

# **EMPLOYEE REWARD MANAGEMENT SYSTEM**

## **A MINI-PROJECT REPORT**

*Submitted by*

**ADHESH. M (220701012)**

**AKASH NARAYAN. P (220701020)**

*in partial fulfillment of the award of the degree*

*of*

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**RAJALAKSHMI ENGINEERING COLLEGE**

**AUTONOMOUS, CHENNAI**

**NOV/DEC, 2023**

## **BONAFIDE CERTIFICATE**

Certified that this mini project “**EMPLOYEE REWARD MANAGEMENT SYSTEM**” is the bonafide work of “**ADHESH. M(220701012), AKASH NARAYAN. P(220701020)**” who carried out the project work under my supervision.

### **SIGNATURE**

**Mr.Duraimurugan,**

Professor,

Computer Science & Engineering

Rajalakshmi Engineering College

Thandalam, Chennai -602105.

Submitted for the End semester practical examination to be held on

**INTERNAL EXAMINER**

**EXTERNAL EXAMINER**

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Adhesh M (220701012)

Akash Narayan P (220701020)

## **ABSTRACT**

The Reward Management System is a web-based application designed to streamline and automate the process of tracking, evaluating, and rewarding employee performance within an organization. The system enables managers to assign performance scores to employees, record various achievements, and manage rewards in a centralized database. It provides a user-friendly interface for adding and updating employee performance data, facilitating a transparent and efficient approach to employee recognition and reward distribution. The system supports real-time updates, enabling authorized personnel to access performance metrics, scores, and reward histories from anywhere. By automating the reward process, the system not only enhances organizational transparency but also motivates employees, improving overall productivity and morale. The Reward Management System aims to foster a culture of recognition, ensuring that employees' contributions are consistently acknowledged and rewarded in a fair and systematic manner.

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# **CHAPTER 1**

## **1.1 INTRODUCTION**

The Reward Management System is a web-based solution designed to simplify the process of tracking and rewarding employee performance in organizations. It allows managers to assign scores, record achievements, and manage rewards, ensuring a fair and transparent recognition system. This system aims to enhance employee motivation, boost morale, and promote a culture of performance-driven growth within the organization.

## **1.2 SCOPE OF THE WORK**

The system is designed to manage employee performance data and reward assignments efficiently. It includes features for recording employee scores, tracking performance over time, and distributing rewards based on merit. The system also allows authorized users to access real-time data on employee performance, ensuring transparency and consistency in the reward process. The goal is to streamline the reward management process and help create a positive and motivating work environment..

## **1.3 PROBLEM STATEMENT**

Many organizations still rely on manual, inconsistent methods to track employee performance and assign rewards. This lack of transparency and efficiency can lead to dissatisfaction among employees and hinder motivation. This project addresses these challenges by developing a web-based Reward Management System that automates the reward process, ensuring fairness, consistency, and ease of access to performance data for managers and employees alike.

## **1.4 AIM AND OBJECTIVES OF THE PROJECT**

The current employee reward system in many organizations is often manual, inconsistent, and lacks transparency. This leads to confusion, dissatisfaction, and demotivation among employees, affecting overall performance and morale. The Reward Management System aims to address these challenges by providing an automated, web-based solution to track employee performance and manage rewards efficiently. This system will be used by managers and authorized personnel to assess and recognize employee contributions in a timely and fair manner, ensuring consistent and transparent reward distribution. The system is designed to improve employee engagement, boost motivation, and foster a positive work environment.

Other objectives of the Reward Management System include enhancing the accessibility of performance data, ensuring data security, and promoting fairness in the reward process. Ultimately, the system seeks to create a transparent culture of recognition within organizations, helping to increase employee satisfaction, retention, and productivity.

## **CHAPTER 2**

### **SYSTEM SPECIFICATIONS**

#### **2.1 HARDWARE SPECIFICATIONS**

Processor	:	Intel Core i3 or Higher
Memory Size	:	128 GB (Minimum)
HDD	:	40 GB (Minimum)

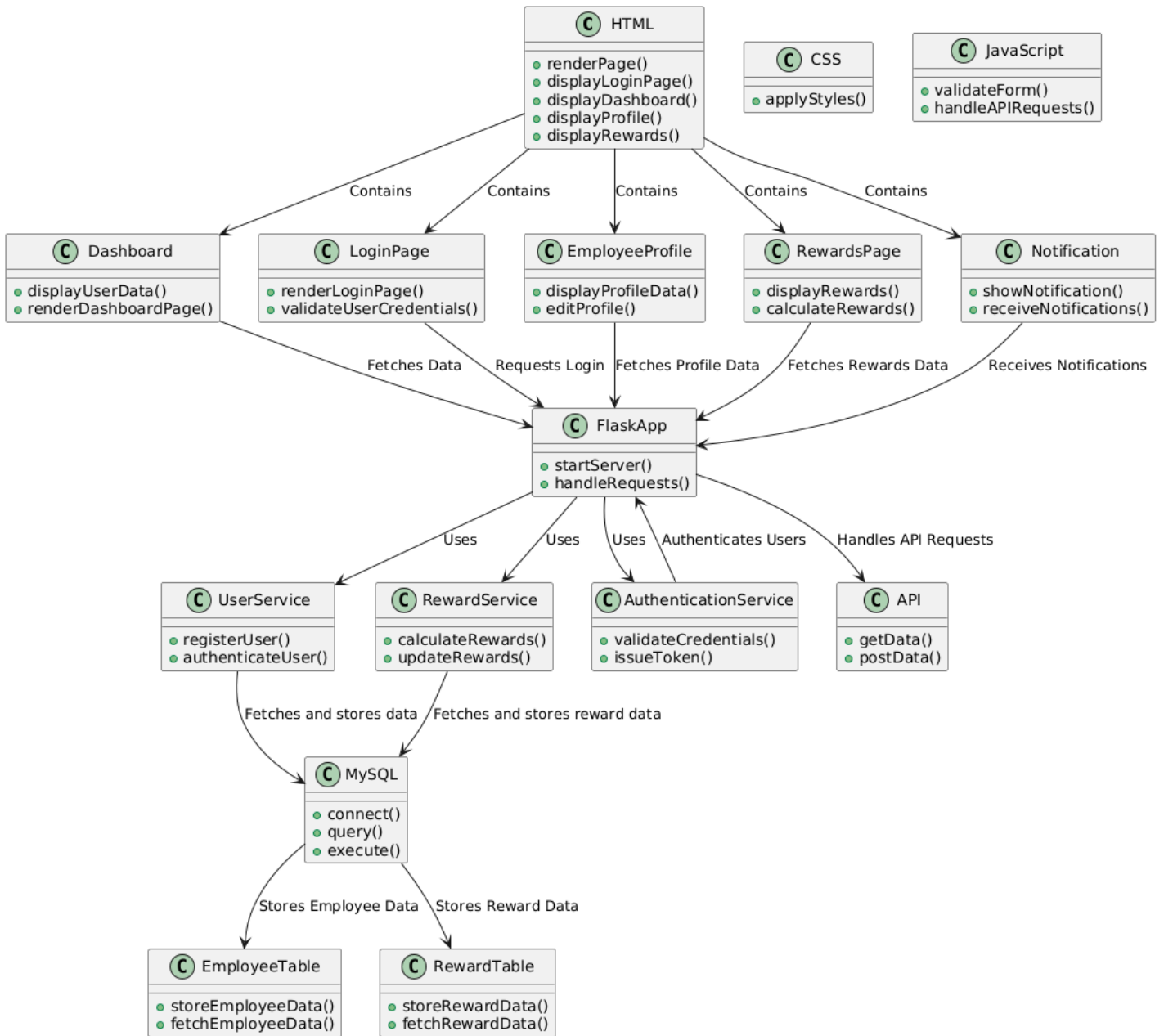
#### **2.2 SOFTWARE SPECIFICATIONS**

Operating System	:	WINDOWS 7 AND PLUS
Front – End	:	HTML, CSS, JAVASCRIPT
Back – End	:	FLASK, MYSQL



# CHAPTER 3

## ARCHITECTURE DIAGRAM



## **CHAPTER 4**

### **MODULE DESCRIPTION**

#### **4.1. User Registration and Login Module:**

This module allows users to create an account and log in to the Reward Management System. Users provide basic details (name, email, password) to register, and can log in securely using these credentials.

#### **4.2. Reward Management Module:**

Managers and admins use this module to track and assign rewards based on employee performance and achievements. Employees can view their rewards and progress, while managers and admins can modify reward criteria.

#### **4.3. Employee Profile Module:**

This module allows employees to view and update their personal information, such as name, department, and reward history. Employees can track their performance, monitor rewards, and make changes to their profiles.

#### **4.4. Admin Management Module**

The Admin Management Module gives admins full control over user accounts, employee data, and reward criteria. Admins can manage system functionality, update reward rules, and generate reports

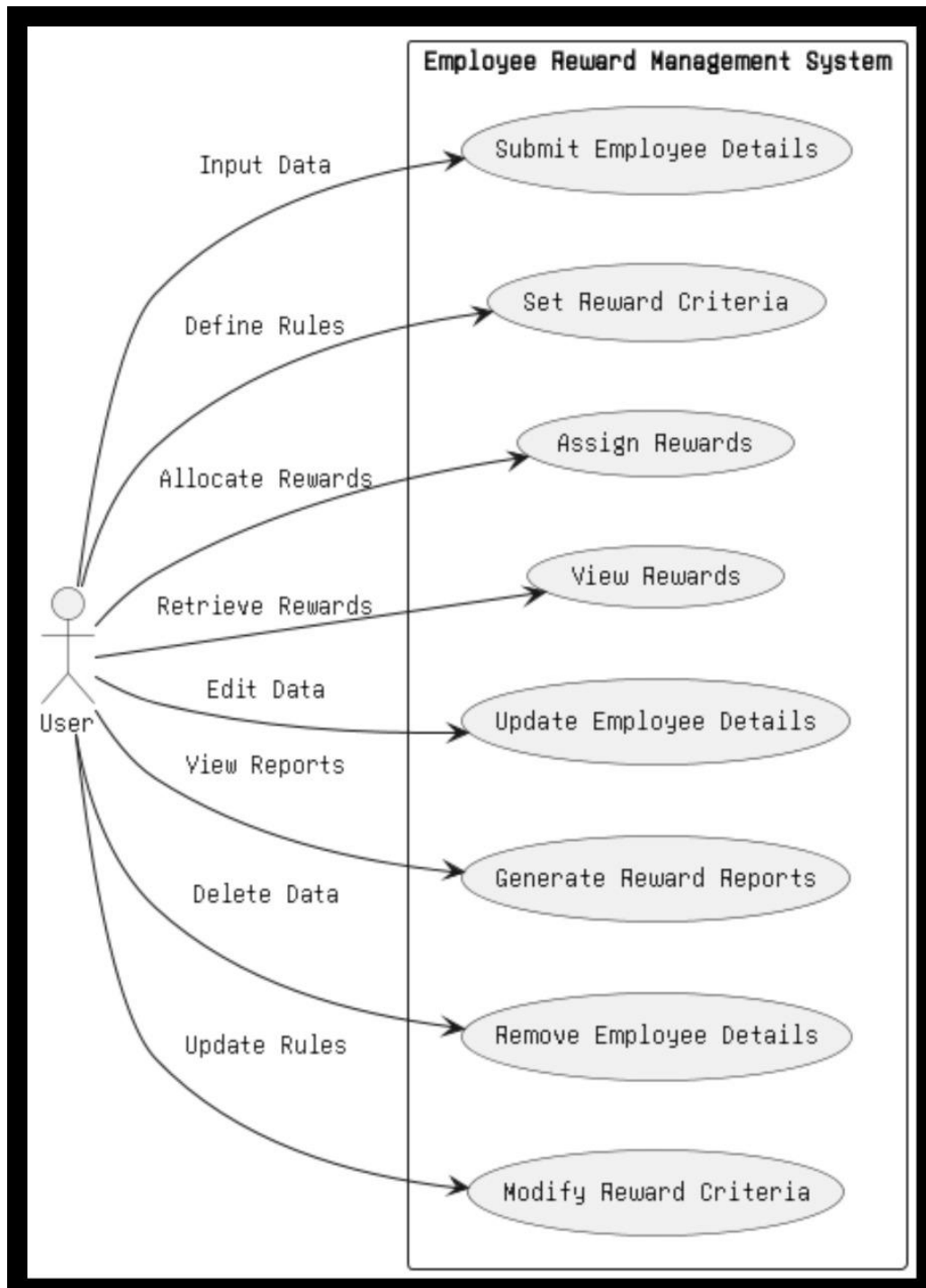
#### **4.5 Admin Dashboard Module:**

The Admin Dashboard module provides the website's admin with complete control over the website's content and user management. The module allows the admin to add products, categories, and brands. The admin can also view products, user details, manage orders, and track the website's performance.

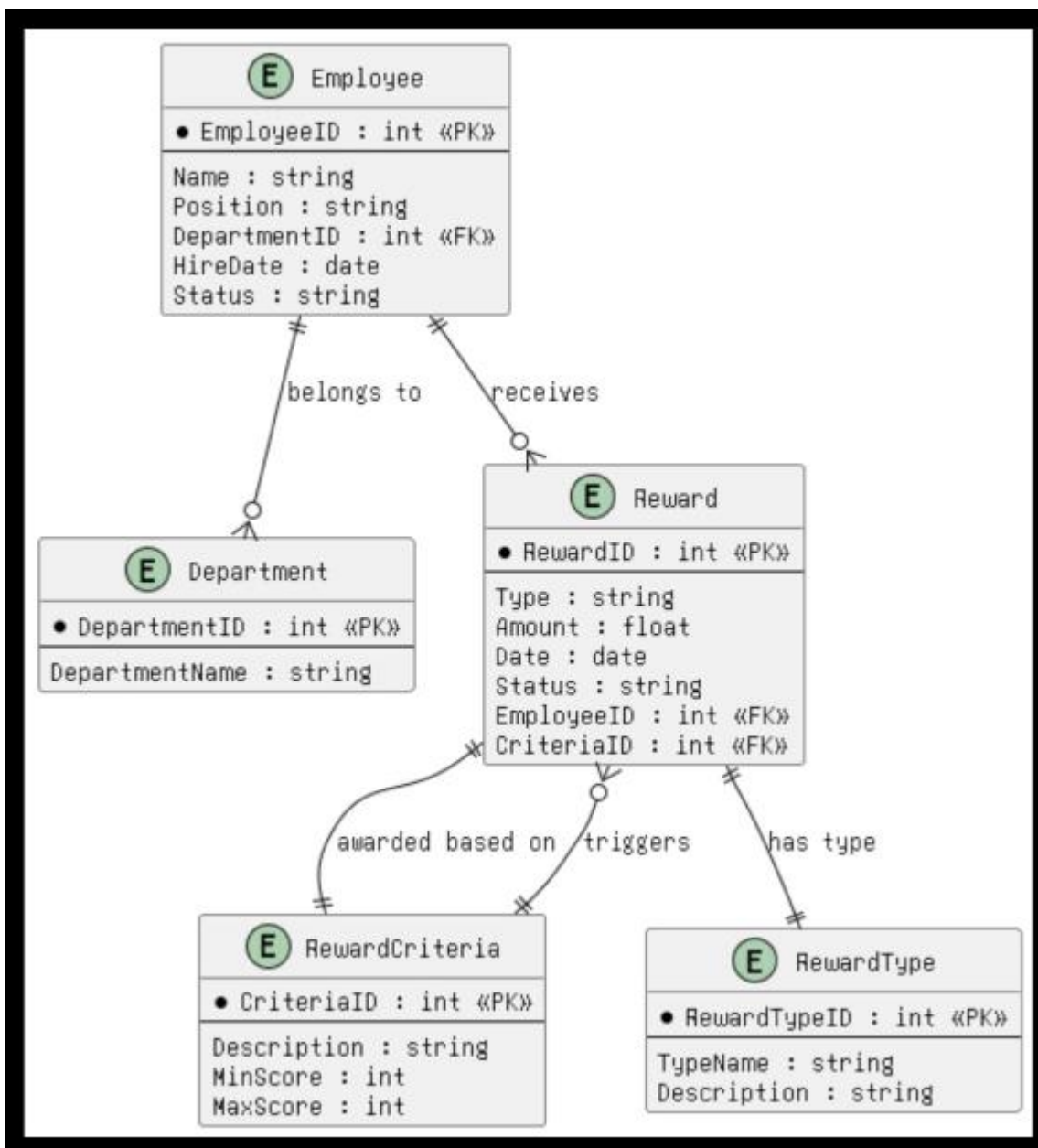
## CHAPTER 5

### SYSTEM DESIGN

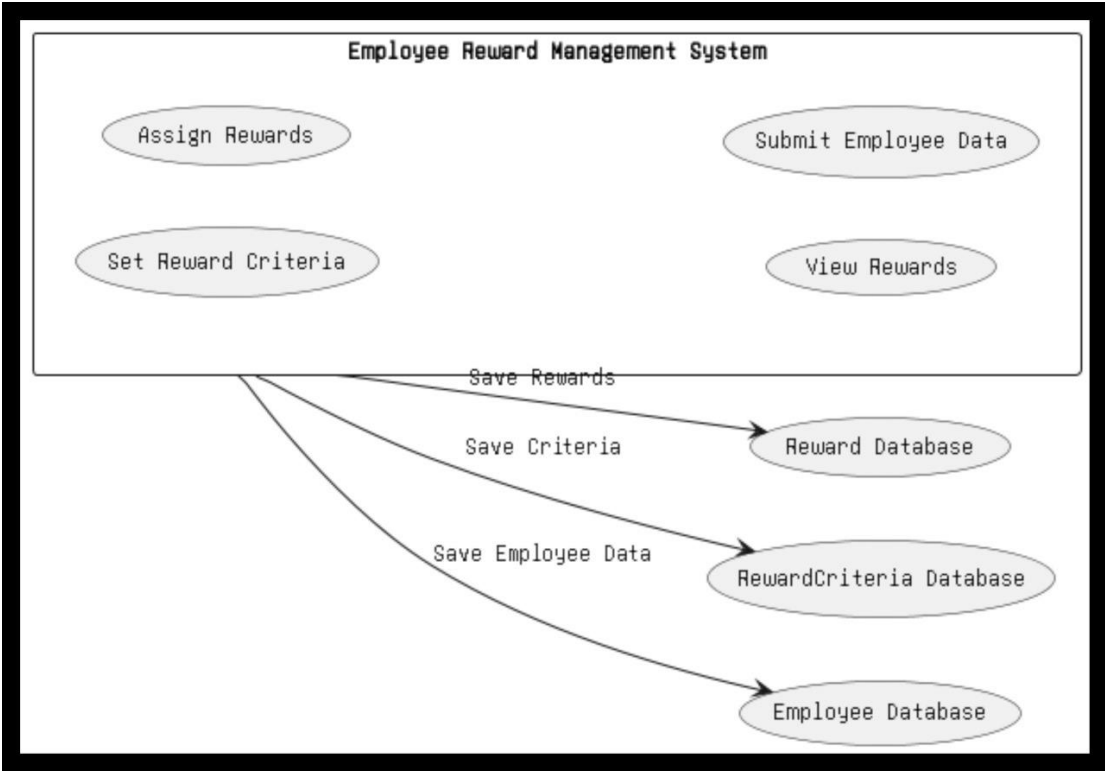
#### 5.1 USE CASE DIAGRAM



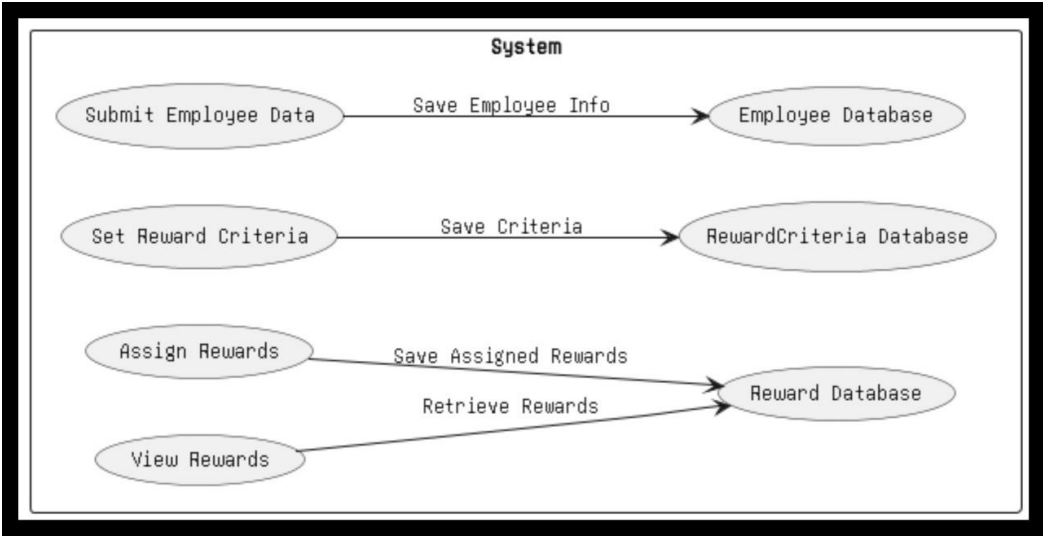
## 5.2 ER DIAGRAM



5.3 DFD DIAGRAM

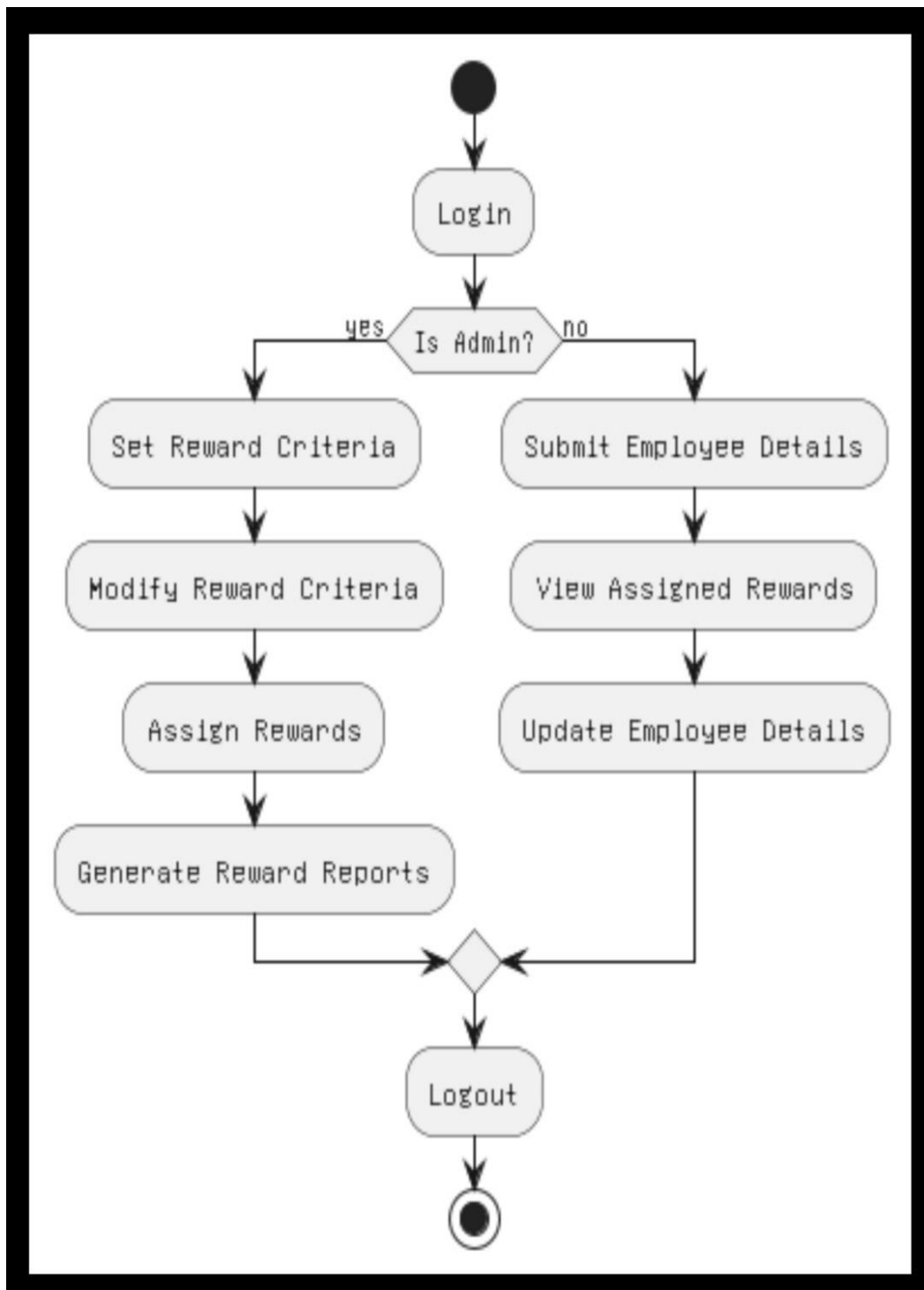


DFD Level-0 Diagram



DFD Level-1 Diagram

## 5.4 ACTIVITY DIAGRAM



# CHAPTER 6

## SAMPLE CODING

### app.py

```
python app.py
```

```
from flask import Flask, render_template, request, redirect, url_for, session
import os
import mysql.connector
from mysql.connector import Error
```

```
app = Flask(__name__)
secret_key = os.urandom(24)
app.secret_key = secret_key
```

```
# Database connection function
```

```
def create_connection():
    connection = None
    try:
        connection = mysql.connector.connect(
            host='localhost',
            user='root',
            password='Falalala06??',
            database='employee_reward_management'
        )
        if connection.is_connected():
            print("Connection to MySQL DB successful")
    except Error as e:
        print(f"The error '{e}' occurred")
    return connection
```

```
@app.route('/')
def index():
    return render_template('index.html')
```

```
@app.route('/index.html')
def bindex():
    return render_template('index.html')
```

```
@app.route('/login.html')
def bogin():
    return render_template('login.html')
```

```
@app.route('/main.html')
def bain():
    return render_template('main.html')
@app.route('/about.html')
def board():
    return render_template('about.html')
```

```

@app.route('/adminlogin.html')
def bard():
    return render_template('adminlogin.html')

@app.route('/login', methods=['GET', 'POST'])
def login():
    connection = create_connection()
    cursor = connection.cursor(dictionary=True)

    if request.method == 'POST':
        email = request.form.get('username')
        password = request.form.get('password') # You can implement password checking

        query = "SELECT * FROM employees WHERE email=%s"
        cursor.execute(query, (email,))
        user = cursor.fetchone()

        if user:
            session['user'] = user
            return redirect('/main') # Redirect to the main page
        else:
            return "Invalid login" # You can redirect to a login error page

    return render_template('login.html')

@app.route('/signup', methods=['POST'])
def signup():
    name = request.form.get('name')
    username = request.form.get('email')
    designation = request.form.get('designation')
    branch_office = request.form.get('branch_office')
    department = request.form.get('department')
    annual_income = request.form.get('annual_income')

    connection = create_connection()
    cursor = connection.cursor(dictionary=True)
    query = """
    INSERT INTO employees (name, email, designation, branch_office, department, annual_income, points)
    VALUES (%s, %s, %s, %s, %s, %s, %s)
    """
    data = (name, username, designation, branch_office, department, annual_income, 0)

    try:
        cursor.execute(query, data)
        connection.commit()

        # Retrieve the newly signed-up user data
        cursor.execute("SELECT * FROM employees WHERE email = %s", (username,))
        user = cursor.fetchone()

        # Store the user data in the session
        session['user'] = user

        print("User signed up successfully")

```



```

except Error as e:
    print(f"The error '{e}' occurred")
finally:
    cursor.close()
    connection.close()

return redirect('/main') # Redirect to main page after signup

@app.route('/main')
def main():
    if 'user' in session:
        user = session['user'] # Get user data from session
        return render_template('main.html', user=user)
    else:
        return redirect('/login') # Redirect to login if not logged in

@app.route('/adminmain.html')
def admin_dashboard():
    connection = create_connection()
    cursor = connection.cursor(dictionary=True)

    employees = []
    try:
        query = """
        SELECT id, name, email, designation, branch_office, department, annual_income, points
        FROM employees
        """
        cursor.execute(query)
        employees = cursor.fetchall()
    except Error as e:
        print(f"The error '{e}' occurred")
    finally:
        if cursor:
            cursor.close()
        if connection:
            connection.close()

    return render_template('adminmain.html', employees=employees)

@app.route('/update_points', methods=['POST'])
def update_points():
    employee_id = request.form.get('employee_id')
    action = request.form.get('action')

    connection = create_connection()
    cursor = connection.cursor()

    # Define query based on action
    if action == "add":
        query = "UPDATE employees SET points = points + 1 WHERE id = %s"
    elif action == "subtract":
        query = "UPDATE employees SET points = points - 1 WHERE id = %s"

```

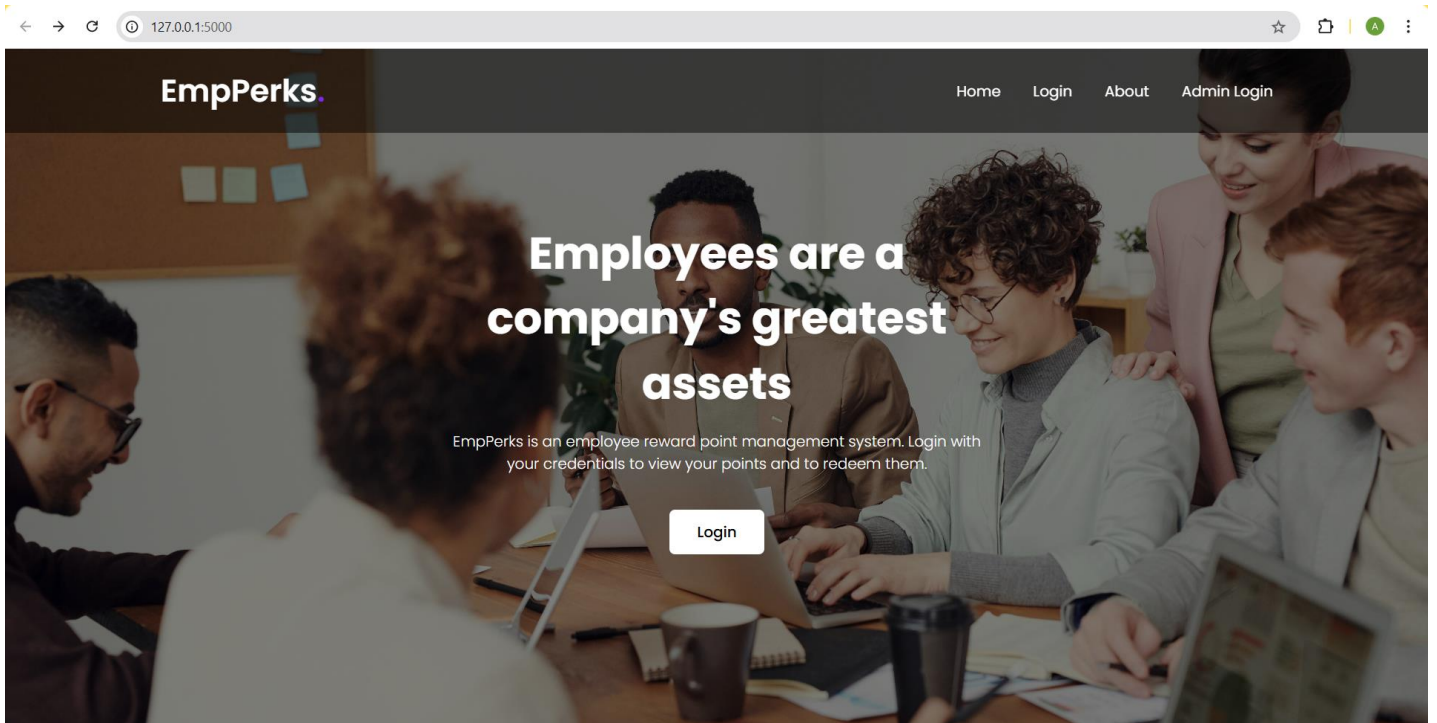
```
try:
    cursor.execute(query, (employee_id,))
    connection.commit()
except Error as e:
    print(f"The error '{e}' occurred")
finally:
    if cursor:
        cursor.close()
    if connection:
        connection.close()

# Redirect back to admin dashboard
return redirect('/adminmain.html')

if __name__ == '__main__':
    app.run(debug=True)
python app.py
```

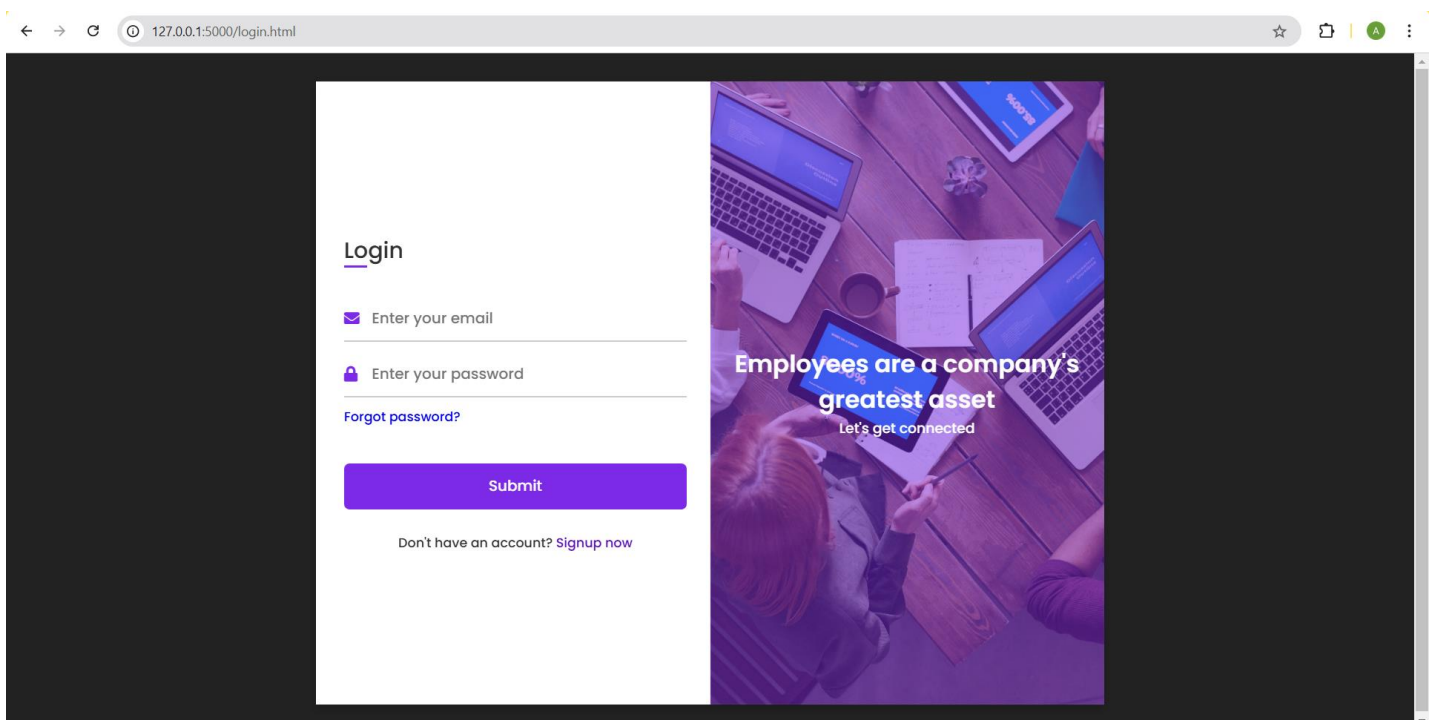
## CHAPTER 7

### SCREEN SHOTS



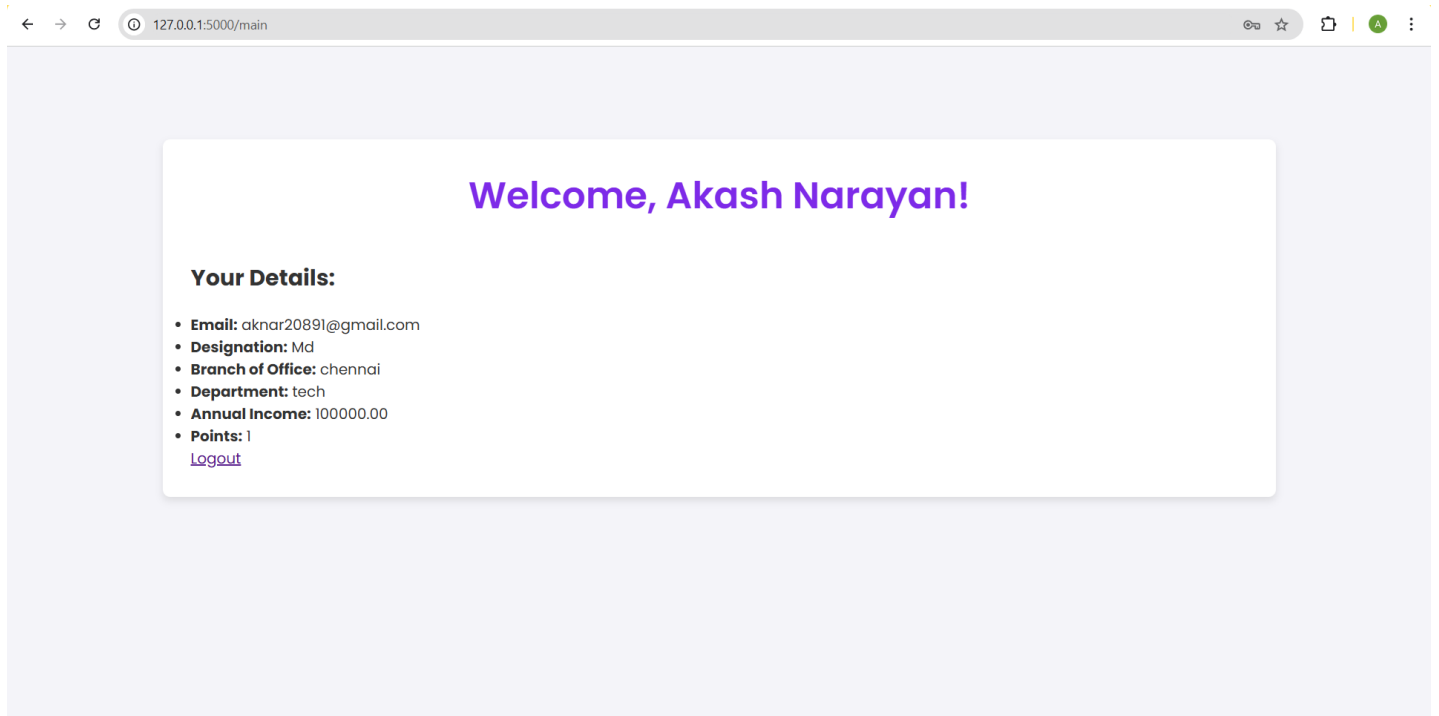
**Fig. 7.1. Home Page**

This is the home page where the employee can login.



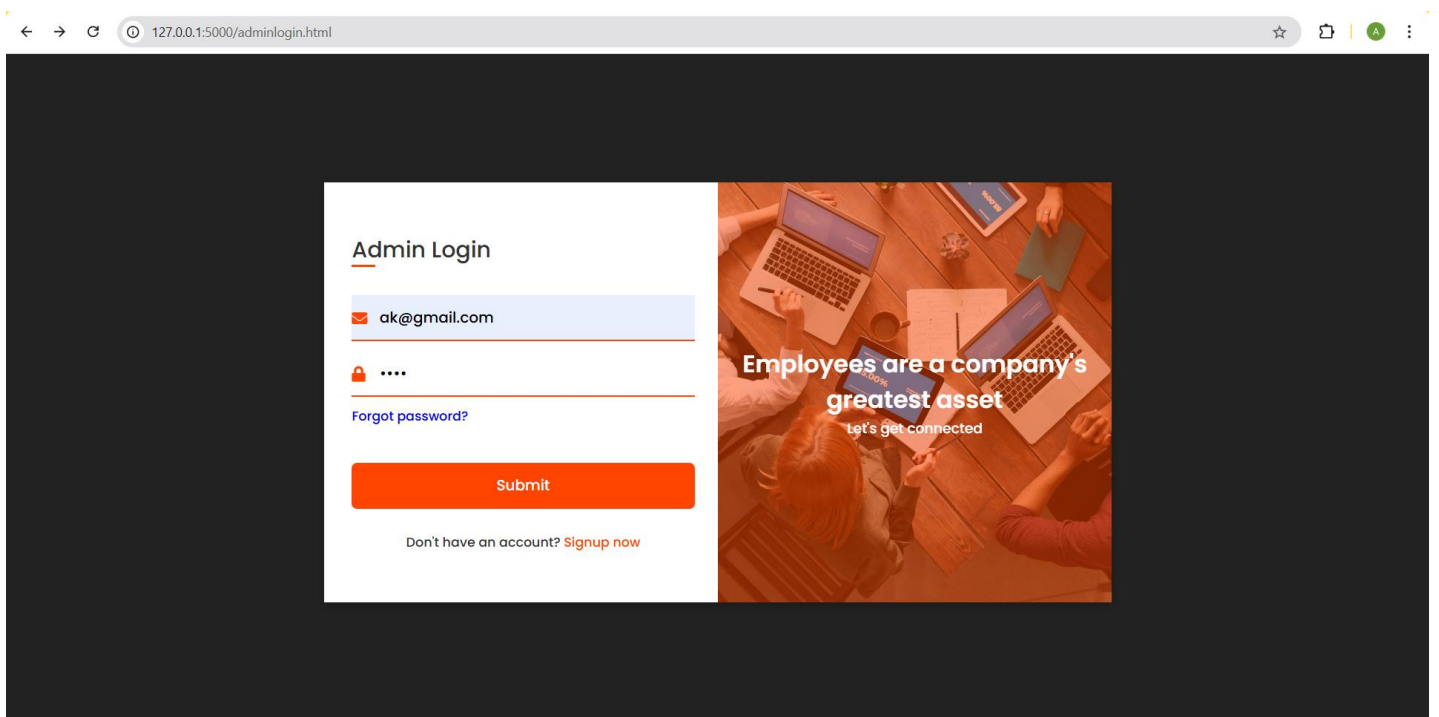
**Fig. 7.2. Login page Section**

Employee can login the page by using their credentials



**Fig. 7.3. Employee Details Page**
















Employee can see the detailed information about the departments.



**Fig. 7.4. Admin login page**

Admin can login in to the site.

**Employee Details**

ID	Name	Email	Designation	Branch Office	Department	Annual Income	Points	Actions
1	adhi	adhi@gmail.com	MD	Bangalore	Tech	\$123,456.00	2	  
3	adhesh	adhesh@gmail.com	MD	Bangalore	Tech	\$123,456.00	1	  
4	Akash	akash@gmail.com	Worker	Chennai	It-wing	\$6,000,000.00	1	  
5	David	david@gmail.com	Senior Manager	Hyderabad	Tech	\$700,000.00	1	  
7	Akash Narayan	aknar20891@gmail.com	Md	chennai	tech	\$100,000.00	1	  

[Logout](#)

**Fig. 7.5. Admin access page**

Admin can see detailed information about employees.

**EmpPerks** Home About Login

## About

Overview: The Employee Reward Point Management System is a comprehensive web-based platform designed to enhance employee engagement and motivation through a structured reward points system. This system allows organizations to allocate, track, and manage reward points for their employees based on performance, achievements, and contributions to the company. By implementing this system, organizations aim to foster a culture of recognition, appreciation, and positive reinforcement. Purpose: In today's competitive work environment, recognizing and rewarding employees for their hard work and dedication is crucial for maintaining morale and job satisfaction. The Employee Reward Point Management System provides a transparent and efficient way to motivate employees by allowing them to earn points that can be redeemed for various rewards. This system not only boosts employee morale but also encourages higher productivity and commitment. Key Features: User Authentication: Secure login and signup processes for employees and managers. Role-based access control to ensure data privacy and security. Point Allocation: Automated point allocation based on predefined criteria (e.g., performance metrics, project completion, attendance). Manual point allotment option for managers to recognize exceptional contributions. Dashboard: A user-friendly dashboard for employees to view their total reward points, transaction history, and available rewards. Managers can access a comprehensive overview of the points distributed and redeemed within their teams. Reward Catalog: A curated list of rewards that employees can redeem their points for, ranging from gift vouchers to extra leave days or team outings. Ability to update the rewards catalog regularly to keep offerings fresh and appealing. Activity Tracking: Detailed tracking of employee activities that earn points, allowing for clear visibility of contributions. Option to provide feedback on activities that led to point allocation. Reporting & Analytics: Analytical tools for managers to assess the effectiveness of the reward program and employee engagement levels. Customizable reports on point distribution, redemption rates, and overall employee satisfaction. Notifications: Automated notifications to inform employees of point allocations, rewards available, and program updates. Reminders for managers to acknowledge exceptional performance. User-Friendly Interface: A clean and intuitive interface that enhances user experience for both employees and managers. Responsive design to ensure accessibility on various devices (desktops, tablets, smartphones). Feedback Mechanism: A section for employees to provide feedback on the reward program, helping to refine and improve the system over time. Benefits: Increased Employee Engagement: By recognizing and rewarding achievements, employees feel valued, leading to higher job satisfaction and retention rates. Improved Performance: A clear rewards structure motivates employees to strive for excellence in their roles. Strengthened Company Culture: Promoting a culture of recognition, foster collaboration, and rewarded team members. Data-Driven Decisions: Access to analytics to make data-driven decisions.

**Fig. 7.6. About page section**

From here you can access the about section.

## **CHAPTER 8**

### **8.1 CONCLUSION**

In conclusion, the Reward Management System is a valuable tool for modern organizations looking to streamline their employee performance tracking and reward processes. By automating the evaluation and reward distribution, the system enhances transparency, ensures fairness, and improves overall employee engagement and satisfaction.

Implementing a reward management system enables organizations to maintain a consistent and objective approach to recognizing employee achievements, which in turn boosts morale and productivity. As businesses continue to adapt to the evolving work environment, embracing such systems can significantly enhance operational efficiency and employee retention.

In the future, the Reward Management System can be further enhanced by incorporating advanced analytics to better assess employee performance trends and predict future reward needs. Integration with AI and machine learning could automate performance assessments, making the process even more efficient and personalized. Additionally, mobile accessibility could be improved to allow employees to track their own performance and rewards in real-time, enhancing user experience. These advancements would not only streamline the reward process but also foster a more engaged and motivated workforce, ensuring that organizations remain competitive and employee-centric in the years to come.

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