### **Project Overview**

This Django application is developed for AB Hospital to streamline patient registration and search functionality. The application allows users to register new patients and check if a patient is already registered using a unique ID.

### **Installation Instructions**

1. Ensure you have Python 2.7 and Django 1.8 installed.

Extract the project files and navigate to the project directory:  
  
cd FinalAssignment/patientMgtApp

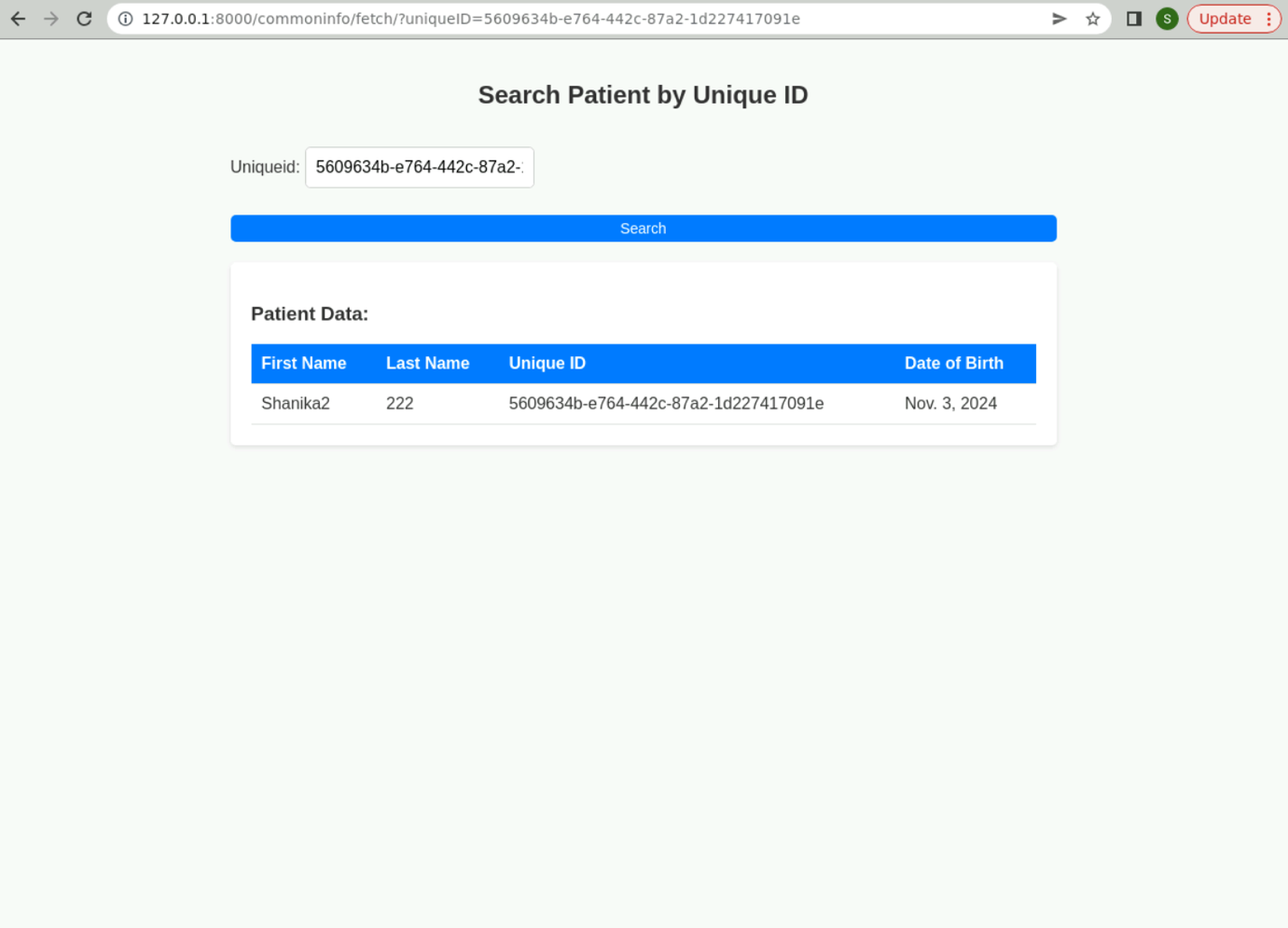
1. Run the initial migrations:  
     
   python manage.py migrate
2. Start the development server:  
   python manage.py runserver 0.0.0.0:8000
3. Access the application via the live preview URL appended with:
   * /commoninfo/add for the registration page.
   * /commoninfo/fetch for the patient search page.

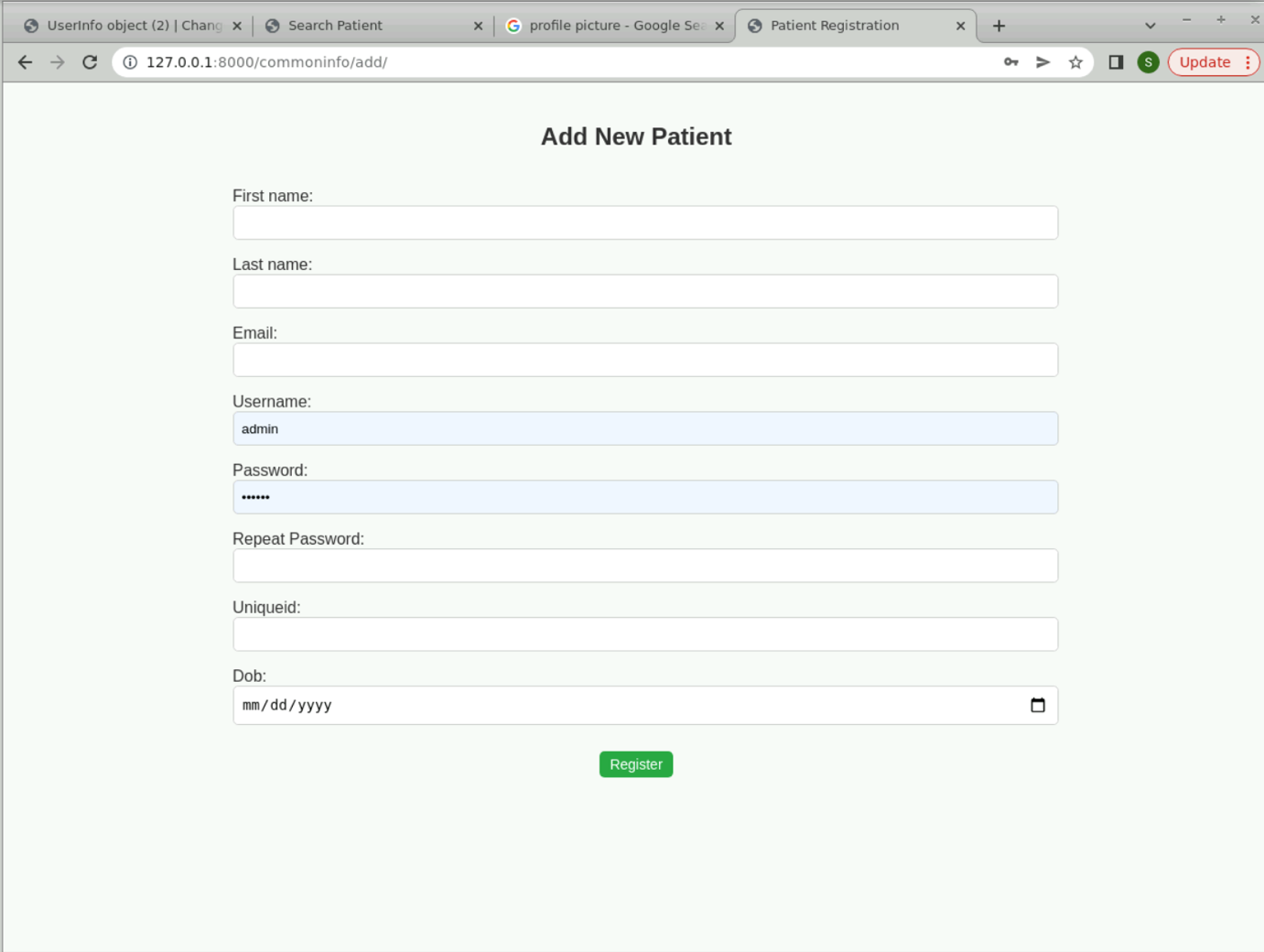
### **Database Model**

The application uses an SQLite database. The UserInfo model stores the following information:

* user: A one-to-one relationship with Django's built-in User model.
* uniqueID: A unique identifier for each patient (UUID field).
* dob: The date of birth of the patient.

**Screenshots**





**Code**

CommonInfo

1. Views.py

| **from** django.shortcuts **import** render, redirect **from** django.db **import** IntegrityError **from** django.contrib **import** messages **from** .forms **import** UserInfoForm ,SearchForm **from** django.contrib.auth.models **import** User **from** .models **import** UserInfo  **def** **add\_patient**(request):  **if** request.method == 'POST':  form = UserInfoForm(request.POST)  **if** form.is\_valid():  *# Save data for User model*  user = User(  first\_name=form.cleaned\_data['first\_name'],  last\_name=form.cleaned\_data['last\_name'],  username=form.cleaned\_data['username'],  email=form.cleaned\_data['email']  )  user.set\_password(form.cleaned\_data['password']) *# Hash the password*  user.save()   *# Save data for UserInfo model*  user\_info = UserInfo(  uniqueID=form.cleaned\_data['uniqueID'],  dob=form.cleaned\_data['dob'],  user =user  )  user\_info.save()  messages.success(request, "Patient added successfully!")  **return** redirect('add\_patient')    **else**:   form = UserInfoForm()  **return** render(request, 'commoninfo/add\_patient.html', {'form': form})    **def** **clean**(self):  cleaned\_data = clean()  password = cleaned\_data.get("password")  confirm\_password = cleaned\_data.get("confirm\_password")   *# Check if both password fields match*  **if** password != confirm\_password:  self.add\_error('confirm\_password', "Passwords do not match.")   **return** cleaned\_data   **def** **search\_patient**(request):  patients = **None**  **if** 'uniqueID' **in** request.GET:  form = SearchForm(request.GET)  **if** form.is\_valid():  uniqueID = form.cleaned\_data['uniqueID']  patients = UserInfo.objects.filter(uniqueID\_\_icontains=uniqueID)    **else**:  form = SearchForm()    **return** render(request, 'commoninfo/search\_patient.html', {'form': form, 'patients': patients}) |
| --- |

1. Models.py

**from django.db import models**

**from django.contrib.auth.models import User**

**class UserInfo(models.Model):**

**user = models.OneToOneField(User, on\_delete=models.CASCADE) #on\_delete will ensure patient gets deleted whenever a user is deleted**

**uniqueID = models.UUIDField(unique=True)**

**dob = models.DateField()**

1. Forms.py

| **from** django **import** forms **from** .models **import** UserInfo **from** django.contrib.auth.models **import** User  **class** **UserInfoForm**(forms.ModelForm):  *# Fields from the User model*  first\_name = forms.CharField(max\_length=150)  last\_name = forms.CharField(max\_length=150)  username = forms.CharField(max\_length=150)  email = forms.EmailField()  password = forms.CharField(widget=forms.PasswordInput)  confirm\_password = forms.CharField(widget=forms.PasswordInput, label="Repeat Password")   *# Fields from the UserInfo model*  uniqueID = forms.UUIDField()  dob = forms.DateField(widget=forms.DateInput(attrs={'type': 'date'}))   **class** **Meta**:  model = UserInfo  fields = ['first\_name', 'last\_name', 'email','username', 'password','confirm\_password', 'uniqueID', 'dob']   **class** **SearchForm**(forms.Form):  uniqueID = forms.CharField(max\_length=100) |
| --- |

1. Admin.py

**from django.contrib import admin**

**from .models import UserInfo**

**# Register your models here.**

**admin.site.register(UserInfo)**

1. Urls.py

| **from** django.urls **import** path **from** .views **import** add\_patient, search\_patient  urlpatterns = [  path('add/', add\_patient, name='add\_patient'),  path('fetch/', search\_patient, name='search\_patient'), ] |
| --- |

1. add\_patient.html

| **<!DOCTYPE html>** <html lang="en"> <head>  <meta charset="UTF-8">  <meta name="viewport" content="width=device-width, initial-scale=1.0">  <title>Patient Registration</title>  <style>  **body** {  font-family: Arial, sans-serif;  background-color: #f4f4f4;  color: #333;  max-width: 800px;  margin: 0 auto;  padding: 20px;  }   **h2** {  text-align: center;  }   **form** {  display: flex;  flex-direction: column;  gap: 10px;  margin-top: 20px;  }   **input**[type="text"], **input**[type="date"], **input**[type="email"], **input**[type="number"], **input**[type="password"] {  padding: 8px;  border-radius: 5px;  border: 1px solid #ccc;  font-size: 14px;  width: 100%;  }      **button** {  padding: 5px 10px;  border: none;  border-radius: 5px;  background-color: #28a745;  color: white;  font-size: 14px;  cursor: pointer;  align-self: center;  }   **button**:hover {  background-color: #218838;  }  </style>   *<!-- Include Font Awesome for the calendar icon -->*  <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.0.0/css/all.min.css"> </head> <body>  <h2>Add New Patient</h2>  <form method="post">  {% csrf\_token %}  <div class="date-input">  {{ form.as\_p }}  </div>  <button type="submit">Register</button>  </form> </body> </html>  6.Search\_patient.html  **<!DOCTYPE html>** <html lang="en"> <head>  <meta charset="UTF-8">  <meta name="viewport" content="width=device-width, initial-scale=1.0">  <title>Search Patient</title>  <style>  **body** {  font-family: Arial, sans-serif;  background-color: #f4f4f4;  color: #333;  max-width: 800px;  margin: 0 auto;  padding: 20px;  }    **h2** {  text-align: center;  }   **form** {  display: flex;  flex-direction: column;  gap: 10px;  margin-bottom: 20px;  }   **input**[type="text"] {  padding: 10px;  border-radius: 5px;  border: 1px solid #ccc;  font-size: 16px;  }   **button** {  padding: 5px 10px;  border: none;  border-radius: 5px;  background-color: #007BFF;  color: white;  font-size: 14px;  cursor: pointer;  }   **button**:hover {  background-color: #0056b3;  }   .patient-data {  background-color: #fff;  border-radius: 5px;  padding: 20px;  box-shadow: 0 2px 4px rgba(0, 0, 0, 0.1);  }   **table** {  width: 100%;  border-collapse: collapse;  margin-top: 10px;  }   **th**, **td** {  padding: 10px;  text-align: left;  border-bottom: 1px solid #ddd;  }   **th** {  background-color: #007BFF;  color: white;  }   .no-record {  text-align: center;  font-style: italic;  color: #888;  }  </style> </head> <body>  <h2>Search Patient by Unique ID</h2>  <form method="get">  {{ form.as\_p }}  <button type="submit">Search</button>  </form>   {% if patients %}  <div class="patient-data">  <h3>Patient Data:</h3>  <table>  <tr>  <th>First Name</th>  <th>Last Name</th>  <th>Unique ID</th>  <th>Date of Birth</th>  </tr>  {% for patient in patients %}  <tr>  <td>{{ patient.user.first\_name }}</td>  <td>{{ patient.user.last\_name }}</td>  <td>{{ patient.uniqueID }}</td>  <td>{{ patient.dob }}</td>  </tr>  {% endfor %}  </table>  </div>  {% else %}  <p class="no-record">No patient record found. Please try searching again.</p>  {% endif %} </body> </html> |
| --- |

patientMgtApp

1.urls.py

| **from** django.contrib **import** admin **from** django.urls **import** path, include   urlpatterns = [  path('admin/', admin.site.urls),  path('commoninfo/', include('commoninfo.urls')) ] |
| --- |

2. settings.py

| INSTALLED\_APPS = [  'commoninfo.apps.CommoninfoConfig',  'django.contrib.admin',  'django.contrib.auth',  'django.contrib.contenttypes',  'django.contrib.sessions',  'django.contrib.messages',  'django.contrib.staticfiles', ] |
| --- |