CS 312 - Project Phase – 1 Report

Follow the instructions provided in the grey text. Replace the grey text with actual information.

Group Details:

Student 1 Name	Manjot kaur
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Student 2 Name	Aryan Sharma
Student 2 Email	as6355@nau.edu

Phase-1 Details:

Project Title	Employee Database Management System (EDMS)
Phase -1 Components	• Database Design • Backend Setup • Authentication Setup • UI Wireframes • Requirement Analysis

Task Status:

Avoid incorporating generic information, as it may result in penalties. Copy all the phase-1 tasks listed in the proposed project plan.

Task No	Task Details	Assigned To	Task Status
1	Requirement Analysis – identify system roles, CRUD operations	Manjot Kaur	Completed
2	Database Design – create ERD, define PostgreSQL schema	Aryan Sharma	Completed
3	Backend Setup – initialize Node.js + Express server	Aryan Sharma	Completed
4	Authentication Setup – implement JWT-based authentication	Manjot Kaur	Completed
5	UI Wireframes – design mockups for dashboard & profile	Manjot Kaur	Completed

New Tasks or Modified Tasks (Optional):

List all newly created tasks or tasks modified from your project proposal. Feel free to add more rows to the following table. **Fill the below section, only if you have any new tasks or modifications in the Phase-1 tasks list or else skip it.**

Task Type	Task Details	Assigned To	Task Status
New/ Modified	Explain the Task in detail (not in general)	Name of the team member	Completed/ Backlog (Pending)/ Modified
New/ Modified	Explain the Task in detail (not in general)	Name of the team member	Completed/ Backlog (Pending)/ Modified

Challenges and Solutions Implementation:

List at least 4 challenges faced by your team during phase-1 development and elaborate on the solutions you have implemented. Feel free to add more rows to the following table.

Details of the Challenge	Solution Implemented
PostgreSQL Connection Errors — faced issues connecting the database in different environments.	Configured environment variables for credentials and used connection pooling via pg library.
JWT Token Expiry During Testing — users were logged out prematurely.	Extended expiry duration and implemented automatic token refresh for smooth login sessions
Cross-Origin Resource Sharing (CORS) Error while linking React frontend with Node backend.	Installed and configured CORS middleware in Express to allow localhost origins during development.
Unclear UI alignment in React wireframes	Used React Bootstrap grid layout and component modularization for a consistent responsive layout.

Phase-1 Developed Screens:

- Incorporate webpage screens corresponding to the project phase - 1.

- Capture all screenshots of your phase-1 delivery (**don't include any code screenshots**) and attach them in this section.

Backend terminal running

```
PS C:\Users\End User\OneDrive\Documents\Project_Group_33_EDMS\backend> npm run dev

> edms-backend@1.0.0 dev
> nodemon server.js

[nodemon] 3.1.9
[nodemon] to restart at any time, enter `rs`
[nodemon] watching path(s): *.*
[nodemon] watching extensions: js,mjs,cjs,json
[nodemon] starting `node server.js`
Server running on port 5000
```

Postman — Register API & Postman — Login API (successful response)

```
1   {
2       "message": "Login successful",
3       "token": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.
            eyJpZCI6MSwicm9sZSI6MSwiZW1haWwiOiJhZG1pbkBleGFtcGxlLmNvbSIsImlhdCI6MT
            c2MzQyNjI0MiwiZXhwIjoxNzYzNDMzNDQyfQ.
            QgvNjuwTNcVjVLSnGYbq-9l19j8D-0hNfjOrQkuPHuc",
4       "user": {
5           "id": 1,
6           "full_name": "Admin User",
7           "email": "admin@example.com",
8           "role_id": 1
9       }
10  }
```

Mockup Screen 1 — Login Page

```
-----------------------------------------------------------

|    EMPLOYEE MANAGEMENT SYSTEM        |

| ------------------------------------------------------  |

|                                                        |

|              [   Login to Continue   ]                 |

|                                                        |

|     Email:      |_____|     |

|                                                        |

|     Password:  |_____|     |

|                                                        |

|          [   LOGIN BUTTON — BLUE   ]        |

|                                                        |

|              Forgot password? (link)            |

|                                                        |

-----------------------------------------------------------
```

Mockup Screen 2 — Admin Dashboard

```
--------------------------------------------------------------------------------

| Sidebar          |   TOP NAVBAR — "Welcome, Admin User"          |

| -------------------- | -------------------------------------------------------- |

| > Dashboard       |                                               |

| > Employees      |  [ Total Employees:  18  ]  [ Active: 15 ]      |

| > Add Employee  |                                               |

| > Profile          |  [ Admin Users:  3 ]      [ Departments 6 ]      |

| > Logout          |                                               |

|                    | ------------------------------------------------------|

|                    | Employees Overview Table (Preview)            |

|                    | ------------------------------------------------------|

|                    |  Name      | Email         | Role | ...           |

|                |  ------------------------------------------------------ |

--------------------------------------------------------------------------------
```

Mockup Screen 3 — Employee List Table

```
---------------------------------------------------------------------------

| Employees                                                  |

| -----------------------------------------------------------------------|

| [Search Bar: _____ ]   [Filter ▼]        |

|                                                            |

| -----------------------------------------------------------------------|

|  NAME          | EMAIL             | ROLE    | ...          |

| ------------------------------------------------------------------ |

|  Admin User     | admin@example.com    | Admin   |Edit  |

|  Employee One | emp1@example.com     | Employee |Edit |

|  Employee Two | emp2@example.com     | Employee |Edit |

| ------------------------------------------------------------------------ |

|   [ Add New Employee — Blue Button ]                      |

---------------------------------------------------------------------------------
```

Mockup Screen 4 — Employee Profile Page

```
----------------------------------------------------------

| Profile                                   |

| ---------------------------------------------------------- |

|   [ Profile Photo Placeholder ]               |

|                                           |

|   Full Name:   | Admin User_____ |  |

|   Email:        | admin@example.com      |  |

|   Department: | HR ▼ _____|  |

|   Role:         | Admin ▼ _____| |

|                                           |

|     [  SAVE CHANGES — BLUE BUTTON   ]        |

----------------------------------------------------------
```

Mockup Screen 5 — Add Employee Form

```
--------------------------------------------------------------
| Add New Employee                              |
| --------------------------------------------------------- |
|  Full Name:    |_____ |  |
|  Email:       |_____ |  |
|  Password:    |_____ |  |
|  Role:       | Admin ▼  Employee ▼      |  |
|  Department:   | IT ▼  HR ▼  Finance ▼   |  |
|                                               |
|      [  CREATE EMPLOYEE — BLUE BUTTON  ] |
--------------------------------------------------------------
```