

# Software Project Management Plan

This document outlines a brief plan about how the project is to be shaped and includes the milestones and deliverables. This document will serve as a guide for developing the product as part of the project. The document contains brief description of the process model we are going to use, the roles and responsibilities of the team members, list of tasks to be performed and the resources needed for their completion. Updates of this document will serve to record the progress of the project.

## 1 INTRODUCTION

### 1.1 Project Overview

The recent literature pays significant attention to the movie industry because of the industry's unique characteristics. The movie industry is a business with a high profile, and a highly variable revenue stream. A single movie can be the difference between millions of dollars of profits or losses for a studio in a given year. Forecasting a movie's opening success is a difficult problem, since it does not always depend on its quality only. External factors such as competing movies, time of the year and even weather influence the success as these factors impact the Box-Office sales for the movie opening. We introduce a simple solution for forecasting movie success in terms of financial success, movie ratings, etc. As a result, this approach will achieve decent estimations, allowing theatre planning to a certain extent, even for small studios.

## 1.2 Project Deliverables

Deliverable	Structure	Standards	Approval Needed By	Resources Required
Project Proposal	Document	As defined in project methodology	Project Guide	Microsoft Word
Software Project Management Plan	Document	As defined in project methodology	Project Guide	Latex
Software Requirements Specification	Document	As defined in project methodology	Project Guide	Latex
Software Design Document	Document	As defined in project methodology	Project Guide	Latex
Database Design and Data Collection	Database Files	As defined in project methodology	Project Guide	Data is collected from websites Wikipedia, Koimoi, BoxOfficeIndia etc SQL server for database design, SQL queries.
User Interface	Prototype	As defined in project methodology	Project Guide	Visual Studio.
Testing Document	Document	As defined in project methodology	Project Guide	Latex
Report and Presentation	Document	As defined in project methodology	Project Guide	Latex, Microsoft Power Point.

## 2 PROJECT ORGANIZATION

### 2.1 Software Process Model

We are going to use the Incremental Model for our project In this model the whole requirement is divided into various builds. Multiple development cycles take place here, making the life cycle a multi-waterfall cycle. As our project is divided in modules such as data collection, pre-processing data, creating GUI, testing, and each module will require the previous module to be completed, we are selecting this model. This model allows us to test and review it at the end of each phase to determine if the project is on right path, helping us build the project correctly and reduce the risk of changing requirements.

Moreover there will be no phase overlapping in this module thereby allowing us to build a system with overall functionality.

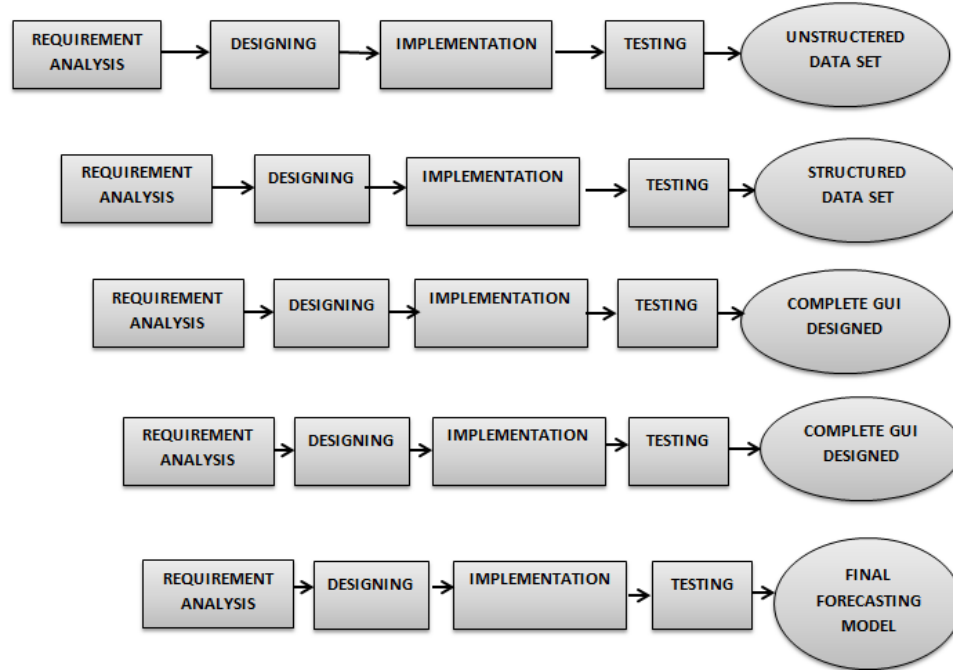


Figure 1: Incremental Model

## 2.2 Roles and Responsibilities

The entire project team is responsible for the successful delivery of the product. Each team member will be involved in all the project activities mentioned below:

- Project Plan
- Requirements Specification.
- Documentation and Analysis
- Architecture Specification
- Component/Object Specification
- Designing Database
- Source Code

- Designing User Interface
- Test Plan
- Final Deliverable

## **2.3 Tools and Techniques**

### **2.3.1 Software Requirements:**

- For front end we use Visual Studio.
- Microsoft Power Point for presentations.
- Microsoft Word and Latex for documentation.
- For back end we use MS SQL SERVER.
- Macro enabled Microsoft Excel for pre-processing data

### **2.3.2 Hardware Requirements:**

- Processor i3 and above.
- Minimum 2GB RAM
- Hard Disk 250GB and above

## **3 PROJECT MANAGEMENT PLAN**

### **3.1 Tasks**

1. Software Requirements Specification
2. Software Design Document
3. Module 1 - Collection of data.
4. Module 2- Preprocessing of data.
5. Module 3- Designing GUI
6. Module 4- Creation of model and coding to forecast results specified as follows:
  - Movies verdict in terms of: Flop, Semi-hit, Super-hit and Block buster
  - Its box office revenue prediction.
  - Regions where the movie will do good business.
  - Suggestion for the movies release month.
  - Rating of the movie.
7. Module 5-Testing

### **3.1.1 SRS(Software Requirement Specification)**

#### **3.1.1.1 Description**

This document will completely describe all the functions of a proposed system and the constraints under which it must operate.

#### **3.1.1.2 Deliverables and Milestones**

An SRS document which will be reviewed by the project Guide and finalised, the revised SRS will be a milestone.

#### **3.1.1.3 Resources Needed**

Latex for documentation and Internet will be the basic requirements.

#### **3.1.1.4 Risks and Contingencies**

Change in requirements will lead to change in SRS.

### **3.1.2 Software Design Document**

#### **3.1.2.1 Description**

This document will consist a detailed written description of software product. It will demonstrate how the design will accomplish the functional and non-functional requirements specified in the SRS .It will give us a view of system architecture, database design, interface of the project, and algorithm design.

#### **3.1.2.2 Deliverables and Milestones**

The document will be reviewed by the project Guide and finalized, the revised document will be a milestone.

#### **3.1.2.3 Resources Needed**

Microsoft Word, Latex for documentation and Internet will be the basic requirements.

#### **3.1.2.4 Risks and Contingencies**

Designing phase cannot start until all the requirements achieved. Change in requirement will result in change in software design.

### **3.1.3 Module 1-Collection of data**

#### **3.1.3.1 Description**

Data is collected from various websites like Wikipedia, Koimoi, Boxoffice-india and Bollywood hungama. We designed a structure for our database. Some of the parameters collected for our database are as follows:

- Actor and actresses rank in the industry.
- Details of various movies, which include the movie name, genre of the movie, cast, director and the release date of the movie.

- Box-office revenue of the movie.
- Month of Release.
- Region-wise revenue earned by movies.

#### **3.1.3.2 Deliverables and Milestones**

The deliverable will be database with unstructured data stored in it. The task of populating the database will be carried regularly.

#### **3.1.3.3 Resources Needed**

We will require SQL server for storing the database, which will be integrated with UI using Visual studio.

#### **3.1.3.4 Dependencies and Constraints**

Changes in the results to be implemented will result in changing the dataset and factors to be considered in dataset.

### **3.1.4 Module 2- Pre-processing of data.**

#### **3.1.4.1 Description**

Macro enabled workbooks are created using VBA coding to pre-process the data. Here the data collected from various social media sites will be converted to structured format using the workbooks.

#### **3.1.4.2 Deliverables and Milestones**

The deliverable will be a structured dataset which can then be used for implementation of next module.

#### **3.1.4.3 Resources Needed**

Microsoft Excel to create workbooks. SQL server for storing the database, which will be integrated with UI using Visual studio.

#### **3.1.4.4 Dependencies and Constraints**

Changes in the results to be implemented will result in changing the dataset.

### **3.1.5 Module 3- Designing GUI**

#### **3.1.5.1 Description**

An interface will be developed in which the user can choose the various options for displaying the output results. Admin will have login id and password. He/she can insert data in database using the interface. The GUI should be user compatible.

#### **3.1.5.2 Deliverables and Milestones**

The User Interface after integration of all the features will become a milestone.

#### **3.1.5.3 Resources Needed**

Visual Studio, .Net framework, C sharp coding

#### **3.1.5.4 Dependencies and Constraints**

This task does not depend on any module.

### **3.1.6 Module 4- Creation of Model.**

#### **3.1.6.1 Description**

Regression based modelling technique will be used as an algorithm for creating a model which will forecast the required results.

#### **3.1.6.2 Deliverables and Milestones**

Source code of the algorithm been used.

#### **3.1.6.3 Resources Needed**

Visual Studio, SQL server.

#### **3.1.6.4 Dependencies and Constraints**

Changes in dataset may affect the code.

### **3.1.7 Module 5- Testing.**

#### **3.1.7.1 Description**

It deals with testing various modules and applications of the project using various testing techniques like black box testing, white box testing, etc.

#### **3.1.7.2 Deliverables and Milestones**

The deliverable will be a list of features not working with the changes been incorporated. The final interface after incorporating the changes and resolving errors will be a milestone.

#### **3.1.7.3 Resources Needed**

Test Cases

#### **3.1.7.4 Dependencies and Constraints**

This task can be performed only when all the above tasks are completed.

### 3.2 Timetable

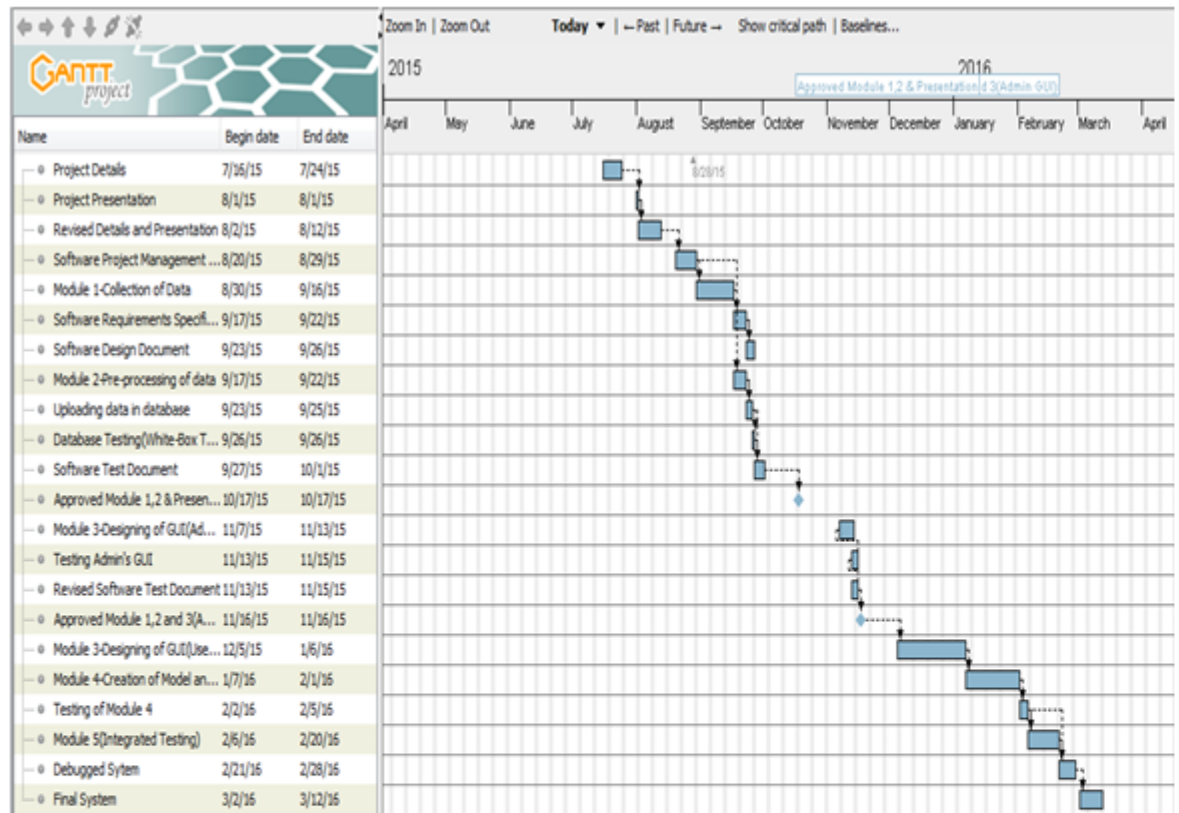


Figure 2: Gantt Chart



<b>Task</b>	<b>Start Date</b>	<b>End Date</b>
Project Details	16/7/15	24/7/15
Project Presentation	1/8/15	1/8/15
Revised Details and Presentation	2/8/15	12/8/15
Software Project Management Plan	20/8/15	29/8/15
Module 1-Collection of Data	30/8/15	16/9/15
Software Requirements Specification	17/9/15	22/9/15
Software Design Document	23/9/15	26/9/15
Module 2-Pre-processing of data	17/9/15	22/9/15
Uploading data in database	23/9/15	25/9/15
Database Testing(White-box Testing)	26/9/15	26/9/15
Software Test Document	27/9/15	1/10/15
Approved Module 1 and 2	17/10/15	17/10/15
Module 3- Designing GUI(Admin Side)	7/11/15	13/11/15
Testing Admin GUI	13/11/15	15/11/15
Revised Software Test Document	13/11/15	15/11/15
Approved Module 1,2 and 3(Admin Side)	16/11/15	16/11/15
Module 3-Designing GUI(User's Side)	5/12/15	6/1/16
Module 4-Creation of model and coding to forecast results	7/1/16	1/2/16
Testing of Module 4	2/2/16	5/2/16
Module 5-Integrated Testing	5/2/16	20/2/16
Debugged system	21/2/16	28/2/16
Final system	2/3/16	12/3/16