

<Project Title>

<Project ID>

Date of Submission: DD-MMM-YYYY

Submitted By:

<Team ID>

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# ACKNOWLEDGEMENTS

***Section Explanation:*** *You may want to thank those individuals who have assisted your team during your project. You could also mention any organizations that have helped you while you have been carrying out the project.*

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# ABSTRACT

***Section Explanation:*** *The executive summary is also known as an abstract of your report. It is a brief summary of the report’s contents. It should be about half a page long (should be about 250 words or less). The reader should be able to understand what the project is about, how it was undertaken and what was accomplished. The abstract should answer the following questions:*

* *What is the project about?*
* *How is the project implemented?*
* *What did the project accomplished?*
* *Final status of the project and recommendations (if any)?*

# Introduction

***Section Explanation:*** *The introduction should tell the reader what your project is about. The introduction should answer the following questions:*

* *What exactly is the problem that your project is trying to solve?*
* *Why is this problem important to solve? This is the motivation of the project.*
* *What are the major tasks and deliverables of the project? This is the project scope.*
* *How have you solved the problem? This is your approach. You should expand on this in the later sections (project strategy, plan and design)*
* *What are the conditions under which your solution is applicable? This is where you list the assumptions made, if any.*
* *What are the main results? This is where you list the main deliverable points.*

# Project Specification and Plan

***Section Explanation:*** *Students should read and understand the requirements in this section and set achievable deliverables with the Supervisor. Some of the deliverables that the students and Supervisors should agree upon before the start of the Project are listed below but not limited to:*

* *Extent of business analysis*
* *Extent of technical analysis, design and implementation*
* *Tools and techniques used in analysis*
* *Resources such as web server etc.*
* *Optional items listed in this guidelines that can be omitted from the report*

*This section should be completed between 1st and 2nd meeting*

* *Project Overview*
* *Functional Requirements*
* *Project Plan*

## Project Overview

***Section Explanation:*** *This subsection should contain a brief description of the system being developed and its purpose, including information such as:*

* *Project Motivation (Why do the project? what are the benefits?)*
* *Project Objectives (What is the project trying to accomplish?)*
* *Project Scope (What are the major tasks and deliverables of the project?)*
* *Project Assumptions (Are there assumptions which are made regarding how the end deliverable will work, etc.?)*

## Functional Requirements

***Section Explanation:*** *This subsection should clearly specify the major functions the system should possess. Business rules or business requirements must be documented. Students are encourage to use tools such as Use Case diagram to document the business requirements.*

## Project Plan

***Section Explanation:*** *This subsection describes in detail the schedule, milestones and work allocation of each member of the team. Care must be taken to prepare this as each member of the team will be evaluated independently based on his/her contribution, effort, teamwork amongst other factors. This subsection will also serve as a basis where teams and supervisors can monitor progress being made. The use of MS Project is recommended.*

*In the Microsoft Project, you may include the following:*

* *List of tasks need to be assigned to a particular team member*
* *Ensure that there is adequate and fair involvement by each team member*
* *Project Plan must take into consideration the deliverables at specific milestone such as the 3 meetings*

# Business Analysis

***Section Explanation:*** *This section is applicable to projects in domains such as Application Development, Data Analytics & Visualisation, IoT (Sensor driven applications), IT Security, Mobile App, and Solution Implementation.*

*This subsection describes the business analysis done to address the business issues of the project. It should contain the following but not limited to:*

* *Business Issues & Market Analysis (optional, Supervisor to decide)*
* *Business Solutions*

## Business Issues

***Section Explanation:*** *This subsection describes the current business situation with special emphasis on the issues that the project is trying to solve. Some consideration includes:*

* *Provide more detail on the current situation*
* *What are the difficulties or business issues that we are trying to solve?*

## Market Analysis

***Section Explanation:*** *This subsection describes the size of the business solution. The following may be included in this subsection:*

* *Size of business and market segment*
* *Competitive analysis*

## Business Solutions

***Section Explanation:*** *This subsection describes the business solution to the problem. Students are expected to demonstrate their ability in understanding the business logic and the process. Some important consideration is to understand the overall business process and not just the IT solution. The following may be included in this subsection*

* *Process flow*
* *How IT can help*

# System Design and Implementation

***Section Explanation:*** *This section describes the architecture and the design of the system. It will briefly describe the various hardware and network interaction.*

## System Architecture

***Section Explanation:*** *This subsection describes the interaction between the different hardware. At the same time, it will describe the network topology that will be used by the system.*

## Detailed System Design

***Section Explanation:*** *This subsection includes the design documentation for the project. Care must be taken to ensure that the diagrams are clear and carefully organized.*

* *The following tools can be used to help in design:*
* *Entity Relationship Diagram*
* *Use Case Specification*
* *Unified Modelling Language Tools (e.g. Class Diagram, Sequence Diagram, only for OOP project)*
* *Data Flow Diagram*
* *Control Flow Chart*
* *Decision Table/Tree*
* *Pseudo Code*

# System Testing

***Section Explanation:*** *This section describes how the system will be tested for robustness and fulfilment of functional and system requirements (Test Plan).*

*You may use the Sample Test plan for reference, and use RP Test Specification Template for Unit / Functional Testing.*

** **

From Freelancer.com

(formerly RentACoder.com)

*Other Resources for reference on Software Debugging and Testing:*

[*https://en.wikipedia.org/wiki/Software\_testing*](https://en.wikipedia.org/wiki/Software_testing)

[*https://braydie.gitbooks.io/how-to-be-a-programmer/content/*](https://braydie.gitbooks.io/how-to-be-a-programmer/content/)

[*http://www.extremeprogramming.org/rules/unittests.html*](http://www.extremeprogramming.org/rules/unittests.html)

# User and Technical Documentations

## User Documentation/Guide/Manual

***Section Explanation:*** *A user documentation or manual should be produced to describe how the system should be used. It should be readable and understandable by a non-technical person (i.e. someone who is IT illiterate). Illustrations and graphics can be used to great advantage here.*

## Technical Documentation (Installation guide/Manual)

# Conclusions

***Section Explanation:*** *This is the section where you should state the main take-away points from your project. It should be more information than the abstract. You should include a concise version of your accomplishments, what problems you had, and what could be done in the future to rectify them.*

* *Summary of Accomplishments*
* *Future Work*

# References

* **Acknowledge** any work, statement or definitions copied
* Citation **style**
  + IEEE citation style
    - [1] D. Ingre, *Survivor’s guide to Technical Writing.* Mason, OH: South-Western Educational, 2003.
    - Usage: Some text. [1]
  + APA citation style
    - Dubeck, L. (1990). Science fiction aids science teaching. *Physics* T*eacher, 28,* 316-318.
    - Usage: Some text. (Dubeck, 1990)
  + MLA citation style
    - James, Nancy E. "Two Sides of Paradise: The Eden Myth According to      Kirk and Spock." Spectrum of the Fantastic. Ed. Donald Palumbo.      Westport: Greenwood, 1988. 219-223.
    - Usage: Some Text. (James 1)

# Appendices

***Section Explanation:*** *This is for you to include materials which you could not put in the main body of your report. For example, you could include source code of your project.*

*Appendices should be headed by letters in alphabetical order, ie. Appendix A, Appendix B, etc.*

# Project Poster

***Section Explanation:*** *Pls create a poster write-up for your project. The file should be saved as a PPT file and embedded in this section as an object.*

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