

EMPLOYEMEE MANAGEMENT SYSTEM

END TERM REPORT

By

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Section: K19PV

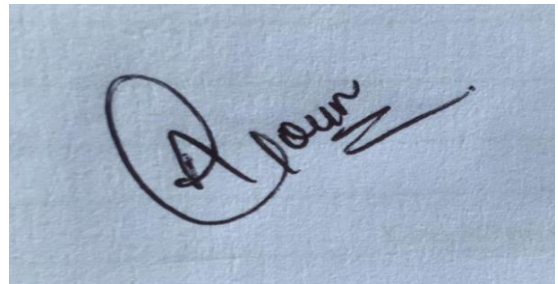


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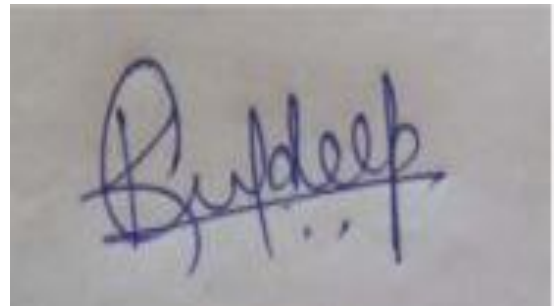
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Student Declaration

This is to declare that this report has been written by me/us. No part of the report is copied from other sources. All information included from other sources have been duly acknowledged. I/We aver that if any part of the report is found to be copied, I/we are shall take full responsibility for it.

A handwritten signature in black ink on a light blue background. The signature is stylized, starting with a large 'A' and ending with a long horizontal stroke.

AYUSH GOUR(B-43)

A handwritten signature in blue ink on a light grey background. The signature is stylized, starting with a large 'K' and ending with a long horizontal stroke.

KULDEEP SINGH SHEKHAWAT(B-56)

Place: JALANDHAR, PUNJAB

Date: 30th OCTOBER, 2020

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BONAFIDE CERTIFICATE

Certified that this project report “**EMPLOYEE MANAGEMENT SYSTEM**” is the bonafide work of “AYUSH GOUR and KULDEEP SINGH SHEKHAWAT” who carried out the project work under my supervision.

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Background

An employee management system is a platform where all work-related as well as important personal details of an employee is stored and managed in a secure way. By using this system, you can manage admin activities in an easier and quicker way.

Employees are the pillar of any organization and an ideal employee management tool makes a big difference to an organization.

As the system is developed to streamline and automate HR tasks, so let's take a quick look on how this software actually supports the human resource team and the employees as well.

- With its time tracking and timesheet software, decision-making becomes easier.
- Its salary modules pay your staff on time and you can also avoid human-errors as well.
- It offers you ESS portal that allows your staff to service themselves and get their queries attended immediately.
- It tracks the time employee spent on a task and HR professionals can use this data to optimize all working hours inside your business.
- It easily integrates with your other software to work together so that the HR department can easily get all the functionalities you need to operate at peak capacity.
- You can access all the necessary information of your employees about their projects, clients, etc. on a single dashboard.
- The software is responsible to improve engagement and overall, employee experience.

Organizations need to understand that how investing in right employee management software proves a smart decision for their business. It is responsible to increase productivity of your staff, and also to boosts workforce engagement.

The system motivates them by making them feel realize that they are playing a key role in the company's success. You can encourage your staff to perform at their best so that your company can achieve their business goals.

Below are some quick key advantages of accessing this intelligent software:

- This cloud-based system allows you to automate and digitize manual data entry and saves time and human efforts both.
- This too can help your business to keep all important documents safe against data loss or data theft.
- The system offers you special tools to communicate and maintain good relationships with your staff.

- It also incorporates with attendance and payroll software so that companies can pay their employees for worked hours.

It is the need of the hour for businesses to embrace cutting-edge engagement tools. The software proves great when it comes to foster a highly integrated and connected workforce. If HR activities are well equipped with the right HR solution that integrates various aspects of staff management like remuneration, recruiting, training, performance tracking, etc., then it empowers both the complete human resource team as well as the workforce.

OBJECTIVE AND GOALS

- Save more time

Employee Management Systems main aim is saving time, and easy of access to the employer.

- Ease your decision-making

By accessing employee management system, you can either customize or create your own metrics or also avail the standard metric system to have an upper-view of entire employee management. Also, you can motivate and support your staff with an analytically driven metric system. With its timesheet management and time tracking software, it becomes easier to decision-making and no more errors are committed thereafter.

- On-time, swift payroll

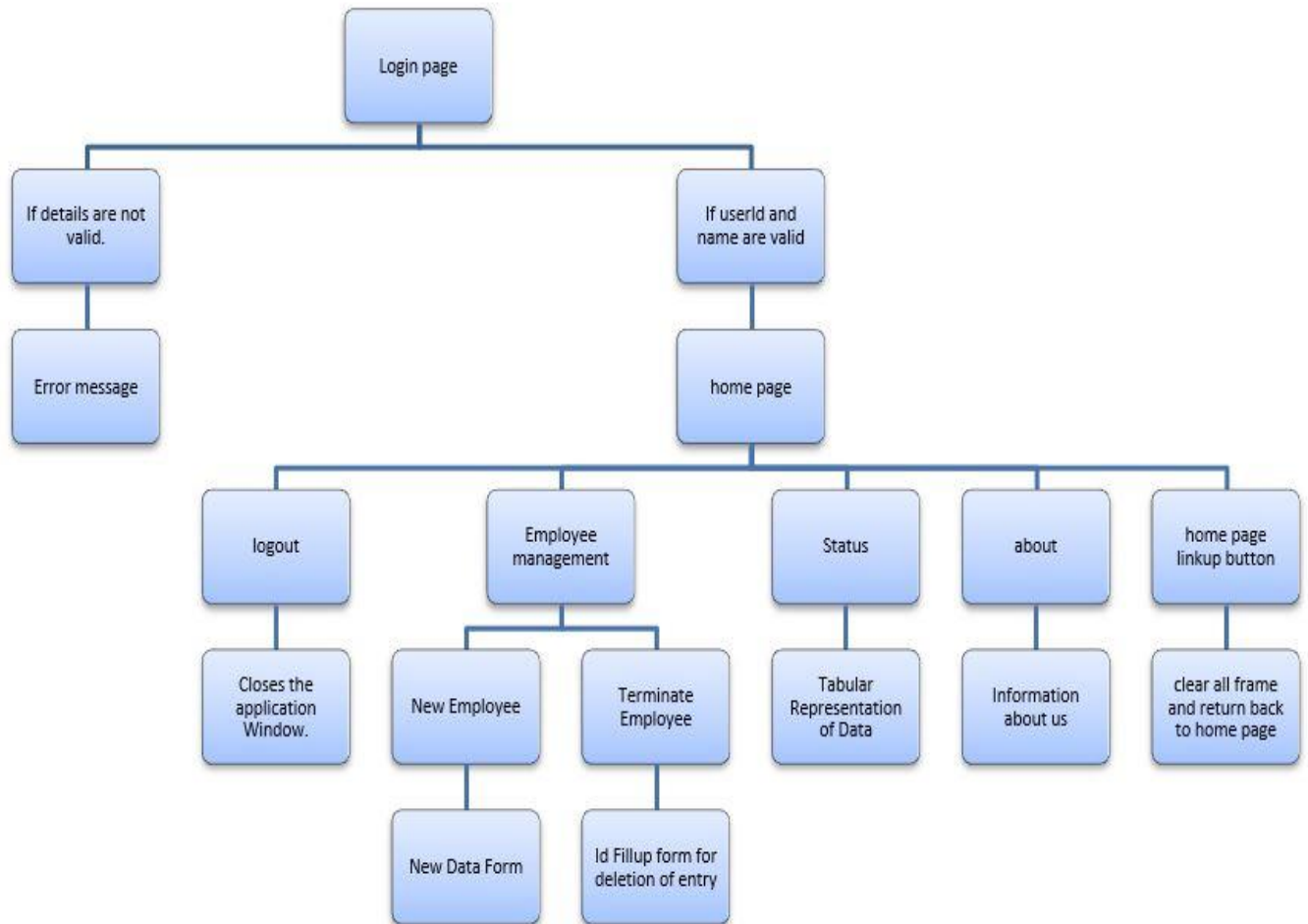
As the above word suggested, performing payroll will be piece of cake for the Employer. Moreover, paying the employees correctly and on time is another major challenge and very important as well. Employee management system helps the Employer pay the employees on time without pushing you into any unwanted legal matters.

- Online employee management

Tracing and recording of the employee data had never been easier. Creating a proper employee database is an important to-do task for perfect payroll. The online employee management software is an essential tool to count exact worked hours and creates the required database for every month. Also, automation helps in cutting down errors.

The **online employee management system** lets the Employer work from any remote location as well.

FLOWCHART



A simple and basic understanding of the Employee Management System.

WORK DISTRIBUTION

AyushGour

Reg No – 11905522, Roll-B-43

- Collected all information on how an Employee Management System works and accordingly arranged the functioning, also had a great hand in designing the Interface and Handling Exception.
- Responsible for retrieval of data from the files and show them as table in very organized way.
- Programmed the function for termination of Existing Employee and, had a great hand in error fixing and merging of all the widgets as a single working Application. He is responsible for the functioning of login form at the very beginning of the application.
- Counter for counting number of employees and location are programmed by him.

Kuldeep Singh Shekhawat

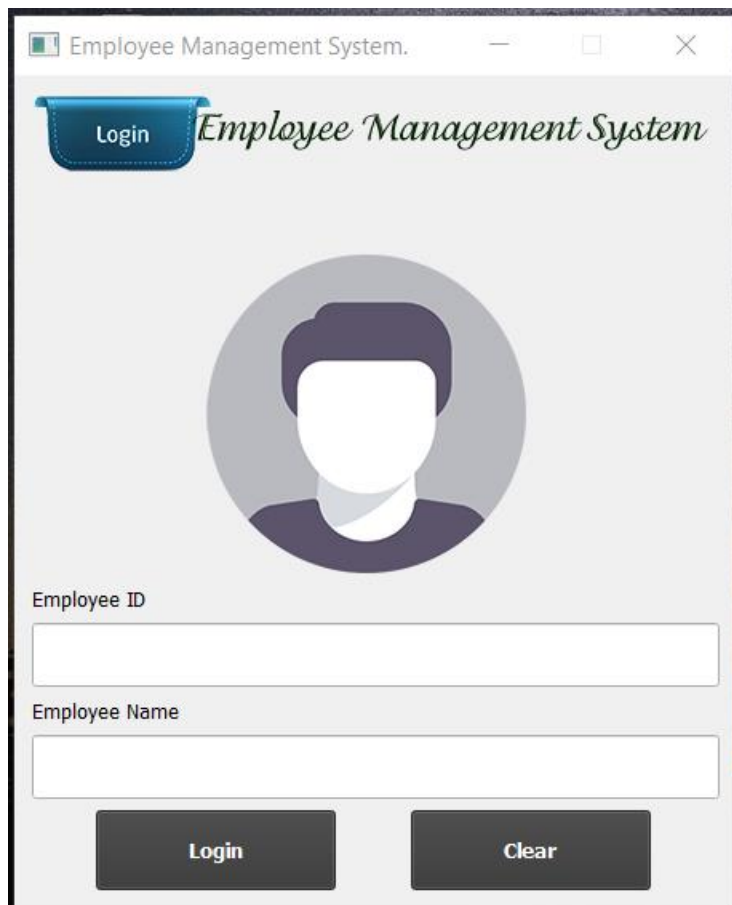
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- Did all the implementation regarding the structure of the Graphical user interface; also, performed all the linking of application functions to the main window (Graphical interface) for the desired output while fixing bugs and errors and errors too.
- Discussed all the functioning, for better understanding and implementation of this project.
- Had a major part in file handling and insertion of data in a file in very organized way.
Also, he had a great hand in error fixing and merging of all the widgets as a single working project.
- Counter for counting number of Departments and Projects are programmed by him.

WEB PAGES

Login Page

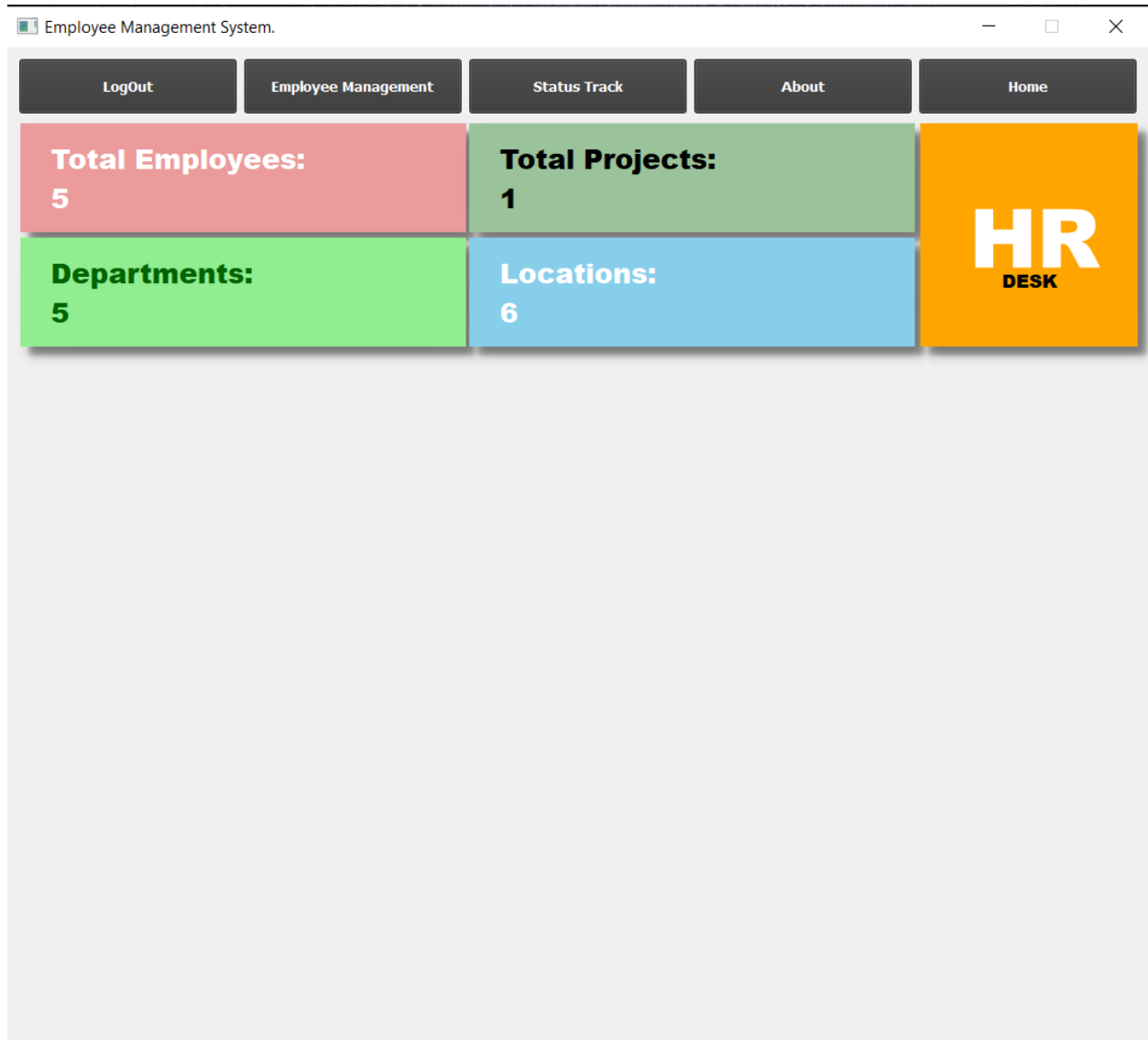
This page comprises of data input stream in the form of input fields. It is the basic need of any user to get into the user page only administrator can access all the pages by default and rest of the user can only access few of the benefits.



The image shows a web browser window titled "Employee Management System." with standard minimize, maximize, and close buttons. The page has a light gray background. At the top left, there is a blue button with the word "Login" in white. To its right, the text "Employee Management System" is written in a black, italicized serif font. In the center of the page is a large circular placeholder for a profile picture, containing a stylized white silhouette of a person's head and shoulders on a dark gray background. Below this, there are two input fields. The first is labeled "Employee ID" and the second is labeled "Employee Name". Both labels are in a small, plain black font. At the bottom of the form, there are two dark gray buttons: "Login" on the left and "Clear" on the right, both with white text.

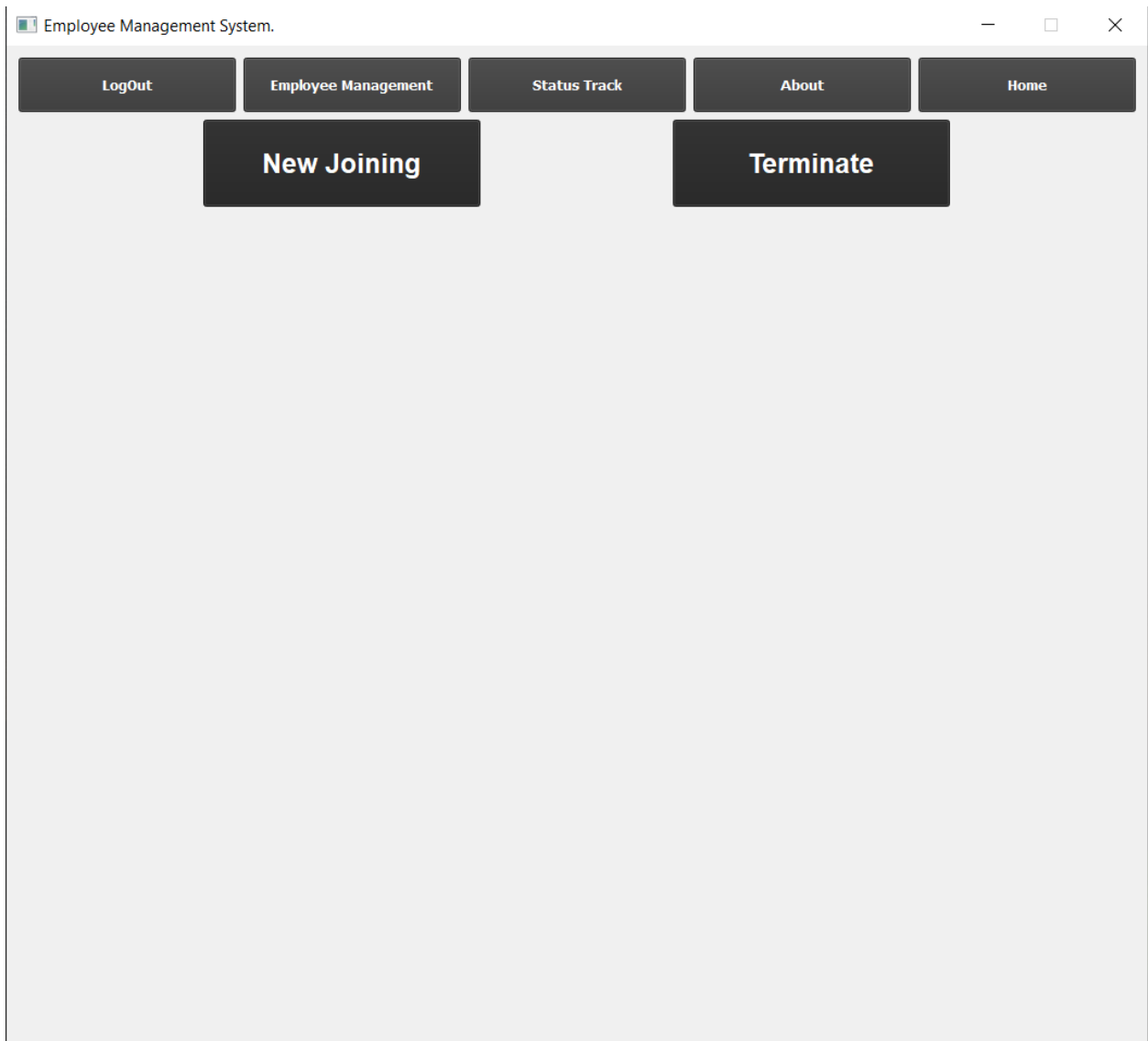
Main/Home Page

The first thing an employee's eyes falls on after logging in. Has all the functions and management available in a set and precise way for ease of access.



Joining Page

The place where Employees can be added or removed.



Add New Employee

Interface shown when a new member is added:

Employee Management System.

LogOut

Employee Management

Status Track

About

Home

New Joining

Terminate

Full-Name

Department Assigned

Salary per Annum

Project Name

Office Location

Email Id

Position/Job Title

Manager Name

Date Of Joining

Gender

Contact No

Highest Education Aquired

Address with pincode

ADD New Employee

Terminate Employee

Interface shown when terminating an employee's contract:

The screenshot shows a web application window titled "Employee Management System." with standard window controls (minimize, maximize, close). The interface features a top navigation bar with five buttons: "LogOut", "Employee Management", "Status Track", "About", and "Home". Below this bar are two large, dark buttons: "New Joining" on the left and "Terminate" on the right. The "Terminate" button is currently selected. Below the "New Joining" button, the text "Enter Emp_ID to be terminated" is displayed. To the right of this text is a text input field containing the value "11915006". Below the input field, the text "Status Return will be seen here" is displayed. At the bottom center of the interface is a large red button labeled "Terminate Employee".

Employee Management System.

LogOut Employee Management Status Track About Home

New Joining Terminate

Enter Emp_ID to be terminated 11915006

Status Return will be seen here

Terminate Employee

Status Track

Current status of the employees, their projects, departments and locations are shown in this interface:

Employee Management System.

Logout

Employee Management

Status Track

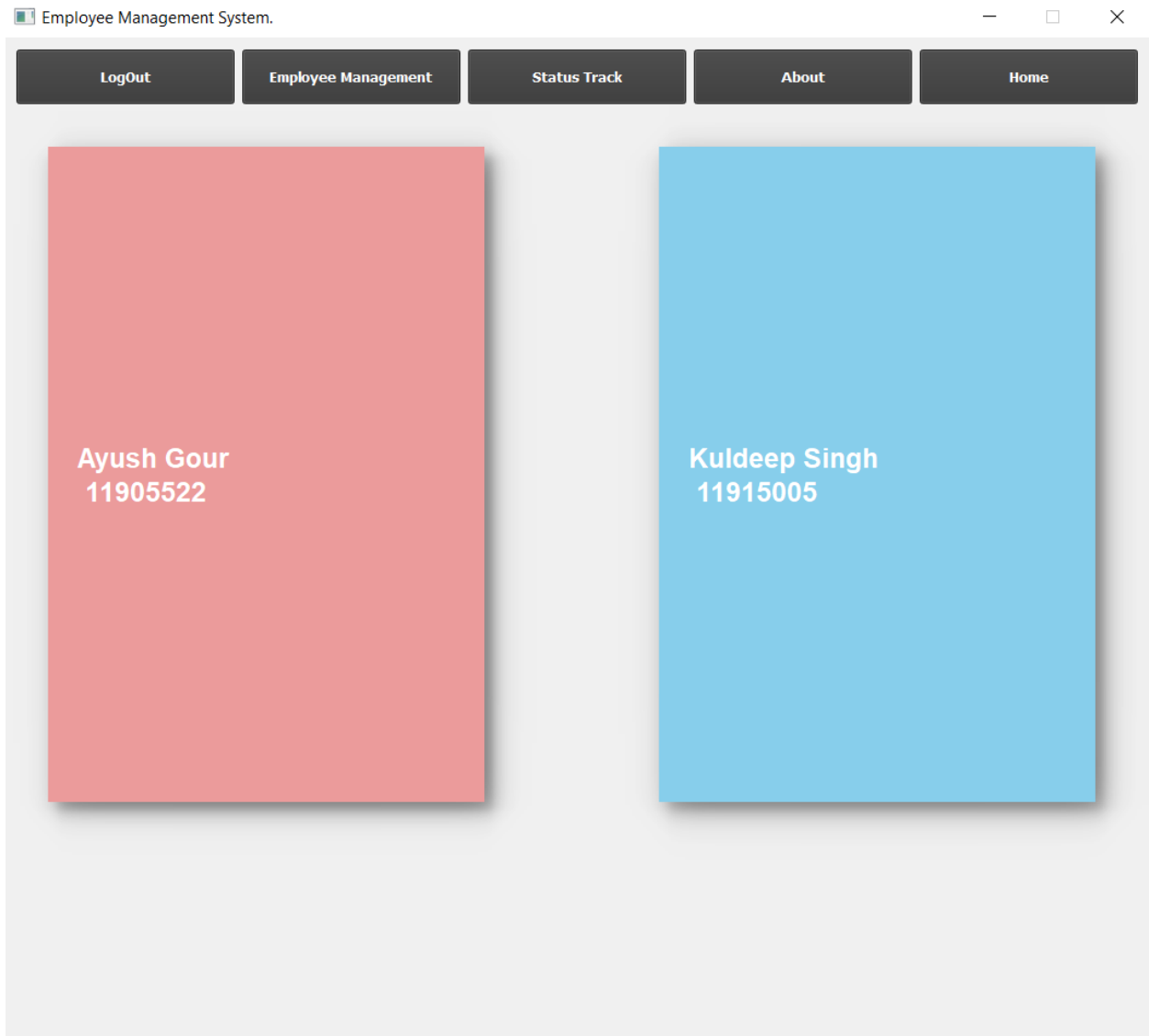
About

Home

Emp_ID	Name	Department	Location	ProjectName	Manager
e_id:11915006	AYUSH GOUR	CSE	PUNJAB	EMS	SHIVANSHU YADAV
e_id:11915007	KULDEEP SINGH	PMS	JALANDHAR	EMS	SHIVANSHU YADAV
e_id:11915009	DIVYA GUPTA	GPRS	MERUT	EMS	KK MANJUL
e_id:11915010	DIKSHA SHRIVASTAVA	GPRS	PUNE	EMS	KK MANJUL
e_id:11915011	SAMIR AKHTAR	CHC	MIRZAPUR	EMS	PANKAJ TRIPATHI

About Us

This page is an internal plug -in of main page, it comprises of details about creators and their work



TECHNOLOGIES AND FRAMEWORK

PYTHON



A high-level, general-purpose, multiplatform, interpreted language. Python is well suited for learning about GUI programming.

It is a python project based for Managing Employee data as an admin. This project is functional only on Python version more excellent or equivalent to 3.0.

We used standard libraries/functions to do so, named the following:

- PyQt5 Graphical user interface.
- Standard libraries like OS and Sys.
- Typecasting, etc.
- File handling.
- Exception handling.

Introduction to PyQt5

There are so many options provided by Python to develop GUI application and PyQt5 is one of them. PyQt5 is cross-platform GUI toolkit, a set of python bindings for Qt v5. One can develop an interactive desktop application with so much ease because of the tools and simplicity provided by this library.

A GUI application consists of Front-end and Back-end. PyQt5 has provided a tool called 'QtDesigner' to design the front-end by drag and drop method so that development can become faster and one can give more time on back-end stuff

Installation:

First, we need to install PyQt5 library. For this, type the following command in the terminal or command prompt:

```
pip install pyqt5
```

SWOT ANALYSIS

STRENGTH: -

1. Interactive Interface: -

Data is managed in a very soothing way so, that users will not face any difficulty while using it. Also, it is every less time consuming while understanding the field of data entry and its representation.

2. Track of Data Entries: -

Count of every is stored and updated each you enter or delete any item from the data base.

WEAKNESS: -

1. Data loss may happen if someone delete the database folder.
2. Data Redundancy may occur in some cases

OPPORTUNITY: -

1. Highly marketable.
2. Only a single user can use it at a time to preserve the data security.
3. Free-to-use: All tutorials are free.

THREAT: -

1. It is an offline application and only can be used on single machine until and unless hosted or copied/installed on other system.
2. Duplicate entries in field can cause incomplete Entries, due to the properties of Dictionary datatype in Python.

GITHUB Id

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