Project Report

Epics

Employee management system
Team: Andromeda
Tanusree Debnath
ID: 013897364
Email: tanusree.debnath@sjsu.edu
Kevin Chang
Ngan Luu
San Jose State University
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Goals and Description of the application

The Epics is an online web app which enables companies to save their employee information in a very organized manner. Employees can save their data. The database administrator and employees can view, save and delete their data from the database according to their permission level. Each employee has a different level of permission in the database. One employee cannot view every detail of another employee. Employees cannot delete data of another employee. One employee cannot change the data of another employee unless the employee is authorized to do so. Epics is passionate about its mission of transforming employee management services into online services through innovation.

Application Requirements and Architecture

Presentation Tier

In Epics, the user interface will be a web application that handles the interaction with the user and displays information. I will build this web application with the programming language Java.
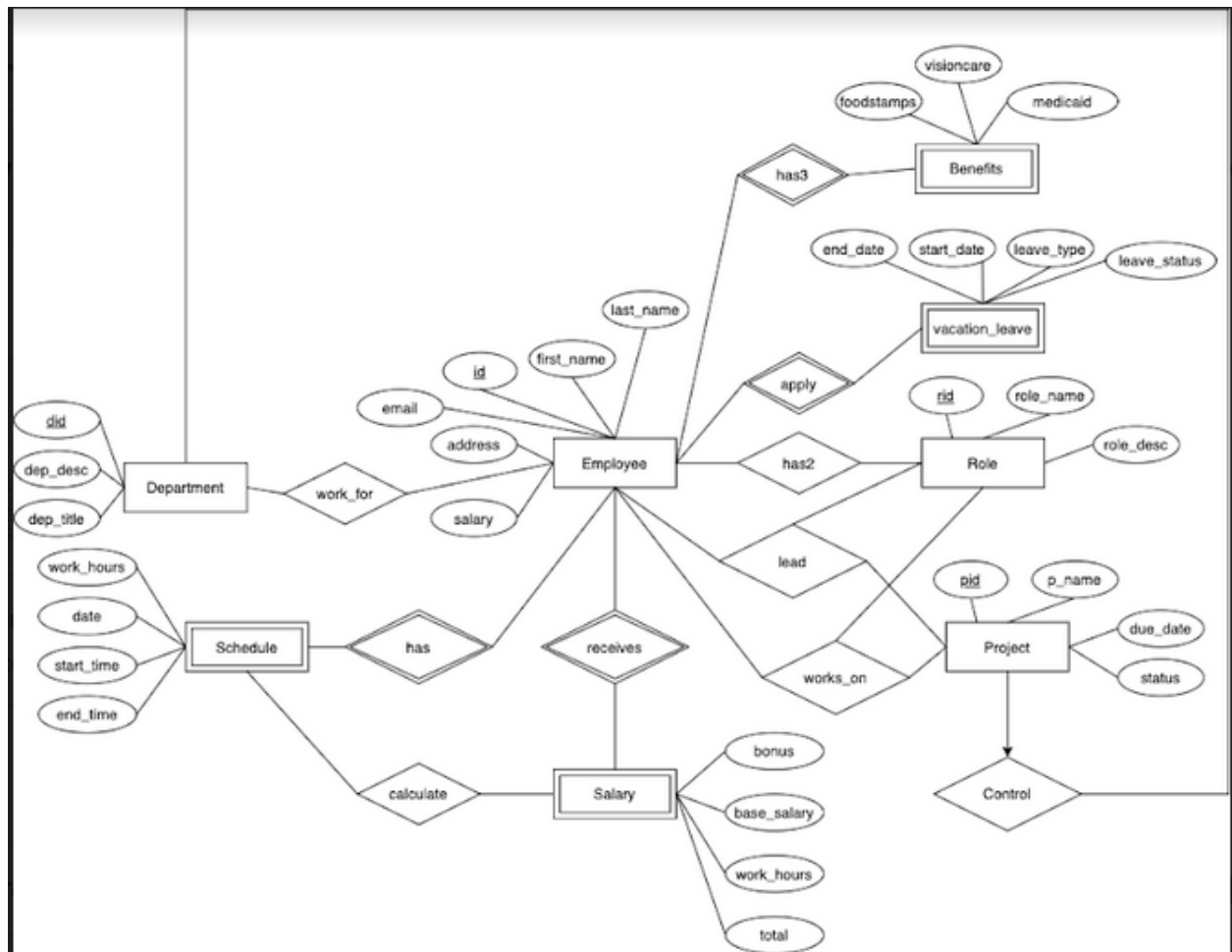
Logic Tier

Scope will use Apache Tomcat9 as a backend server for handling user requests and communicating with the database.

Data Tier

Our project will use ORACLE as our RDBMS(Relational Database Manage System) to manage and provide access to the data.

ER data model with the requirement of minimum 10 relations for the application

A database design, including tables and relationships among tables. The tables
and relationships should be essentially the same as will be used in the final.

CREATE TABLE Employee

(id integer NOT NULL,

name varchar(50) NOT NULL,

```
    department varchar(50),



    salary integer



    );



    insert into Employee values (1, 'Rina' , 'sales', 1254);



    insert into Employee values (2, 'Tina' , 'teach', 1256);


insert into Employee values (3, 'Sina' , 'sales', 1255);
```

Major design decisions

As we did not get so much time to implement the webapp we had to leave few features unimplemented. We decided to implement the 3 main features of the webapp which are add functionality, delete and view functionality. We chose tomcat as our server and we implemented the project using Java programming language as we all are familiar with Java.

Implementation details

We have implemented the webapp using Java programming language.
We have used servlet to add the employee to the database.
We have used Oracle as our database.
We have used an index.jsp file to show the home page.
We have used an Add.html file to render the add page on the screen.
We have used GUI features to add, show and delete employees.

Demonstration of example system run

Conclusions, lessons learned possible improvements, etc.