

**BS COMPUTER SCIENCE PROJECT PROPOSAL**

**PROJECT TRACKING & ANALYSIS (PTA) APP**

**SUBMITTED BY:**

Muhammad Shahid

(Morning)

**PROJECT SUPERVISOR:**

Rana Amjad Mubarak

**FACULTY OF SCIENCES**

**DEPARTMENT OF COMPUTER SCIENCE**

**UNIVERSITY OF SAHIWAL**

November 2018

# INTRODUCTION

The Project entitled “**Project Tracking & Analysis”** deals with the various levels of project development and will account for time used in analysis, design, programming, testing and verification etc.

It is well known fact that software companies undertake huge projects more than one at a time. Hence there is a profound need for the organizations to manage all the projects efficiently and ensure that projects cycle goes on smoothly and they are completed on time.

PTA (Project Tracking & Analysis) is a planning and tracking system solution that simplifies and automates various manual operations developed to assist large companies to maintain consistent information of the projects undertaken and employees working for the company. PTA keeps track of employees, projects, projects phases, analyses the project, generates reports and shows them in charts and graphs. Also analyses the budget of projects, specifies the profit and loss and also generates alerts for project remaining time.

During the lifetime of a project, the organization has to commemorate all the activities of the project. This tool makes it easier for the organization to monitor the projects. It maintains records and tracks various parameters that influence software project development process and helps the management to take decisions at various stages of the project development.

# OBJECTIVES OF PROJECT

PTA i*s* nothing but a business solution that simplifies and automates various manual operations through smart search facility, centralized database. This system involves external entities, internal entities and there is dynamic flow between them.

# METHODLOGIES FOR IMPLEMENTATION OF PROJECT

I will use Hybrid Methodology for implementation of project. The Hybrid approach, as the name implies, is a combination of the Waterfall and Agile methodologies. It takes the best parts of both Waterfall and Agile and combines them in a flexible yet structured approach that can be used across different projects.

# USERS

**Admin**

Admin is one of the most important and crucial component of the system. The functions which the Admin can perform are:

1. Add, delete, and update employee records
2. Add, delete, and update project record
3. Send project approval request to Manager

**Manager**

**Employee (Worker)**

# FUNCTIONAL REQUIREMENTS

This section contains the functional requirements for the purchasing Project Tracking and Analysis (PTA). The functional requirements, as collected from the users, have been categorized as follows to support the types of user interactions that the system shall have.

* account handling
* project details
* project tracking
* financial analysis of projects
* financial report generation
* project delivery reports
* Employees’ record

# Non-Functional Requirements

A non-functional requirement is a requirement that specifies criteria that can be used to judge the operation of a system, rather than specific behaviors. Some of the non-functional requirements include:

* **Familiar Interface**

The new system will have an interface that shares some of the feel of the old system so that users who are familiar with the old system will not have trouble adjusting to the new system.

* **Focused Layout**

The new system will reduce the potential for confusion by having a focused layout. This means that it is relevant to the current task and conversely, leaves out irrelevant information.

* **Effective Recovery**

The system must effectively recover from a crash within ten minutes. Effective recovery means that the data is still in a consistent state accurate to 1 minute before the system crashes when the system returns.

* **Performance**

The proposed system will reduce the time and easy for storing information. It will capable to answer various quires instantly and efficiently. And also can retrieve information. Some of the other non-functional requirements are:

* Backup- provision for data backup
* Maintainability- easy to maintain
* Performance/ response time- fast response
* Safety- should be safe to use
* SQA (There should be high quality system that minimize software risk)
* Safeness and steadfastness
* Data integrity and confidential flow of data between different forms
* Software motility
* Right access to right person only
* Maximum speed with minimum memory
* Ease of use
* Software Quality Assurance
* Security and Reliability
* Data Integrity and Confidential Flow of data between activities
* Software Portability and Flexibility
* Right access to right person only
* Free of exceptions deployment with interactive design
* Mutual understanding between system and end users
* Robustness and ease of use
* Maximum speed with minimum size

# PROJECT SCHEDULE PLANNING

* Collection of literature Two Weeks
* Study of Literature Two Weeks
* Analysis of Proposed Scheme One Month
* Preparation of Scheme/Model One Month
* Implementation of Scheme/Model One Month
* Analysis and Simulation One Month
* Result Formulation Two Weeks
* Final Write-up & Thesis Submission Two Weeks

# SOFTWARE REQUIREMENTS

* + **Language :** Java, JavaFX2.0, Jfoenix
  + **IDE :** Eclipse/intelliJ IDE , SceneBuilder, MySQL Workbench Server
  + **Database :** MySQL

# HARDWARE REQUIREMENTS

* **Operating System :** Windows7 or above
* **Processor :** Any Intel or AMD Processor
* **Disk Space :** 1GB is needed, 3GB for typical Installations
* **RAM :** Around 1GB or above