Low Level Design (LLD)

Employee Tracking System

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# Document Version Control

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| 21st February | **1.2** | **Workflow process added** | -Do- |
| 22nd February | **1.3** | **Constraints and Exceptions added** |  |
| 23rd February | **1.4** | **Key performance indexes added** |  |
| 24th February | **1.5** | **Flowcharts added denoting input and output** |  |
| 24th February | **1.6** |  |  |
| 25th February | **1.7** | **Added dataset overview and updated user I/O flowchart.** |  |
| 26th February | **1.8** | **LLD Structure ready for submission** |  |

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**ABSTRACT**

The Employee tracking application is prepared as a console-based core java project. The system tracks the performance of all registered employees in an organisation, involved in different projects. The detailed address of the employees is stored in a different entity and may be referred to when tracking of employees is necessary or their proximity to each other and involvement in different projects may need to be conveniently assigned.

The Manager entity of the system benefits the managerial staff to track the employees efficiently to know their allotment, department, progress, and scheduling data.

This system requires no web server and may be executed from a digital device within the onsite premises of an organisation which can effectively use it to understand the performance of its employees.

The system helps in

* Division of labour
* Understanding effectiveness of each employee
* Understanding employee potential
* Project constraints
* Effective scheduling
* Effective running of organisational framework
* Less cost involvement
* Tracking employee details

1. **INTRODUCTION**

## **Need of a Low-Level Design Document:**

The low-level Design Document contains a detailed description of the application to be developed. Low level designing contains bulky data and document to delve into details the development phase. The LLD is a reference document for developers, reference material with all the technicalities involved.

Low level designing aims at the technical detailing of the project. It consists of the algorithm and details about classes/ methods to achieve the required functionality in terms of business requirements. The Low Levell design aims to achieve the functional and non-functional requirements by giving a technical roadmap for it. The document divided into various sections to make the code reusable and scalable.

The main objective of the project is to make create a console-based application to be run in onsite premises to get a hands-on information about the ongoing projects and details of employees involved.

This project shall be delivered in a manner that suggestive changes may be easily implemented without disturbing the already existing data.:

## **Scope**

This software system will be a console-based application with Core Java. This system will be designed to gather a first-hand information on which employee is involved in which project, their department name and location details.

In the application, employees may be tracked by the employer for the benefit of creating a clear understanding of their employees.

The project deals with a employee view as well as a manager view, to get a ready information on employees and projects.

## **Constraints**

A few functionalities could not be implemented.

* The system suffers from the drawback of not being able to function at times due to session creation error for the application.
* The employer or the manager constructor which is created as a inherited class from the employee class, has no existence if employees do not exist.
* Address was put on delete cascade but the updating could not be put in Cascade mode.
* Time of begin and end project is given as extra feature but the time stamp could not be provided as MySQL Workbench did not allow it as datatype.

## **Risks**

Document specific risks that have been identified or that should be considered.

* The authenticity of users is not determined.
* The pdfs of books available are therefore cautiously done for a few.
* Copyright and patent rules for creative content are subject to a few risks. This makes the system vulnerable.

## **Out of Scope**

1. The project is developed in the local system and the code in github repository.
2. The project is not hosted in any cloud platform and is still not available in on internet.
3. Book Authors to be connected with Readers.
4. Writing skill improvement implementation.

# Broader range of sale manifesto to be developed

# TECHNICAL SPECIFICATIONS

It includes the hardware software and other technical requirements of the system. Any platform and machine with an installed jdk can effectively run the application. As the project is developed in java it is:

* Portable
* Simple to understand and implement
* Any database can be used for stating minimum employee details
* Minimum storage and any RAM that effectively runs a java application can be used.
* The application uses the System Library which may vary from machine to machine. Only the hibernate jars are to be downloaded and included in build path with MySQL Connectivity jar.
* The application is developed in Eclipse IDE. It may be opened in any IDE or it may even run in command prompt.
  1. **Hardware Requirements**

 Processor: Intel Pentium microprocessor with RYZEN

 Main memory: 512 MB

 Hard disk : 256 MB required

 Keyboard: Standard

 Monitor: 600x800 Resolution or above

 Mouse: Scroll

### **Software Requirements**

##### Tools and platforms used

֎ Operating System: Windows11