# Chapter One

# Introduction

## Background of the Organization/Background of the Project

* Write it in paragraphs
* Write about the background of the organization/project
  + Go from general background to specific

## Statement of the Problem

* Write it in paragraphs
* Write about the current problems that exist and indicate how your project overcomes this problems
* One paragraph should only describe about one problem
* It should have a logical flow from general to specific

## Objective of the Project

### 1.3.1 General Objective

* Write it in **not** more than two sentences.
* Describe the general objective you aim to achieve by the end of this project

### 1.3.2 Specific Objectives

* Write it using bullet points
* Write the specific steps you need to follow/take to achieve the general objective
* This should be measurable, achievable and tangible/can be seen in the document and in the implementation
* Each objective should be written in not more than one sentence
* Write it like **: To** identify the requirements for ……
* Should have b/n 5 – 12 objectives

## Methodology

### 1.4.1 Data collection

* List and describe in short the types of data collection tools you are going to use like: survey/questionnaire, interview, observation, document analysis…etc.
* This tools will be included on the appendix section of the project

### 1.4.2 System development Process model

* Write it in paragraph
* Write about:
  + what system development process models are and how they help software development.
  + Which model you selected and why you chose it
  + How it suits your project
  + If there is a picture of the model , then include it

### 1.4.3 Design pattern

* Write in paragraph
* Write what design pattern you chose to follow like MVC, MVVM, singleton pattern or something else.
* Write why you chose this and how it works in general

### 1.4.4 Programming language

* You can use a list or a table or a paragraph properly
* Write which **languages** you chose from front to back
* In the case of the backend, give reason on why you chose that language

## 1.5 Tools

### 1.5.1 Hardware Tools

* You can use a list or a table
* Write any hardware you used(will be using) to develop this system PCs, mobile devices…etc.

### 1.5.2 Software Tools

* You can use a list or a table and describe each in short
* Include the frameworks, libraries, servers, IDEs, DBMS, runtime environments, browsers…etc.
* Also include the software you used to create the different diagrams like class, ER, …etc. and for UI design

## 1.6 Scope and Limitation of the Project

### 1.6.1 Scope of the Project

* Write it in bullet points
* Write about:
  + where it works?
  + For whom?
  + when?
  + on what platform?(web or desktop or mobile, or other)
  + included expected MAIN features?
    - Like what major components it will include

### 1.6.2 Limitations of the Project

* Write it in bullet points
* The limitations are the opposite of the scope.
* Write about:
  + what features that are normally expected aren't covered by your project?
  + where does it not work?
  + when doesn't it work?
  + who cannot use it?
  + on what platforms can a user not use it?

## 1.7 Significance of the Project

* Write it in bullet points
* This section explains the importance or potential impact of the project. It could be in terms of business value, social impact, research contribution, etc.
* List its uses for each user and how it benefits the user

## 1.8 Feasibility Study

* Write in one or two sentence, on the use of Feasibility studies and the type of Feasibility studies considered for this project.

### 1.8.1 Technical Feasibility

* Write in paragraphs
* Write about whether there exists correct required hardware and software resources and technologies which will be used for project development.
* And whether the selected tools are suitable and can do the job
* Also analyzes technical skills and capabilities of the team

### 1.8.2 Economic Feasibility

* Write in paragraphs
* Write whether the project is economically viable to develop given the development cost of the project and its operational cost.

### 1.8.3 Operational Feasibility (Maybe)

* Write in paragraphs
* Write whether it is possible to maintain and operate and keep running after the deployment of the system.
* Whether the proposed system solves the current problem when it’s deployed

### 1.8.4 Legal Feasibility (Maybe- if there are any legal related issues only)

* Write in paragraphs
* Are there any legal restrictions on the development and deployment of the system

## 1.9 Risk Assessment

### 1.9.1 Risk

* Write in paragraphs and bullet points
* Mention and discuss the risks that could potentially stop you from developing this system fully
* Also write how you intend to mitigate or handle this obstacles.

### 1.9.2 Assumptions

* Write in bullet points
* Write the assumptions you are making related to the development, deployment and use of the system.

### 1.9.3 Constraints

* Write in bullet points
* Write the limitations you have to work with(that you have no control over)

## 1.10 Work Break Down

* Mainly use Gantt chart
* This is a visual representation of the project tasks, their dependencies, and the timeline for completion.