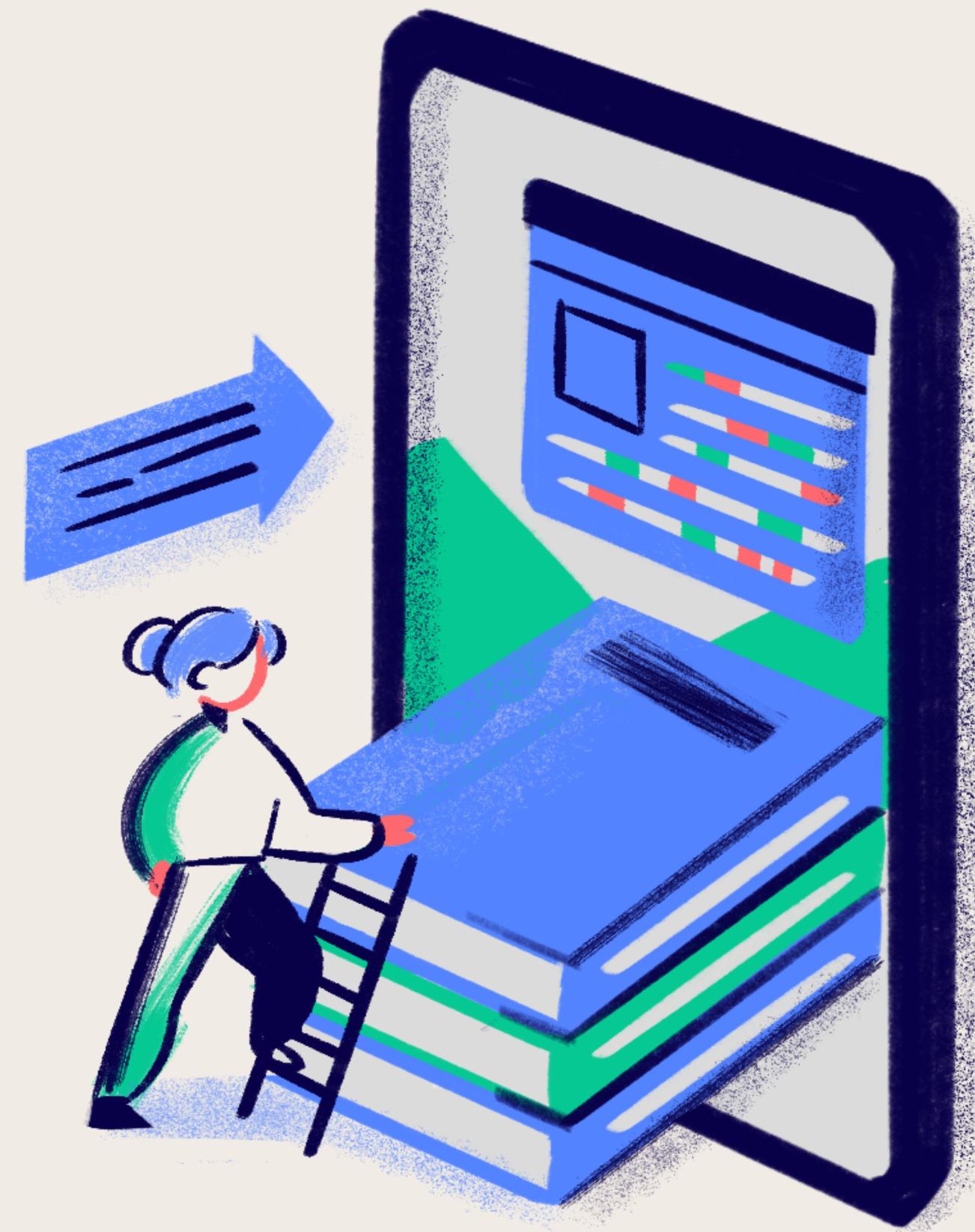


PRESENTED BY ARHAM SIDDIQUI

# PAYROLL MANAGEMENT SYSTEM

AUTOMATED COMPENSATION  
MANAGEMENT

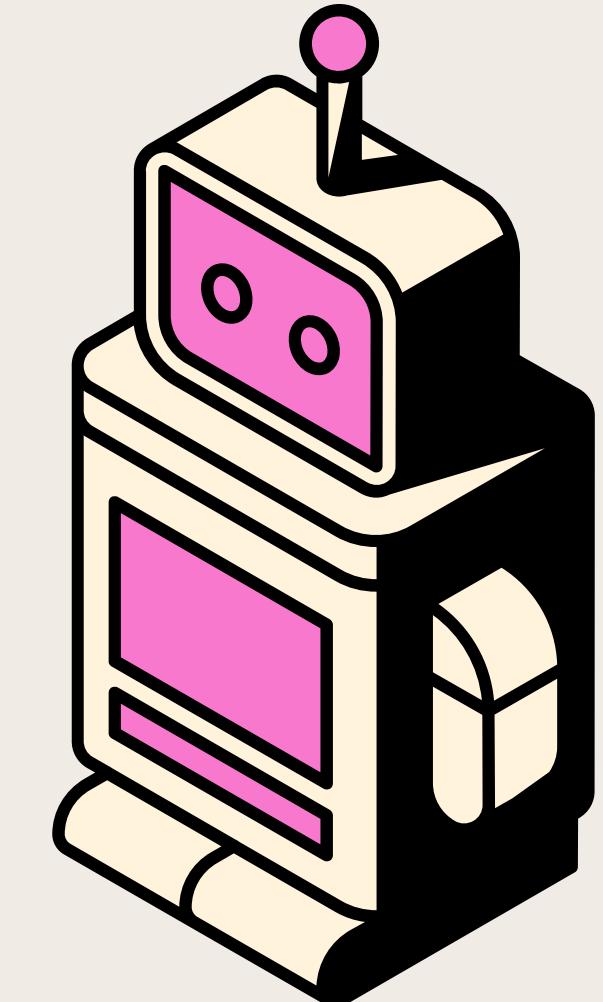


# INTRODUCTION

- **What is the project about and what are its utilities??**

The project aims to alleviate the hassle of maintaining and distributing payrolls by:

- **Automation of Payroll Processes:**
  - Streamlining the manual aspects of payroll management.
  - Efficient handling of salary calculations and disbursements.
- **Centralized Employee Data Management:**
  - Consolidation and organization of employee information.
  - Accessible platform for HR personnel to manage employee records.
- **Accurate Tax and Deduction Calculations:**
  - Automated computation of taxes and deductions.
  - Minimizing errors in salary-related calculations.
- **Reporting Capabilities:**
  - Generation of comprehensive reports for payroll analysis.
  - Providing insights into payroll trends and expenditures.



# INTRODUCTION

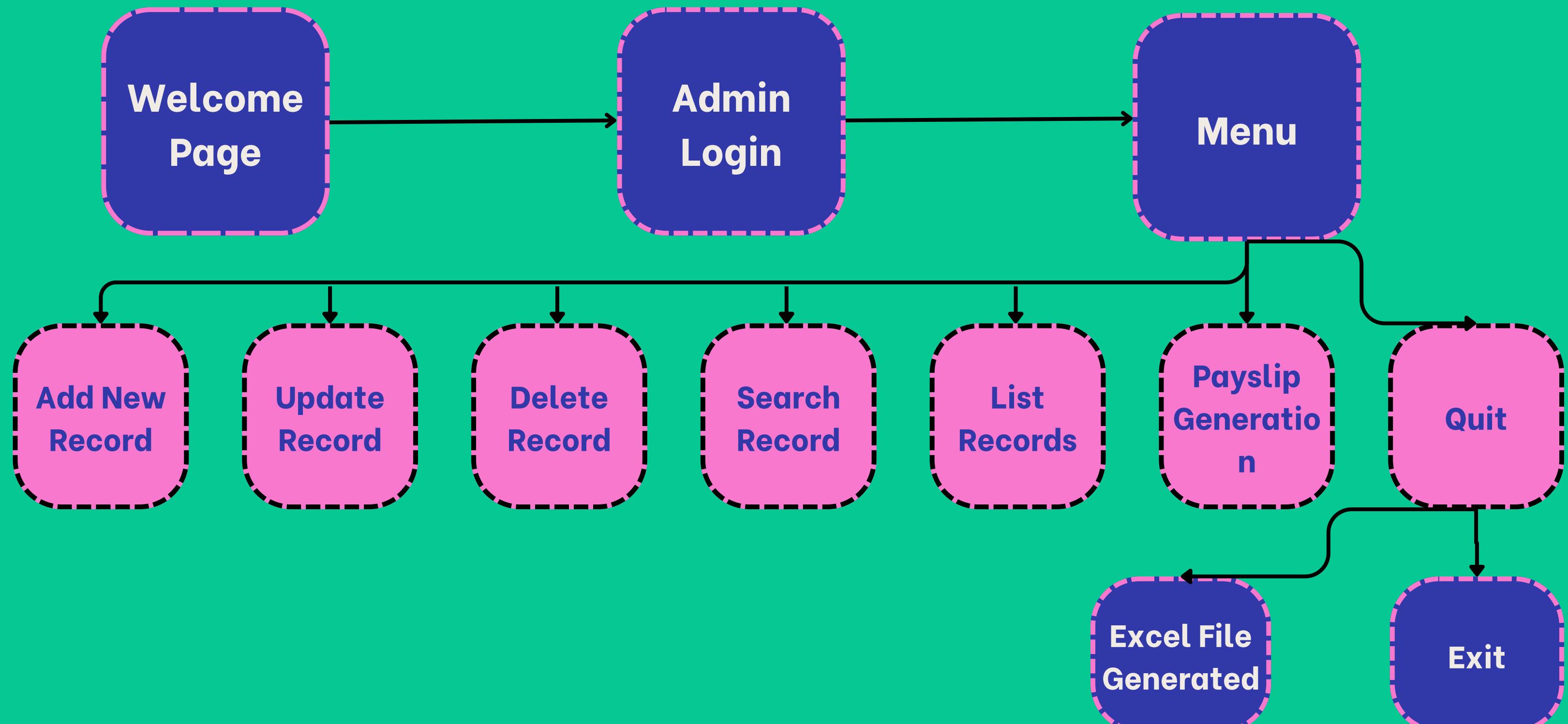
- What is the scope of the project?

Scope of the project and potential future developments:

- Scope:
  - Initial Focus:
    - Concentrates on automating fundamental payroll processes.
    - Covers essential features such as salary calculations and employee data management.
  - Scalability:
    - Designed to accommodate the potential addition of new features.
    - Allows for scalability to meet the evolving needs of the organization..
- Future Working:
  - Module Expansion:
    - Consideration for the addition of supplementary modules.
    - Example modules: Benefits administration, time and attendance tracking.
  - Integration Possibilities:
    - Explore integration with other organizational systems.



# FLOW → CHART



# PROJECT PARTICULARS

Language used for Console Application:

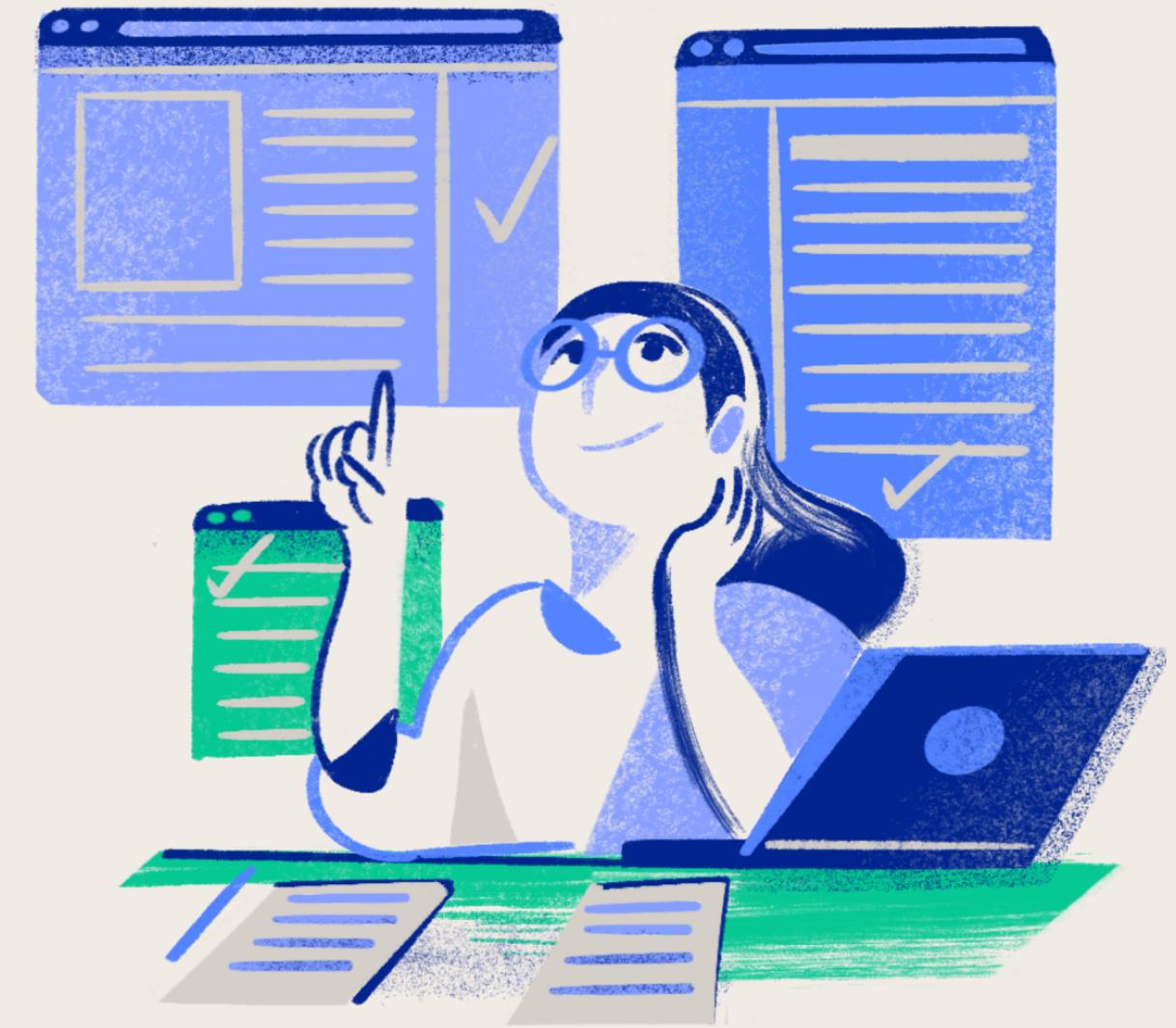
- C++

Prospective GUI Builder

- Walnut (Based on the Vulkan Framework)

Header Files and their uses:

- `#include<iostream>`
  - This is a C++ header file that provides functionality for input and output streams. It includes objects like cin and cout.
- `#include<stdlib.h>`
  - The header file for standard library functions in C. It includes functions involving memory allocation (malloc, free) and other utility functions.
- `#include<conio.h>`
  - This is a non-standard header file used for console input and output functions. It often includes functions like \_getch().



# PROJECT PARTICULARS- CONTINUED

## Header Files and their uses: (Continued)

- `#include<windows.h>`
  - Windows-specific header file providing functions for interacting with the Windows API. It includes functions for console manipulation, like changing text color.
- `#include<time.h>`
  - Header file for date and time functions. It includes functions like time for getting the current time.
- `#include<iomanip>`
  - C++ header file providing tools to manipulate the input and output formatting, e.g., setw for setting the width of the next input or output field.
- `#include<ctype.h>`
  - C header file for character handling functions like isdigit or isalpha.

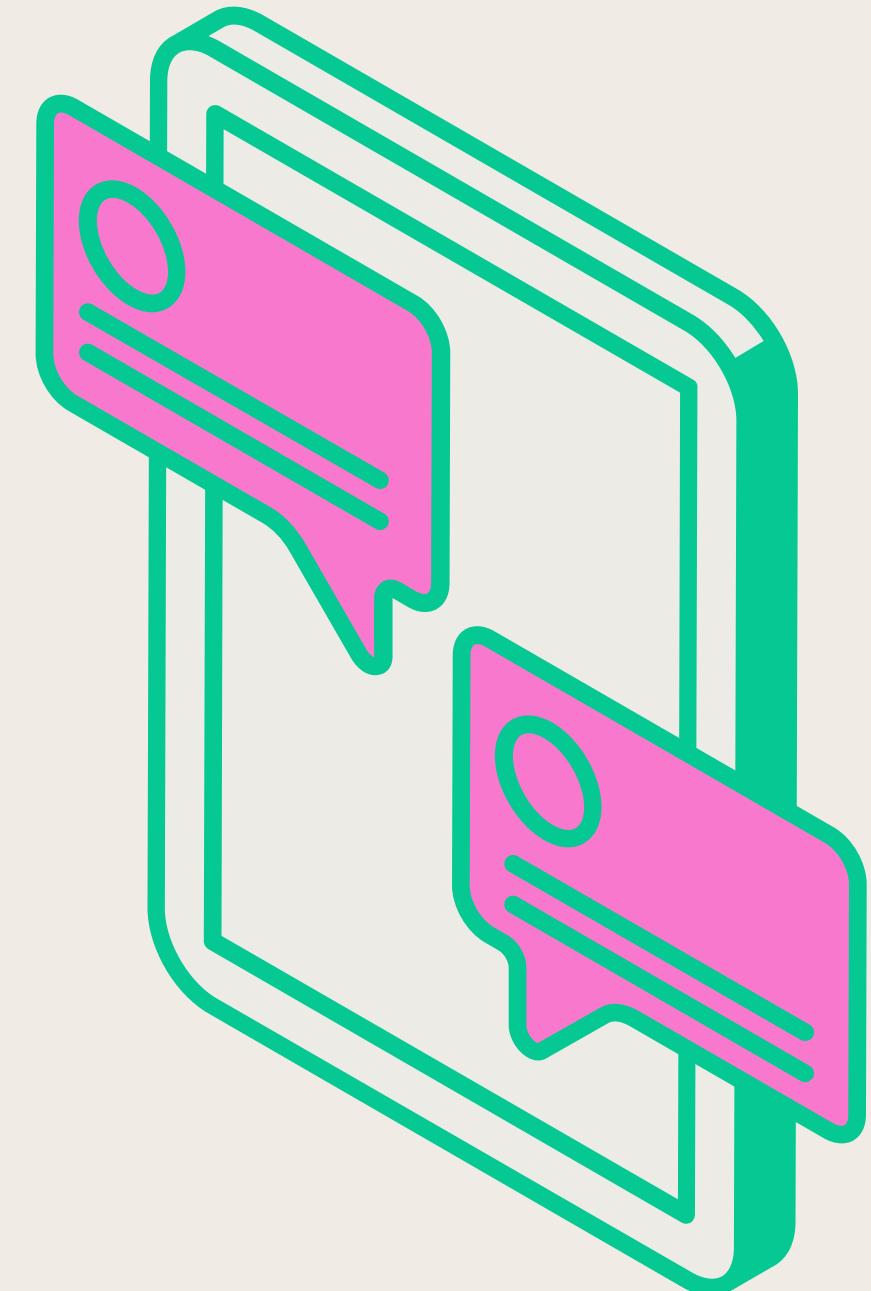


# A RUDIMENTARY GUI

Using built-in functions with a bit of clever manipulation I was able to mitigate the absence of a dedicated GUI by designing a layout with delays, login frames, borders and a fixed layout

Let's discuss the functions/methods that made this possible:

- `void loginFrame1 (int xLenS = 18, int yLenS = 8, int xLenE = 55, int yLenE = 15)`
  - This utilized the `gotoXY()` function, which by taking integer arguments allows us to move the cursor to any part of the window.
- `void setWindowSize (int width=670,int height=445)`
  - This sets the size of the console window.
- `void border (int xLenS = 2, int yLenS = 2,int xLenE = 76, int yLenE = 22 )`
  - This implements the border, which encapsulates all data.
- `void Cdelay (int msec)`
  - This utilizes the `clock()` function of the standard library, and sleeps the program by the argument, msec, + the clock at present.



# Keeping records- Excel (.xls)

- To keep a comprehensive record of the payslips generated by the program, an excel file is generated and updated with each entry.
- This allows for tabulation of data and allows for meaningful insights to be derived from the data.



**ANY  
QUESTIONS?  
THANK YOU  
VERY MUCH!**

