Hospital Management System - Migration Tables

# Users Table

|  |  |  |
| --- | --- | --- |
| **Column** | **Type** | **Description** |
| id | INT(11), UNSIGNED, AUTO\_INCREMENT | Primary key |
| hospital\_id | INT(11), UNSIGNED | Foreign key from hospitals.id |
| name | VARCHAR(100) | User name |
| email | VARCHAR(150), UNIQUE | User email |
| password | VARCHAR(255) | User password |
| role | ENUM("superadmin","admin","doctor","patient"), | User role |
| created\_at | TIMESTAMP | Record creation timestamp |
| updated\_at | TIMESTAMP | Record update timestamp |
| deleted\_at | TIMESTAMP | Soft delete timestamp |

# Patients Table

|  |  |  |
| --- | --- | --- |
| **Column** | **Type** | **Description** |
| id | INT(11), UNSIGNED, AUTO\_INCREMENT | Primary key |
| User\_id | INT(10) , UNSIGNED | Foreign key from users.id |
| **hospital\_id** | INT(10) , UNSIGNED | Foreign key from hospital.id |
| Age | INT(11) | Age of patient |
| gender | ENUM('male','female','other') | Patient gender |
| created\_by | INT(10) , UNSIGNED | User\_id of patient data created |
| updated\_by | INT(10) , UNSIGNED | User\_id of patient data updated |
| deleted\_by | INT(10) , UNSIGNED | User\_id of patient data deleted |
| created\_at | TIMESTAMP | Record creation timestamp |
| updated\_at | TIMESTAMP | Record update timestamp |
| deleted\_at | TIMESTAMP | Soft delete timestamp |

# Doctors Table

|  |  |  |
| --- | --- | --- |
| Column | Type | Description |
| id | INT(11), UNSIGNED, AUTO\_INCREMENT | Primary key |
| User\_id | INT(11), UNSIGNED | Foreign key from users.id |
| hospital\_id | INT(11), UNSIGNED | Foreign key from hospitals.id |
| age | INT(10) | Age of doctor |
| gender | enum('male','female','other') | Gender of doctor |
| expertise | VARCHAR(150) | Doctor specialization |
| avaliability | VARCHAR(150) | Availability cheak of doctor |
| created\_by | INT(11), UNSIGNED | User\_id of doctor data created |
| updated\_by | INT(11), UNSIGNED | User\_id of doctor data updated |
| deleted\_by | INT(11), UNSIGNED | User\_id of doctor data deleted |
| created\_at | TIMESTAMP | Record creation timestamp |
| updated\_at | TIMESTAMP | Record update timestamp |
| deleted\_at | TIMESTAMP | Soft delete timestamp |

# Appointments Table

|  |  |  |
| --- | --- | --- |
| Column | Type | Description |
| id | INT(11), UNSIGNED, AUTO\_INCREMENT | Primary key |
| hospital\_id | INT(11), UNSIGNED | Foreign key from hospitals.id |
| patient\_id | INT(11), UNSIGNED | Foreign key from patients.id |
| doctor\_id | INT(11), UNSIGNED | Foreign key from doctors.id |
| start\_datetime | DATETIME | Appointment start datetime |
| end\_datetime | DATETIME | Appointment end datetime |
| status | ENUM(pending,'Completed','Cancelled'), default=pending | Appointment status |
| created\_by | INT(11), UNSIGNED | User\_id of appointment created |
| updated\_by | INT(11), UNSIGNED | User\_id of appointment updated/rescheduled |
| deleted\_by | INT(11), UNSIGNED | User\_id of appointment deleted |
| created\_at | TIMESTAMP | Record creation timestamp |
| updated\_at | TIMESTAMP | Record update timestamp |
| deleted\_at | TIMESTAMP | Soft delete timestamp |

# Visit\_history Table

|  |  |  |
| --- | --- | --- |
| Column | Type | Description |
| id | INT(11), UNSIGNED, AUTO\_INCREMENT | Primary key |
| appointment\_id | INT(11), UNSIGNED | Foreign key from appointments.id |
| patient\_id | INT(11), UNSIGNED | Foreign key from patients.id |
| doctor\_id | INT(11), UNSIGNED | Foreign key tfro doctors.id |
| reason | TEXT, NULL | Reason for visit |
| weight | Decimal(5,2) | Patient weight |
| blood\_pressure | VARCHAR(10), NULL | Patient blood pressure |
| doctor\_comments | TEXT, NULL | Doctor comments |
| created\_at | TIMESTAMP | Record creation timestamp |
| updated\_at | TIMESTAMP | Record update timestamp |
| deleted\_at | TIMESTAMP | Soft delete timestamp |

# Prescription Table

|  |  |  |
| --- | --- | --- |
| Column | Type | Description |
| id | INT(11), UNSIGNED, AUTO\_INCREMENT | Primary key |
| **visit\_id** | INT(11), UNSIGNED | Foreign key from visit\_history.id |
| appointment\_id | INT(11), UNSIGNED | Foreign key from appointments.id |
| **doctor\_id** | INT(11), UNSIGNED | Foreign key from doctors.id |
| **patient\_id** | INT(11), UNSIGNED | Foreign key from patients.id |
| prescription\_text | TEXT | To add prescription to patient |
| created\_at | TIMESTAMP | Record creation timestamp |
| updated\_at | TIMESTAMP | Record update timestamp |

# Admins Table

|  |  |  |
| --- | --- | --- |
| Column | Type | Description |
| **id** | INT(11), UNSIGNED, AUTO\_INCREMENT | Primary key |
| **user\_id** | INT(11), UNSIGNED | Foreign key from user.id |
| **hospital\_id** | INT(11), UNSIGNED | Foreign key from hospital.id |
| created\_by | INT(11), UNSIGNED | User\_id of admin created |
| updated\_by | INT(11), UNSIGNED | User\_id of admin updated/rescheduled |
| deleted\_by | INT(11), UNSIGNED | User\_id of admin deleted |
| created\_at | TIMESTAMP | Record creation timestamp |
| updated\_at | TIMESTAMP | Record update timestamp |
| deleted\_at | TIMESTAMP | Soft delete timestamp |

**Bills Table**

|  |  |  |
| --- | --- | --- |
| **id** | int(10) UN AI PK | Primary key |
| **appointment\_id** | int(10) UN | Foreign key from appointments.id |
| **visit\_id** | int(10) UN | Foreign key from visit\_history.id |
| **patient\_id** | int(10) UN | Foreign key from patients.id |
| **doctor\_id** | int(10) UN | Foreign key from doctors.id |
| **hospital\_id** | int(10) UN | Foreign key from hospitals.id |
| consultation\_fee | decimal(10,2) | Doctors consultation fees |
| total\_amount | decimal(10,2) | Appointment’s total amount |
| payment\_status | enum('Pending','Paid') | Status of payment |
| payment\_mode | enum('Cash','Card','UPI','NetBanking','Insurance','Other') | Type of payment |
| payment\_date | datetime | Payment done date |
| created\_at | datetime | Record creation timestamp |
| updated\_at | datetime | Record update timestamp |

**Services Table**

|  |  |  |
| --- | --- | --- |
| **Column** | **Type** | **Description** |
| id | int(10) UN AI PK | Primary key |
| name | varchar(255) | Services name |
| price | decimal(10,2) | Services price |
| created\_at | datetime | Record creation timestamp |
| updated\_at | datetime | Record update timestamp |

**Bill\_Services Table**

|  |  |  |
| --- | --- | --- |
| **id** | int(11) AI PK | Primary key |
| **bill\_id** | int(11) UN | Foreign key from bills.id |
| **service\_id** | int(11) UN | Foreign key from services.id |
| service\_name | varchar(255) | Service name for each bill |
| price | decimal(10,2) | Service price for each bill |
| created\_at | datetime | Record creation timestamp |
| updated\_at | datetime | Record update timestamp |

## Authentication

All endpoints require user login (except /login and /register). Session Aythentication

## Auth Routes

|  |  |  |  |
| --- | --- | --- | --- |
| Method | URL | Controller::Method | Description |
| GET | / | AuthController::landing | Landing page |
| GET | register | AuthController::register | Show registration form |
| POST | auth/registerPost | AuthController::registerPost | Handle registration submission |
| GET | login | AuthController::login | Show login form |
| POST | auth/loginPost | AuthController::loginPost | Handle login submission |
| GET | logout | AuthController::logout | Logout user |

## SuperAdmin Routes - Dashboard & Hospitals

|  |  |  |  |
| --- | --- | --- | --- |
| Method | URL | Controller::Method | Description |
| GET | superadmin/dashboard | SuperAdminController::dashboard | SuperAdmin dashboard |
| GET | superadmin/addHospital | SuperAdminController::addHospital | Show add hospital form |
| POST | superadmin/saveHospital | SuperAdminController::saveHospital | Save hospital data |
| GET | superadmin/editHospital/(:num) | SuperAdminController::editHospital | Edit hospital form |
| POST | superadmin/updateHospital/(:num) | SuperAdminController::updateHospital | Update hospital record |
| GET | superadmin/deleteHospital/(:num) | SuperAdminController::deleteHospital | Delete hospital |
| GET | superadmin/restoreHospital/(:num) | SuperAdminController::restoreHospital | Restore deleted hospital |
| GET | superadmin/hospitalProfile/(:num) | SuperAdminController::hospitalProfile | View hospital profile |
| GET | superadmin/listHospitals | SuperAdminController::listHospitals | List all hospitals |

## SuperAdmin Routes - Admin Management

|  |  |  |  |
| --- | --- | --- | --- |
| Method | URL | Controller::Method | Description |
| GET | superadmin/addAdmin | SuperAdminController::addAdmin | Show add admin form |
| POST | superadmin/addAdminPost | SuperAdminController::addAdminPost | Save new admin |
| GET | superadmin/addAdmin/(:num) | SuperAdminController::addAdmin | Add admin for specific hospital |
| POST | superadmin/saveAdmin/(:num) | SuperAdminController::saveAdmin | Save admin under hospital |
| GET | superadmin/viewAdmin/(:num) | SuperAdminController::viewAdmin | View admin details |
| GET | superadmin/listAdmins | SuperAdminController::listAdmins | List all admins |
| GET | superadmin/editAdmin/(:num) | SuperAdminController::editAdmin | Edit admin details |
| POST | superadmin/updateAdmin/(:num) | SuperAdminController::updateAdmin | Update admin details |
| GET | superadmin/deleteAdmin/(:num) | SuperAdminController::deleteAdmin | Delete admin |
| GET | superadmin/adminProfiles/(:num) | SuperAdminController::adminProfiles | View admin profiles per hospital |

## SuperAdmin Routes - Doctor Management

|  |  |  |  |
| --- | --- | --- | --- |
| Method | URL | Controller::Method | Description |
| GET | superadmin/listDoctors/(:num) | SuperAdminController::listDoctors | List doctors by hospital |
| GET | superadmin/addDoctor/(:num) | SuperAdminController::addDoctor | Show add doctor form |
| POST | superadmin/saveDoctor/(:num) | SuperAdminController::saveDoctor | Save new doctor |
| GET | superadmin/editDoctor/(:num) | SuperAdminController::editDoctor | Edit doctor details |
| POST | superadmin/updateDoctor/(:num) | SuperAdminController::updateDoctor | Update doctor record |
| GET | superadmin/deleteDoctor/(:num) | SuperAdminController::deleteDoctor | Delete doctor |
| GET | superadmin/doctorProfile/(:num) | SuperAdminController::doctorProfile | View doctor profile |

## SuperAdmin Routes - Patient Management

|  |  |  |  |
| --- | --- | --- | --- |
| Method | URL | Controller::Method | Description |
| GET | superadmin/listPatients/(:num) | SuperAdminController::listPatients | List patients by hospital |
| GET | superadmin/addPatient/(:num) | SuperAdminController::addPatient | Add patient under hospital |
| POST | superadmin/savePatient/(:num) | SuperAdminController::savePatient | Save patient record |
| GET | superadmin/editPatient/(:num) | SuperAdminController::editPatient | Edit patient details |
| POST | superadmin/updatePatient/(:num) | SuperAdminController::updatePatient | Update patient |
| GET | superadmin/deletePatient/(:num) | SuperAdminController::deletePatient | Delete patient |
| GET | superadmin/managePatients/(:num) | SuperAdminController::managePatients | Manage hospital’s patients |
| GET | superadmin/patientProfile/(:num) | SuperAdminController::patientProfile | View patient profile |
| GET | superadmin/patientProfile/(:num)/(:num) | SuperAdminController::patientProfile | View patient with visit details |

## SuperAdmin Routes - Appointment & Visit Management

|  |  |  |  |
| --- | --- | --- | --- |
| Method | URL | Controller::Method | Description |
| GET | | superadmin/addAppointment/(:num) | SuperAdminController::addAppointment | Show appointment form |
| POST | superadmin/storeAppointment | SuperAdminController::storeAppointment | Save appointment |
| GET | superadmin/editAppointment/(:num) | SuperAdminController::editAppointment | Edit appointment |
| POST | superadmin/updateAppointment/(:num) | SuperAdminController::updateAppointment | Update appointment |
| GET | superadmin/cancelAppointment/(:num) | SuperAdminController::cancelAppointment | Cancel appointment |
| GET | superadmin/markAppointmentDone/(:num) | SuperAdminController::markAppointmentDone | Mark appointment as done |
| GET | superadmin/rescheduleAppointment/(:num) | SuperAdminController::rescheduleAppointment | Reschedule appointment |
| POST | superadmin/saveReschedule/(:num) | SuperAdminController::saveReschedule | Save rescheduled appointment |
| GET | superadmin/addVisitDetails/(:num) | SuperAdminController::addVisitDetails | Add visit details |
| POST | superadmin/saveVisitDetails/(:num) | SuperAdminController::saveVisitDetails | Save visit details |
| GET | superadmin/addHospitalAppointment/(:num) | SuperAdminController::addHospitalAppointment | Add appointment under hospital |
| POST | superadmin/storeHospitalAppointment | SuperAdminController::storeAppointment | Save hospital appointment |

## SuperAdmin Routes - Prescription Management

|  |  |  |  |
| --- | --- | --- | --- |
| Method | URL | Controller::Method | Description |
| GET | superadmin/addPrescription/(:num) | SuperAdminController::addPrescription | Show add prescription form |
| POST | superadmin/savePrescription | SuperAdminController::savePrescription | Save prescription |
| GET | superadmin/viewPrescription/(:num) | SuperAdminController::viewPrescription | View prescription |
| GET | superadmin/downloadPrescription/(:num) | SuperAdminController::downloadPrescription | Download prescription |

## Admin Routes

|  |  |  |  |
| --- | --- | --- | --- |
| Method | URL | Controller::Method | Description |
| GET | admin/dashboard | AdminController::dashboard | Admin dashboard |
| GET | admin/patients | AdminController::patients | View all patients |
| GET | admin/patient/(:num) | AdminController::patient | View single patient |
| GET | admin/doctors | AdminController::doctors | List all doctors |
| GET | admin/doctorProfile/(:num) | AdminController::doctorProfile | View doctor profile |
| GET | admin/appointments | AdminController::appointments | List all appointments |
| GET | admin/viewAppointment/(:num) | AdminController::viewAppointment | View appointment |
| GET | admin/viewPrescription/(:num) | AdminController::viewPrescription | View prescription |
| GET | admin/patientProfile/(:num) | AdminController::patientProfile | View patient profile |

## Doctor Routes

|  |  |  |  |
| --- | --- | --- | --- |
| Method | URL | Controller::Method | Description |
| GET | doctor/dashboard | DoctorController::dashboard | Doctor dashboard |
| GET | doctor/patients | DoctorController::patients | View doctor’s patients |
| GET | doctor/patient/(:num) | DoctorController::patientProfile | View single patient |
| GET | doctor/addPatient | DoctorController::addPatient | Show add patient form |
| POST | doctor/savePatient | DoctorController::savePatient | Save patient |
| GET | doctor/editPatient/(:num) | DoctorController::editPatient | Edit patient |
| POST | doctor/updatePatient/(:num) | DoctorController::updatePatient | Update patient |
| GET | doctor/appointments | DoctorController::appointments | List doctor’s appointments |
| GET | doctor/appointment/(:num) | DoctorController::appointment | View appointment details |
| GET | doctor/viewAppointment/(:num) | DoctorController::viewAppointment | View appointment details |
| POST | doctor/addVisit/(:num) | DoctorController::addVisit | Add visit |
| POST | doctor/saveVisit | DoctorController::saveVisit | Save visit record |
| GET | doctor/addPrescription/(:num) | DoctorController::addPrescription | Add prescription |
| POST | doctor/savePrescription | DoctorController::savePrescription | Save prescription |
| GET | doctor/viewPrescription/(:num) | DoctorController::viewPrescription | View prescription |
| GET | doctor/addAppointment | DoctorController::addAppointment | Show add appointment form |
| POST | doctor/saveAppointment | DoctorController::saveAppointment | Save appointment |
| GET | doctor/addBill/(:num) | DoctorController::addBill | Add bill for appointment |
| POST | doctor/saveBill | DoctorController::saveBill | Save bill |
| GET | doctor/viewBill/(:num) | DoctorController::viewBill | View bill details |
| GET | doctor/editBill/(:num) | DoctorController::editBill | Edit bill |
| POST | doctor/updateBill/(:num) | DoctorController::updateBill | Update bill |
| GET | doctor/downloadBill/(:num) | DoctorController::downloadBill | Download bill |
| GET | doctor/markDone/(:num) | DoctorController::markDone | Mark appointment completed |
| GET | doctor/cancelAppointment/(:num) | DoctorController::cancelAppointment | Cancel appointment |
| GET | doctor/reschedule/(:num) | DoctorController::reschedule | Reschedule appointment |
| POST | doctor/updatePaymentStatus/(:num) | DoctorController::updatePaymentStatus | Update payment status |

## Patient Routes

|  |  |  |  |
| --- | --- | --- | --- |
| Method | URL | Controller::Method | Description |
| GET | patient/dashboard | PatientController::dashboard | Patient dashboard |
| GET | patient/bookAppointment | PatientController::bookAppointment | Book appointment form |
| POST | patient/saveAppointment | PatientController::saveAppointment | Save appointment |
| GET | patient/upcomingAppointments | PatientController::upcomingAppointments | List upcoming appointments |
| GET | patient/completedAppointments | PatientController::completedAppointments | List completed appointments |
| GET | patient/viewBill/(:num) | PatientController::viewBill | View bill |
| GET | patient/cancelAppointment/(:num) | PatientController::cancelAppointment | Cancel appointment |
| GET | patient/rescheduleAppointment/(:num) | PatientController::rescheduleAppointment | Reschedule appointment |
| POST | patient/updateReschedule/(:num) | PatientController::updateReschedule | Update reschedule info |
| GET | patient/downloadPrescription/(:num) | PatientController::downloadPrescription | Download prescription |