# README - JavaFX HR Management App

## Project Title

JavaFX HR Management System - Lab 3 Submission

## Overview

This project is a simple HR Management application built using JavaFX, MySQL, and Maven. It includes login authentication, admin and employee modules, and a dashboard interface.

## Tools & Technologies Used

- Java 17  
- JavaFX 17  
- MySQL (via XAMPP)  
- Maven  
- VS Code  
- GitHub

## Project Structure

All source files are under `src/main/java/com/example` and FXML files are in `src/main/resources/com/example`.  
  
[ Screenshot of folder structure here]

A screenshot of a computer

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## Section A: Login Page

Login screen with email and password fields. Credentials are checked against MySQL database table 'admin'.  
  
[ Screenshot of Login Page]

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## Section B: Dashboard Page

After successful login, the dashboard appears with options: Admin Panel, Employee Panel, Logout, Exit.  
  
[ Screenshot of Dashboard Page]

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## Section C: Admin Panel

Allows creation, viewing, updating, and deletion of admin records using a TableView and forms.  
  
[ Screenshot of Admin Panel]

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## Section D: Employee Panel

Same functionality as Admin Panel but for employee records.  
  
[ Screenshot of Employee Panel]

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## Section E: Database Setup

Database name: `hr\_lab3`. Tables: `admin`, `employee`, `salary`. Connected via JDBC.  
  
[ Screenshot of phpMyAdmin or DB schema]

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## Section F: Navigation & App Flow

Navigation uses App.setRoot() to switch scenes. Logout returns to Login screen, Exit closes app.  
  
[ Screenshot of navigation button functions]

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## Section G: MVC Architecture

App follows MVC: FXML = View, Controllers = Logic, Java Beans = Model (e.g., Admin.java, Employee.java).  
  
[ Screenshot of code sample showing MVC parts]

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## Section H: JUnit Testing - Yearly Salary (300 Marks)

JUnit test cases check if salary calculation is correct using `monthlySalary \* 12`.  
  
[ Screenshot of JUnit Code ]

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## Section I: GitHub Repository

Project is hosted on GitHub.  
Link: [ GitHub Repo Link]

<https://github.com/SaddamHussainSafi/LAB3_HR_Management>

## Final Notes

All components and sections of the lab are completed. Project tested and debugged successfully. Code is organized and easy to navigate.

## Disclaimer

This project was developed by Saddam Hussain Safi for academic purposes. ChatGPT was used for troubleshooting, guidance, and partial logic validation. All original implementation and documentation was completed independently.