GRAM PANCHAYAT MANAGEMENT SYSTEM

Report

TEAM NAME: GROUP2025

GROUP MEMBERS

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ER- Diagram:-

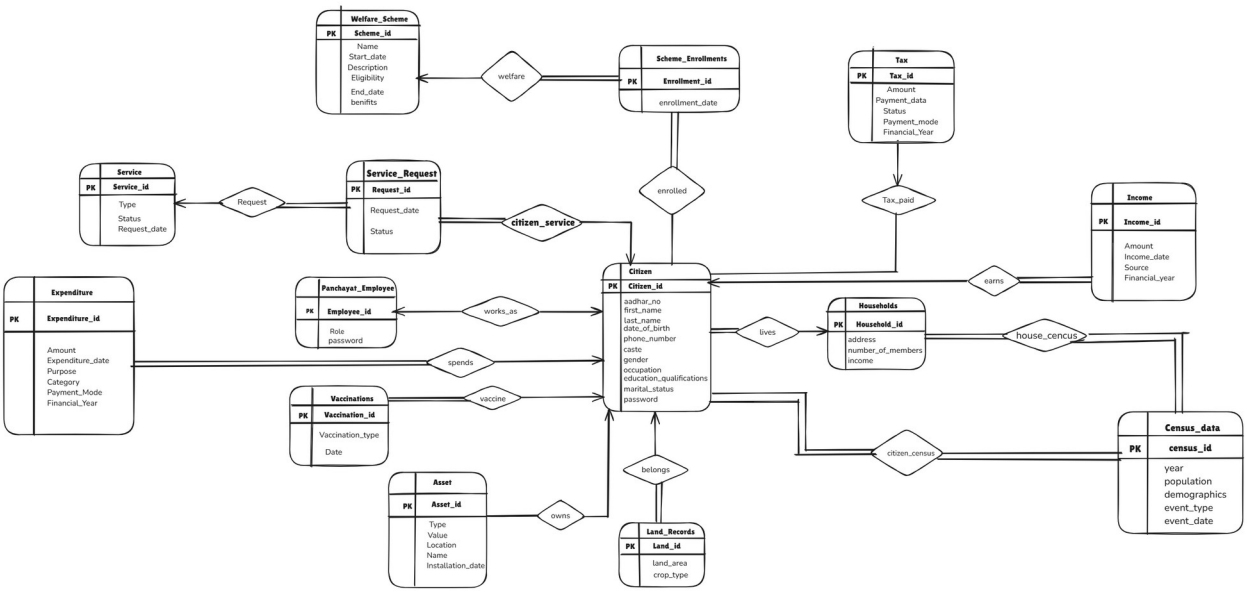
Welfare_Scheme
PK Scheme_id
Name
Start_date
Description
Eligibility
End_date
benifits
welfare
Scheme_Enrollments
PK Enrollment_id
enrollment_date
Tax
PK Tax_id
Amount
Payment_data
Status
Payment_mode
Financial_Year
Service
PK Service_id
Type
Status
Request_date
Request
Service_Request
PK Request_id
Request_date
Status
citizen_service
enrolled
Tax_paid
Income
PK Income_id
Amount
Income_date
Source
Financial_year
earns
Expenditure
PK Expenditure_id
Amount
Expenditure_date
Purpose
Category
Payment_Mode
Financial_Year
Panchayat_Employee
PK Employee_id
Role
password
works_as
Citizen
PK Citizen_id
aadhar_no
first_name
last_name
date_of_birth
phone_number
caste
gender
occupation
education_qualifications
marital_status
password
lives
Households
PK Household_id
address
number_of_members
income
house_cencus
spends
Vaccinations
PK Vaccination_id
Vaccination_type
Date
vaccine
Census_data
PK census_id
year
population
demographics
event_type
event_date
citizen_census
belongs
Asset
PK Asset_id
Type
Value
Location
Name
Installation_date
owns
Land_Records
PK Land_id
land_area
crop_type

Table Schema

1. Households Table

```
CREATE TABLE households (
    household_id SERIAL PRIMARY KEY,
    address VARCHAR(200) NOT NULL,

);
```

2. Citizens Table

```
CCREATE TABLE citizens (


   citizen_id SERIAL PRIMARY KEY,
    aadhar_no VARCHAR(200) UNIQUE NOT NULL,
    first_name VARCHAR(200) NOT NULL,
    last_name VARCHAR(200) NOT NULL,
    date_of_birth DATE NOT NULL,
    phone_number VARCHAR(200),
    caste VARCHAR(200),
    gender VARCHAR(200) NOT NULL,
    household_id INTEGER NOT NULL,
    educational_qualification VARCHAR(200),
    occupation VARCHAR(200),
    marital_status VARCHAR(200),
    password VARCHAR(256) NOT NULL,
    FOREIGN KEY (household_id) REFERENCES households(household_id)
);
```

3. Temporary Citizens Table

```
CREATE TABLE citizen_temp (
    id SERIAL PRIMARY KEY,
    aadhar_no VARCHAR(200) UNIQUE NOT NULL,
    first_name VARCHAR(200) NOT NULL,
```

```
    last_name VARCHAR(200) NOT NULL,
    dob DATE NOT NULL,
    phone VARCHAR(200),
    caste VARCHAR(200),
    gender VARCHAR(200) NOT NULL,
    household_id INTEGER NOT NULL,
    educational_qualification VARCHAR(200),
    occupation VARCHAR(200),
    marital_status VARCHAR(200),
    password VARCHAR(256) NOT NULL,

);
```

4. Land Records Table

```
CREATE TABLE land_records (
    land_id SERIAL PRIMARY KEY,
    citizen_id INTEGER,
    area_acres DECIMAL NOT NULL,
    crop_type VARCHAR(200),
    FOREIGN KEY (citizen_id) REFERENCES citizens(citizen_id)
);
```

5. Panchayat Employees Table

```
CREATE TABLE panchayat_employees (

    citizen_id INTEGER,
    password VARCHAR(256) NOT NULL,
    role VARCHAR(200) NOT NULL

);
```

6. Assets Table

```
CREATE TABLE assets (
    asset_id SERIAL PRIMARY KEY,
    type VARCHAR(200) NOT NULL,
    value DECIMAL NOT NULL,
    location VARCHAR(200),
    name VARCHAR(200),
```

```
    installation_date DATE
);
```

7. Welfare Schemes Table

```
CREATE TABLE welfare_schemes (
    scheme_id SERIAL PRIMARY KEY,
    name VARCHAR(200) NOT NULL,
    description VARCHAR(200),
    eligibility VARCHAR(200),
    benefits VARCHAR(200),
    start_date DATE,
    end_date DATE
);
```

8. Scheme Enrollments Table

```
CREATE TABLE scheme_enrollments (
    enrollment_id SERIAL PRIMARY KEY,
    citizen_id INTEGER,
    scheme_id INTEGER,
    enrollment_date DATE NOT NULL,
    FOREIGN KEY (citizen_id) REFERENCES citizens(citizen_id),
    FOREIGN KEY (scheme_id) REFERENCES welfare_schemes(scheme_id)
);
```

9. Vaccinations Table

```
CREATE TABLE vaccinations (
    vaccination_id SERIAL PRIMARY KEY,
    citizen_id INTEGER,
    vaccine_type VARCHAR(200) NOT NULL,
    date DATE NOT NULL,
    FOREIGN KEY (citizen_id) REFERENCES citizens(citizen_id)
);
```

10. Census Data Table

```
CREATE TABLE census_data (
    id SERIAL PRIMARY KEY,
    year INTEGER NOT NULL,
    population INTEGER NOT NULL,
    demographics VARCHAR(200),
    description VARCHAR(200)

);
```

11. Tax Table

```
CREATE TABLE tax(
     id SERIAL PRIMARY KEY,
     citizen_id INTEGER NOT NULL,
     amount DOUBLE PRECISON NOT NULL,
     year INTEGER NOT NULL,
     description TEXT,
     FOREIGN KEY (citizen_id) REFERENCES  citizens(citizen_id)
);
```

12. Income Table

```
CREATE TABLE income (
    income_id SERIAL PRIMARY KEY,
    amount DECIMAL NOT NULL,
    income_date DATE NOT NULL,
    source VARCHAR(200),
    financial_year VARCHAR(200)
);
```

13. Expenditure Table

```
CREATE TABLE expenditure (
    expenditure_id SERIAL PRIMARY KEY,
```

```
    amount DECIMAL NOT NULL,
    expenditure_date DATE NOT NULL,
    purpose VARCHAR(200),
    category VARCHAR(200),
    payment_mode VARCHAR(200),
    financial_year VARCHAR(200)
);
```

14. Service Table

```
CREATE TABLE service (
    service_id SERIAL PRIMARY KEY,
    type VARCHAR(200) NOT NULL,
    status VARCHAR(200),
    request_date DATE
);
```

15. Service Requests Table

```
CREATE TABLE service_requests (
    request_id SERIAL PRIMARY KEY,
    citizen_id INTEGER,
    service_id INTEGER,
    request_date DATE NOT NULL,
    status VARCHAR(200),
    FOREIGN KEY (citizen_id) REFERENCES citizens(citizen_id),
    FOREIGN KEY (service_id) REFERENCES service(service_id)
);
```

16. Admin Table

```
CREATE TABLE admin (
    id INTEGER PRIMARY KEY,
    password VARCHAR(255) NOT NULL
);
```

17.Environmental Data Table

```
CREATE TABLE environmental_data(
      id SERIAL PRIMARY KEY,
      issue_type VARCHAR(50) NOT NULL,
      description TEXT,
      report_date DATE NOT NULL,
      rainfall DOUBLE PRECISION,
      groundwater_level DOUBLE PRECISION,
      pollution_data TEXT
)
```

List of Functionalities Implemented:

1. Citizen registration.
2. Login functionality for Citizens, Panchayat Employees, and System Administrators.
3. Edit details option for Citizens and Panchayat Employees.
4. Citizens can file taxes through the system.
5. Functionality for Citizens to apply for Panchayat Employee positions.
6. Monitoring of Citizen and Panchayat Employee details for government oversight.
7. System Administrator can approve Citizens as Panchayat Employees.
8. System Administrator has access to all Citizen and Panchayat Employee details.
9. Panchayat Employees can approve tax filings submitted by Citizens.

Front-End Tools Used :-

1.HTML
2.CSS
3.Bootstrap 5