraph presents an example of intext citation and corresponding references in the REFERENCE section.

**Robot assisted rehabilitation:** The actual goal of rehabilitation training can be attained depending on whether the control strategy of assistive robot is applied effectively. The motion control strategies of rehabilitation robot are based on theories of movement function and rehabilitation exercise. **Xu, Song, and Li (2009)** mentioned that, among the available control strategies, the most widely used one is force control strategy, which mainly applied force sensor to detect and control the interaction between the robot and the disease sites directly. The controls include force control, impedance control, force-location mix control etc. Impedance control has been applied to both horizontal lower limbs rehabilitation robot in the University of Michigan in America and ankle joint rehabilitation robot in the University of Auckland in New Zealand, which realized the symmetrical training of bilateral limbs and the rehabilitation training of ankle joints respectively **(Tsoi & Xie, 2009)**. In the National Cheng Kung University in Taiwan, the application of fuzzy reasoning to rehabilitation training realized the force-location mix control. Meanwhile, the combination of fuzzy reasoning and neural network has been applied to rehabilitation training and the active and passive control has been realized by means of identification of the interaction force between the patient and the robot **(Ho & Chen, 2008; Ju et al., 2005)**. In addition, good rehabilitation results of the application of impedance control to rehabilitation training of the affected limbs have been achieved respectively in Beihang University, Beijing **(Shuang et al., 2009)**, University of Bologna, Italy, and Institute of Robotics and Mechatronics, Germany **(Biagiotti, 2003)**. The lower extremity exoskeletons are now applied to several fields, including power augmentation for the military or medical assistance, rehabilitation, and in haptic interfaces **(Zoss, Kazerooni, & Chu, 2006; Liu, Cramer, & Reinkensmeyer, 2006; Rocon et al., 2007)**.

It is important to remember that the list of references or citations as presented in the REFERENCE section must have font size as 11 points. The line spacing of the references will be single (1.0 points) and paragraph spacing must be 12 points. Important styles for the references can be pointed out as follows.

1. **Font & Font size:** Calibri (Body) 11 points.
2. **Line spacing:** Single (1.0)
3. **Paragraph spacing:** 12 points after paragraph
4. **Hanging:** 0.5 inch
5. **Indentation:** Left 0.0

**2.8 EQUATION STYLE (HEADING LEVEL 1, JUSTIFIED,FONT 12, UPPERCASE, BOLD, INDENTATION LEFT 0.0 INCH, HANGING 0.5 INCH)**

Any kind of equation used in the document should be written in format. All the equations should be numbered properly based on the respective chapters. There should be indentation at the beginning of each line of the equation as 0.5 inch. Just after the equation there should be a tab and the number of the equation must be in the bracket “( )” and must be right aligned. Equation 2.1 is presenting an example equation (Euclidian Distance formula) format.

(2.1)

Equation 2.1 is simply the square root of the summation of the squares of the differences between two points, and . So, the equation can be rewritten as presented in Equation 2.2.

(2.2)

**2.9 SUMMARY (HEADING LEVEL 1, JUSTIFIED,FONT 12, UPPERCASE, BOLD, INDENTATION LEFT 0.0 INCH, HANGING 0.5 INCH)**

Write the chapter summary here.

**CHAPTER THREE**

**SYSTEM ANALYSIS / MODELING & DESIGN**

**3.1 OVERVIEW (HEADING LEVEL 1, JUSTIFIED,FONT 12, UPPERCASE, BOLD, INDENTATION LEFT 0.0 INCH, HANGING 0.5 INCH)**

Write the chapter overview here.

**3.2 ANALYSIS, MODELING, AND DESIGN (HEADING LEVEL 1, JUSTIFIED,FONT 12, UPPERCASE, BOLD, INDENTATION LEFT 0.0 INCH, HANGING 0.5 INCH)**

Write your detail analysis, design, and modeling of your project/research. Please use necessary sections, sub-sections, and other formats if necessary. Please provide necessary diagrams, figures, tables, etc. with proper numbering, title, and explanation. Remember that if you use any diagrams, figures, or tables, you must mention in the text of the explanation.

**3.3 SUMMARY (HEADING LEVEL 1, JUSTIFIED,FONT 12, UPPERCASE, BOLD, INDENTATION LEFT 0.0 INCH, HANGING 0.5 INCH)**

Write the chapter summary here.

**CHAPTER FOUR**

**SYSTEM SETUP, IMPLEMENTATION, & TESTING**

**4.1 OVERVIEW (HEADING LEVEL 1, JUSTIFIED,FONT 12, UPPERCASE, BOLD, INDENTATION LEFT 0.0 INCH, HANGING 0.5 INCH)**

Write the chapter overview here. This section should present a brief description of the chapter to get an overview of the presentation.

**4.2 SYSTEM SETUP / EXPERIMENTAL SETUP (HEADING LEVEL 1, JUSTIFIED,FONT 12, UPPERCASE, BOLD, INDENTATION LEFT 0.0 INCH, HANGING 0.5 INCH)**

Write about the system setup or your experimental setup in detail. This section will present all the requirements needed to conduct your experiment or project. If necessary, please use necessary sections, sub-sections, and other formats if necessary. Please provide necessary diagrams, figures, tables, etc. with proper numbering, title, and explanation. Remember that if you use any diagrams, figures, or tables, you must mention in the text of the explanation.

**4.3 IMPLEMENTATION (HEADING LEVEL 1, JUSTIFIED,FONT 12, UPPERCASE, BOLD, INDENTATION LEFT 0.0 INCH, HANGING 0.5 INCH)**

Write the implementation strategies of your project/research. You can provide your specific flow diagram, strategies, or algorithm if necessary. Please use necessary sections, sub-sections, and other formats if necessary. Please provide necessary diagrams, figures, tables, etc. with proper numbering, title, and explanation. Remember that if you use any diagrams, figures, or tables, you must mention in the text of the explanation.

**4.4 TESTING (HEADING LEVEL 1, JUSTIFIED,FONT 12, UPPERCASE, BOLD, INDENTATION LEFT 0.0 INCH, HANGING 0.5 INCH)**

Write the testing and validation strategies in detail. Please use necessary sections, sub-sections, and other formats if necessary. Please provide necessary diagrams, figures, tables, etc. with proper numbering, title, and explanation. Remember that if you use any diagrams, figures, or tables, you must mention in the text of the explanation.

**4.5 SUMMARY (HEADING LEVEL 1, JUSTIFIED,FONT 12, UPPERCASE, BOLD, INDENTATION LEFT 0.0 INCH, HANGING 0.5 INCH)**

Write the chapter summary here.

**CHAPTER FIVE**

**RESULT ANALYSIS & BENCHMARKING**

**5.1 OVERVIEW (HEADING LEVEL 1, JUSTIFIED,FONT 12, UPPERCASE, BOLD, INDENTATION LEFT 0.0 INCH, HANGING 0.5 INCH)**

This section should present a brief description of the chapter.

**5.2 RESULT PRESENTATION (HEADING LEVEL 1, JUSTIFIED,FONT 12, UPPERCASE, BOLD, INDENTATION LEFT 0.0 INCH, HANGING 0.5 INCH)**

Present your results or outputs with proper explanation. Please use necessary sections, sub-sections, and other formats if necessary. Please provide necessary diagrams, figures, tables, etc. with proper numbering, title, and explanation. If any diagrams, figures, or tables are used, it must be mentioned in the text of the explanation.

**5.3 DISCUSSIONS (HEADING LEVEL 1, JUSTIFIED,FONT 12, UPPERCASE, BOLD, INDENTATION LEFT 0.0 INCH, HANGING 0.5 INCH)**

If necessary, discuss your results or outputs with critical analysis. Also provide necessary comparisons among the results. Please use necessary sections, sub-sections, and other formats if necessary. Please provide necessary diagrams, figures, tables, etc. with proper numbering, title, and explanation.

**5.4 BENCHMARKING (HEADING LEVEL 1, JUSTIFIED,FONT 12, UPPERCASE, BOLD, INDENTATION LEFT 0.0 INCH, HANGING 0.5 INCH)**

Benchmarking should be conducted by comparing the results of your research with results of existing system which can be found in the literature review. Please explain and present the comparison between your study results and other existing research outcomes.

**5.5 SUMMARY (HEADING LEVEL 1, JUSTIFIED,FONT 12, UPPERCASE, BOLD, INDENTATION LEFT 0.0 INCH, HANGING 0.5 INCH)**

Write the chapter summary here.

**CHAPTER SIX**

**CONCLUSION & RECOMMENDATIONS**

Conclusion section will present the overall concluding remarks of the research/project. This section will briefly explain all the main focuses of the project/research. This section will also present about the challenges and solutions and necessary steps which would be taken to complete the project/research successfully.

**6.1 RESEARCH/PROJECT OUTCOMES (HEADING LEVEL 1, JUSTIFIED,FONT 12, UPPERCASE, BOLD, INDENTATION LEFT 0.0 INCH, HANGING 0.5 INCH)**

This section will point out the possible specific outcomes of the project. Basically, the specific outcome or new findings should match with the pointed objectives which are presented in Chapter one. Outcomes may be presented in three groups; New findings/knowledge, Potential applications, and Research publications. Basically, New findings/knowledge is the most important which must be presented, and the rest two groups may be excluded if not necessary for the project.

**For example,** the expected outcomes of preparing this document template can be specified as new findings/knowledge. Potential applications also can be defined for this document template. But the third one, Research publications, is not necessary for this template preparation work.

1. **New findings/Knowledge**
2. A complete structure of technical report book with specific points to focus on.
3. Proper explanation of relevant points and sufficient examples for proper understanding to write a Research/Project report book.
4. A well formatted document as a guideline for preparing FYP Research/Project report book.
5. **Specific or Potential Applications**
6. Materials for one day workshop on research methodology.
7. Can be used for Thesis/Report writing guideline.

**6.2 LIMITATIONS OF THE RESEARCH/PROJECT (HEADING LEVEL 1, JUSTIFIED,FONT 12, UPPERCASE, BOLD, INDENTATION LEFT 0.0 INCH, HANGING 0.5 INCH)**

Write the limitations of the research/project.

**6.3 RECOMMENDATIONS (HEADING LEVEL 1, JUSTIFIED,FONT 12, UPPERCASE, BOLD, INDENTATION LEFT 0.0 INCH, HANGING 0.5 INCH)**

Write the recommendations/suggestions/future works of the submitted research/project work. It is a good practice to point out some recommendations for the future study.

**REFERENCES**

Biagiotti L., Liu H., Hirzinger G., and Melchiorri C. (2003). *Cartesian Impedance Control for Dexterous Manipulation*. Proceedings of the 2003 IEEE/RSJ Intl. Conference on Intelligent Robots and Systems Las Vegas, Nevada, October 2003. pp. 3270–3275.

Ho H. J. and Chen T. C. (2008). *Hybrid CPM/CAM Physiotherapy by Use of the Slide-Mode Fuzzy Neural Network Control.* The 3rd International Conference on Innovative Computing Information and Control (ICICIC'08), 18-20 June 2008.

Ju M. S., Lin C. C. K., Lin D. H., Hwang I. S., and Chen S. M. (2005). *A Rehabilitation Robot with Force-Position Hybrid Fuzzy Controller: Hybrid Fuzzy Control of Rehabilitation Robot*. IEEE Transactions on Neural Systems and Rehabilitation Engineering, Vol. 13, No. 3, Sept. 2005. pp. 349–358.

Liu J., Cramer S. C. and Reinkensmeyer D. J. (2006). *Learning to perform a new movement with robotic assistance: comparison of haptic guidance and visual demonstration*. Journal of Neuro Engineering and Rehabilitation, Vol. 3, No. 20. pp. 1–10.

Rocon E., Moreno J. C., Ruiz A. F., Brunetti F., Miranda J. A., and Pons J. L. (2007). *Application of inertial sensors in rehabilitation robotics*. Proceedings of the 2007 IEEE 10th International Conference on Rehabilitation Robotics, June 12-15, Noordwijk, The Netherlands. pp. 145–150.

Shuang W., Jiting L., Yuru Z., and Ju W. (2009). *Active and Passive Control of an Exoskeleton with Cable Transmission for Hand Rehabilitation*. 2nd International Conference on Biomedical Engineering and Informatics, 2009. BMEI '09. 17-19 Oct. 2009. pp. 1–5.

Tsoi Y. H. and Xie S. Q. (2009). *Impedance Control of Ankle Rehabilitation Robot*. 2008 IEEE International Conference on Robotics and Biomimetics. Bangkok Thailand, February 2009. Pp. 21–26.

Xu G. Z., Song A. G., and Li H. J. (2009). *System design and control technique of robot-aided rehabilitation*. Journal of Clinical Rehabilitative Tissue Engineering Research, vol. 13, no. 4, January 2009, pp. 717-720.

Zoss A. B., Kazerooni H., and Chu A. (2006). *Biomechanical design of the Berkeley lower extremity exoskeleton (BLEEX)*. IEEE ASME Trans. Mechatron. 2006, Vol. 11. pp. 128-138.

**APPENDIX A**

**EXAMPLE CODES**

**CODES FOR LOGIN PAGE**

Provide necessary codes for login page.

**CODES FOR REGISTRATION PAGE**

Provide necessary codes for registration page.

**SPINE TEXT**

**Spine text should contain:**

1) BSc/MSc in CSE

2) 10 blank spaces

3) Title of the project/research

4) UU, Semester & year

**Formatting of the texts:**

1) Font: Calibri (Body)

2) Bold

3) UPPER CASE

4) Font size: 16 points or less to

adjust within the spine.

**BSc in CSE TITLE OF THE RESEARCH/PROJECT [WRITE YOUR TITLE HERE IN ADJUSTABLE FONT SIZES] UU, SPRING 2019**