1. **Database Design:**

**Table Name: user**

| **COLUMN** | **DATA TYPE** | **CONSTRAINT** |
| --- | --- | --- |
| **user\_id** | **INT** | **PRIMARY KEY** |
| **user\_name** | **VARCHAR(50)** | **NOT NULL** |
| **email** | **VARCHAR(20)** | **NOT NULL** |
| **role\_id** | **INT** | **FOREIGN KEY** |
| **password** | **VARCHAR(50)** | **NOT NULL** |

**Table Name: role**

| **COLUMN** | **DATA TYPE** | **CONSTRAINT** |
| --- | --- | --- |
| **role\_id** | **INT** | **PRIMARY KEY** |
| **role\_name** | **VARCHAR(50)** | **NOT NULL** |

**Table Name: employee**

| **COLUMN** | **DATA TYPE** | **CONSTRAINT** |
| --- | --- | --- |
| **emp\_id** | **INT** | **PRIMARY KEY** |
| **first\_name** | **VARCHAR(50)** | **NOT NULL** |
| **last\_name** | **VARCHAR(20)** | **NOT NULL** |
| **Age** | **INT** | **NOT NULL** |
| **Gender** | **VARCHAR(50)** | **NOT NULL** |
| **address** | **VARCHAR(50)** | **NOT NULL** |
| **Phone Number** | **VARCHAR(10)** | **NOT NULL** |
| **user\_id** | **INT** | **NOT NULL** |

**Table Name: requests**

| **COLUMN** | **DATA TYPE** | **CONSTRAINT** |
| --- | --- | --- |
| **request\_id** | **INT** | **PRIMARY KEY** |
| **cause\_travel** | **VARCHAR(100)** | **NOT NULL** |
| **source** | **VARCHAR(100)** | **NOT NULL** |
| **destination** | **INT** | **NOT NULL** |
| **mode** | **VARCHAR(100)** | **NOT NULL** |
| **from \_date** | **DATE** | **NOT NULL** |
| **to\_date** | **DATE** | **NOT NULL** |
| **no\_days** | **INT** | **AUTO-GENERATE** |
| **priority** | **INT** | **CRITICAL/NORMAL** |
| **project\_id** | **INT** | **FOREIGN KEY** |
| **emp\_id** | **INT** | **FOERIGN KEY** |
| **status** | **VARCHAR(20)** | **NOT NULL** |

**Table Name: project\_table**

| **COLUMN** | **DATA TYPE** | **CONSTRAINT** |
| --- | --- | --- |
| **project\_id** | **INT** | **PRIMARY KEY** |
| **project\_name** | **VARCHAR(100)** | **NOT NULL** |

1. **API Design:**
2. **Request Management**

| Method | API | Description |
| --- | --- | --- |
| GET | /api/request | To fetch all the request |
| PUT | /api/request/{id} | To update the request by id |
| POST | /api/request/add | To add new request |

**2.Logins**

| **Method** | **API** | **Description** |
| --- | --- | --- |
| POST | /api/login | Login page |
| POST | /api/{user} | Login for user |
| GET | /api/admin | Admin’s landing page |