

PROJECT REPORT

EMPLOYEE MANAGEMENT

Submitted by

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ABSTRACT

Human Resources department of every organization has to face many challenges regarding the keeping of records every employees. Even a small error can make a huge disturbance in the working environment, so it's their duty to maintain proper records. Employee Management System is an application project that allows the user to create and store employee records in proper and well maintained manner. The aim of our project is meant to partially computerize the work performed in the management system. This will help you ensure that your organization is equipped with the right level of human resources for your future goals. The system will ultimately allow you to better manage resources. This project helps to make the work easier for maintaining and accessing the employee records. It is a user friendly and help the user to follow the step operations by giving him required records. It would be fast and can perform many operations of a company within a single project. As it's user friendly, it's easy to understand as well as can be used by anyone without knowing much about the operation of a new application. The combination of these modules into one application assures the perfect platform for re-engineering and aligning Human Resource processes along with the organizational goals. Thus it brings an easy way for maintaining the records in a well manner.

INTRODUCTION

Employee Management System Project application stores all the employee's information in a database. This application is helpful to the department of the organization which maintains data of employees of that organization. It stores all the employee's information in a database. It is an application developed in Java and the database used is MySQL. It contains employee information like employee id, first name, last name, age etc. It is an easy to use application and has a user-friendly interface. It is totally built at the administrative end which means that only the admin has access rights to change or modify any records. So this makes it a safe and reliable application to use. The main aim of developing this application was to reduce the errors that occur in the manual system. One can search the details easily by just entering employee id. In earlier systems, there was not such a facility to do so. All the details are stored in a MySQL database. It is easy to update any employee details. All the employee records are integrated and so this makes it user-friendly and easy to use application.

Earlier systems were manual where there was no way of properly storing information. Employee records were stored manually which lead to errors and also storing of these records is also make it difficult. There was no proper way of tracking employee records. It was very difficult and required a lot of paperwork which makes the application time consuming and not secured. And another main issue was that there would be need of one efficient person for tracking the data once it required, otherwise it is time consuming. There was no administrator which could handle the records. So there was the need to develop a system which could manage all these things and reduce the paperwork.

Employee information system is easy to use application which is created to manage the employee data. It is created to record the details of the employees. This reduces the dependency on the manual system which could create errors. This system can easily help in tracking employee records. There is a search feature which allows getting records of a specific employee. There is an administrator which can add, edit, delete and save records in a database.

- Login module: This module is created for login details of admin and the employee. There are different login details provided and both can login using their respective user id and password.
- Manage employee module: This module enables admin to add and edit employee records. It is also for viewing the each and every employee details by the admin.
- Delete module: This module is created to delete any employee details.
- Search module: This module is an added feature in this system which enables to search employee records easily using employee id.

REQUIREMENT SPECIFICATION

For building and executing this software,these requirements have to be followed.

1. Java 1.8+

JDK is an acronym for Java Development Kit. The Java Development Kit (JDK) is a software development environment which is used to develop java applications and applets. It physically exists. It contains JRE + development tools.JDK is an implementation of any one of the below given Java Platforms released by Oracle corporation:Standard Edition Java Platform,Enterprise Edition Java Platform,Micro Edition Java Platform.The JDK contains a private Java Virtual Machine (JVM) and a few other resources such as an interpreter/loader (Java), a compiler (javac), an archiver (jar), a documentation generator (Javadoc) etc. to complete the development of a Java Application.

2.Tomcat Server 7.0 or above

Apache Tomcat (sometimes simply "Tomcat") is an open-source implementation of the Java Servlet, JavaServer Pages, Java Expression Language and WebSocket technologies. Tomcat provides a "pure Java" HTTP web server environment in which Java code can runTomcat is developed and maintained by an open community of developers under the auspices of the Apache Software Foundation, released under the Apache License 2.0 license.

3. MySQL database 5.0 or above

MySQL is a relational database management system based on the Structured Query Language, which is the popular language for accessing and managing the records in the database. The data in MySQL database are stored in tables.

4. Eclipse IDE / STS 2018-2019

Eclipse is an integrated development environment used in computer programming. It contains a base workspace and an extensible plug-in system for customizing the environment. Spring Tool Suite is an IDE to develop Spring applications. It is an Eclipse-based development environment. It provides a ready-to-use environment to implement, run, deploy, and debug the application. It validates our application and provides quick fixes for the applications.

5. Maven 3.0 or above

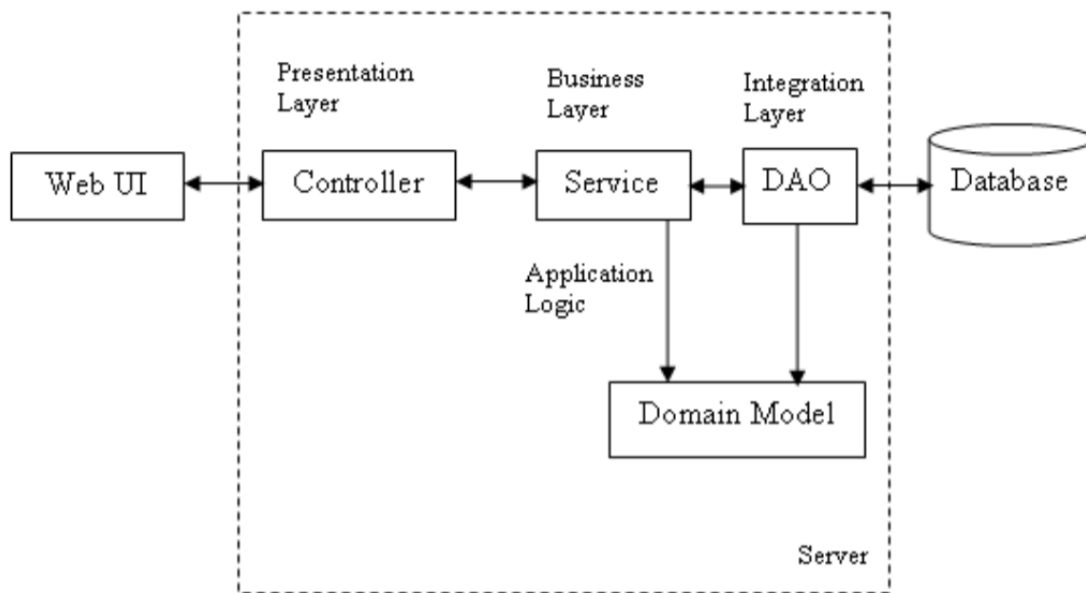
Maven is a software project management and comprehension tool. Based on the concept of a project object model (POM), Maven can manage a project's build, reporting and documentation from a central place.

6. Junit 4

JUnit is a unit testing framework for the Java programming language. JUnit has been important in the development of test-driven development, and is one of a family of unit testing frameworks. Its main use is to write repeatable tests for our application code units.

ARCHITECTURE DESIGN

Outline of the Project



The Web-UI provides presentation of content to the end user through GUI. This can be accessed through any type of client device like desktop, laptop, tablet, mobile, thin client, and so on. For the content to be displayed to the user, the relevant web pages should be fetched by the web browser or other presentation component which is running in the client device. To present the content, it is essential for Web-UI to interact with the other tiers that are present preceding it.

The middle tier is server. This is the tier in which the business logic of the application runs. Business logic is the set of rules that are required for running the application as per the guidelines laid down by the organization. The components of

this tier typically run on one or more application servers. The application data is typically stored in a database server, file server, or any other device or media that supports data access logic and provides the necessary steps to ensure that only the data is exposed without providing any access to the data storage and retrieval mechanisms.

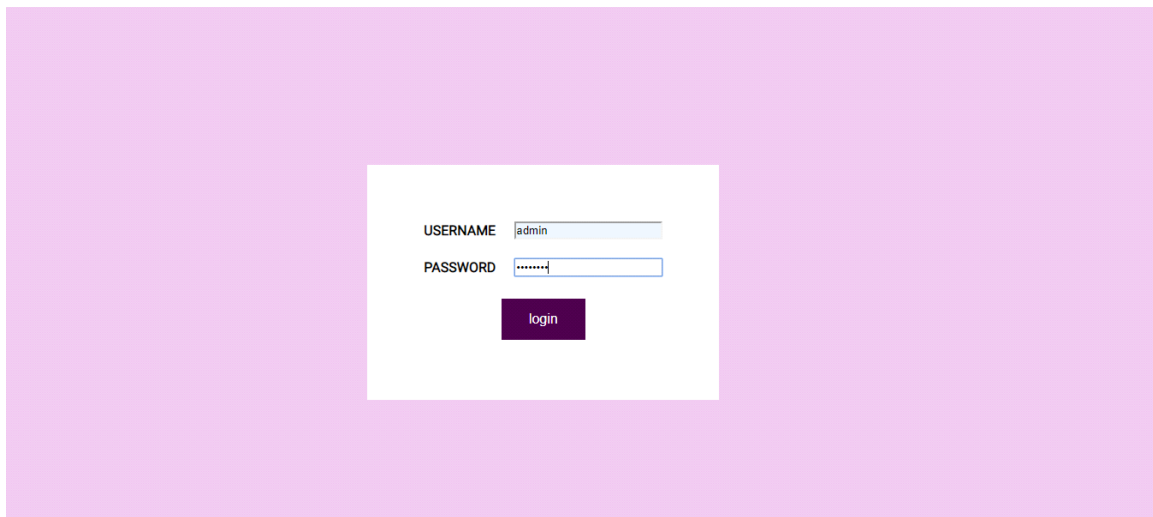
A screenshot of a login module. It features a light purple background. In the center, there is a white rectangular box containing the login form. The form has two input fields: 'USERNAME' with the text 'admin' and 'PASSWORD' with masked characters '.....'. Below these fields is a purple button labeled 'login'.

Fig:Login Module

Employee List													
Employee List Add New Employee Logout										Search Employee ID: <input type="text"/>		<input type="button" value="Search"/>	
EmpID	First Name	Last Name	Email	Contact Number	Gender	Age	Job Location	BU	ProjectID	Job Title	DOJ	Salary	
234	Blessy	merin	bleess@hotmail.com	1234567890	female	23	Bangalore	Insurance	12	Associate	2012-02-03	23456.0	<input type="button" value="Update"/> <input type="button" value="Delete"/>
780	Anu	Krishna	anu@yahoo.com	9876543222	Male	45	Pune	Digital	478	TeamLeader	2019-03-02	5678.0	<input type="button" value="Update"/> <input type="button" value="Delete"/>
1245	Ram	Kumar	ram@gmail.com	1234567892	male	30	Chennai	Insurance	12	Associate	2020-09-30	21000.5	<input type="button" value="Update"/> <input type="button" value="Delete"/>

Fig:Employee List

Employee List

EmployeeId:	<input type="text"/>
First Name:	<input type="text"/>
Last Name:	<input type="text"/>
Email:	<input type="text"/>
Contact Number:	<input type="text"/>
Gender:	<input type="text"/>
Age:	<input type="text"/>
Job Location:	<input type="text"/>
BU:	<input type="text"/>
Project Id:	<input type="text"/>
Job Title:	<input type="text"/>
DOJ:	<input type="text"/>
Salary:	<input type="text"/>
	<input type="button" value="Save"/>

Fig:Add New Employee

Employee List

First Name:	<input type="text" value="Blessy"/>
Last Name:	<input type="text" value="merin"/>
Email:	<input type="text" value="bless@hotmail.com"/>
Contact Number:	<input type="text" value="1234567890"/>
Gender:	<input type="text" value="female"/>
Age:	<input type="text" value="23"/>
Job Location:	<input type="text" value="Bangalore"/>
BU:	<input type="text" value="Insurance"/>
Project Id:	<input type="text" value="12"/>
Job Title:	<input type="text" value="Associate"/>
DOJ:	<input type="text" value="2012-02-03"/>
Salary:	<input type="text" value="23456.0"/>
	<input type="button" value="Save"/>

Fig:Update Module

Employee List												
Your Search Result.....												
EmpID	First Name	Last Name	Email	Contact Number	Gender	Age	JobLocation	BU	ProjectID	Job Title	DOJ	Salary
234	Blessy	merin	bless@hotmail.com	1234567890	female	23	Bangalore	Insurance	12	Associate	2012-02-03	23456.0

Fig:Search Module

OOPS!!!!.....Invalid Login Details...

Retry

Fig:Login Failed Page

CONCLUSION AND FUTURE WORK

The "Employee Management System " has been developed to override the problems prevailing in the practicing manual system. This Web Application is supported to eliminate and in some cases reduce the hardships faced by this existing system.. This project simplifies the task of maintain records because its users friendly nature. Moreover this system is designed for the particular need of

various companies to carry out the operations in a smooth and effective manner. This application is reduced as much as possible to avoid the errors while entering the data. It also provides error messages while entering the invalid data. No formal knowledge is needed for the user to use this system. Thus by this all it proves it is user friendly.

In future, I would implement the web application as a mobile application supportable by both android and ios mobile phones. I would also try to implement some extra features in the Employee management web application like employee working hours, shifts and allowances, medical details etc. I would also like to modify our current UI to a more attractive UI by using angular in the future.

REFERENCE

1. <https://docs.spring.io/spring/docs/current/spring-framework-reference>
2. <https://docs.spring.io/spring/docs/current/spring-framework-reference/core.html#spring-core>
3. <https://docs.spring.io/spring/docs/current/spring-framework-reference/web.html>
4. <https://hibernate.org/orm/documentation/5.0/>
5. <https://maven.apache.org/guides/getting-started/index.html>