

Web Technologies and Applications Project

Title : Appointment booking system.

Summary:

Our aim is to create a web application using various full stack development tools to mimic an appointment system for a private practice. Users would be able to book consultations with various doctors based on their availability.

Web Framework: The web framework used to create this project was Django.

Front end: The content of the various user interactive pages was created using HTML with CSS for styling all the pages across the application in an uniform manner. Responsiveness of the pages was achieved using Bootstrap. JavaScript functions were used for DOM manipulations and Session cookies are used to manipulate sessions for eg, in login functions. Ajax and RESTful API's were used to communicate with the backend.

Back end: The server side logic and database connectivity uses python. The database used is SQLite 3. Django Forms and Models is used across the project. A superuser 'admin' is created to directly add/edit/delete tables from the database. (**Note:** The username for **superuser 'admin' uses the password 'admin'**, Django didn't let me change it the password requested in the coursework)

Functionality Implemented:

i. Login

There are 3 types of users: admin, patient and doctor. We can book appointments only if we login to the system with the registered uname and password stored in the db(List of user names in the table below). Once logged in the user can book appointment with any doctor available in the search list. All the basic functionality of login is implemented, like wrong user inputs are handled. And once you login, based on the type of user we are redirected to their respective home pages (Session storage, AJAX and JS used to implement this functionality).

Based on the type of user, the user should be redirected to respective home pages

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Call Now Book online appointment Home Logout

Admin users page

Admin list Patient queries Add new user

Tasks to be completed today

Schedule appointment for nurse recall ☒

Call back for patients ☐

Add new users ☐

Follow up on medicine orders from Pharmacy ☐

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Doctors page

Appointments Patient Records

Patient Padmavathi Sivalingam on 09/06/21 at 14:00

Patient Pijochu Pkemon on 17/06/21 at 10:30

Patient Padmavathi Sivalingam on 21/06/21 at 14:30

Patient Pijochu Pkemon on 17/06/21 at 10:30

Patient Pijochu Pkemon on 18/06/21 at 15:00

Patient Padmavathi Sivalingam on 17/06/21 at 14:00

Patient Padmavathi Sivalingam on 21/06/21 at 14:30

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Call Now Book online appointment

if logged in as patient, we are redirected to the search page

You can search for your Specialist based on their name or department

Department: All Specialist: All Search

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ii. Searching for a doctor based on department or doctor name

Users can search for a doctor based on the doctor name or department from the dropdown menus that are populated dynamically from values in the db tables. We need to set dropdown values and click on search button. Then we can click on the 'Book Appointment' button to book appointment with the doctor. If we are already logged in, then we are redirected to the appointment booking else we need to log in to book appointment. Admin and Patients can book appointments.

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You can search for your Specialist based on their name or department

Department: Gynecologist Specialist: Dr Vidya Varadarajan Search

We can set the dynamically changing dropdowns and click 'search' button to display the doctor cards

Dr Vidya Varadarajan
Department: Gynecologist

Book appointment

Click on 'Book Appointment' button to book an appointment. If logged in, we are redirected to the appointments page, else redirected to the login page.

iii. Booking an Appointment

To book an appointment, choose a doctor from the search page. If you are a patient, all your details are automatically filled in the form and you won't be able to view any fields. You will just have to choose the date and the available appointments will appear. We would be able to choose only free appointment times. If the appointment is already booked, then we won't be able to book the appointment at the same time. If you are booking an appointment as an admin, then we need to enter the patient's name and patient id. (Note : use date 17/06/2021 to check this functionality as there are appointments for all doctors on that date and you won't be able to book appointments in time slots that are already booked)

The screenshots illustrate the appointment booking process for an admin user and a patient user.

Admin User Flow:

- Appointment request:** The admin user is prompted to enter the patient's name and ID. The form shows "Patient Name: Mary Kom" and "Patient Id: 1". A red box highlights these fields with the text: "If, admin type user tries to book appointment, they would need patients name and id. If patient type user books appointment, the user details are filled by the session storage".
- Appointment request:** The admin user is prompted to choose an appointment date. The form shows "Choose Appointment Date" and "dd/mm/yyyy". A red box highlights the date field with the text: "Admin user".

Patient User Flow:

- Appointment request:** The patient user is prompted to choose an appointment date. The form shows "Choose Appointment Date" and "dd/mm/yyyy". A red box highlights the date field with the text: "Patient user, All values are dynamically set".
- Appointment request:** When the date is chosen (17/06/2021), a list of available time slots is displayed. The text "When date is chosen, List of available time slots is displayed" is shown. The time slots are: 10:30, 11:30, 12:30, 13:30, 14:30, 15:00, 15:30, 16:00, 16:30. A red box highlights the 10:30 slot with the text: "Disabled and user cant book appointments then".

Unavailable time slots: The text "Unavailable time slots are disabled using Ajax and JS. Users should be able to book only timeslots that are not disabled" is shown.

iv. Doctors viewing their own appointment lists

When we login as a doctor, we should be able to view the appointments for the particular doctor displaying patient name, date and time of appointment.

When logged in a user doctor, list of appointments should be displayed dynamically with the patient name, date and time. If there are no appointments, then 'No appointments' message is displayed.

Doctors page

AppointmentsPatient Records

Patient Padmavathi Sivalingam on 09/06/21 at 14:00

Patient Picachu Pokemon on 17/06/21 at 10:00

Patient Padmavathi Sivalingam on 27/06/21 at 15:30

Patient Picachu Pokemon on 17/06/21 at 10:30

Patient Picachu Pokemon on 16/06/21 at 15:00

Patient Padmavathi Sivalingam on 17/06/21 at 14:00

Patient Padmavathi Sivalingam on 21/06/21 at 14:30

v. Application's admin user

When we login as an admin, we should be able to book appointments, add new patient and create new logins for various new users.

Admin users page

Todo listPatient queriesAdd new user

Call Back patient

Book Appointment

Change or Cancel Appointment

Update Patient record

Add patient record

Admin user can Book Appointment, Add a new patient record. To change or delete patient records, need to login as superuser.

Admin users page

Todo listPatient queriesAdd new user

Add a login account.Names and ids are required for registered doctors,patients and admins to create logins

Uname:

Psswd:

Department:

Name:abc

Givenid:0

Save

Admin users can create new login ids for patients/doctors/admin

vi. Other supporting links : Contact us, submitting queries, Blog with game

To give the application a completeness, pages like contact us and blog are available.

Blog showcases a game which keeps count of the number of spots caught in one minute and some links regarding covid.

Contact us page has some basic details of the practice and a place to submit queries.

Contact us

ESSVEE HOSPITALS

✆ 506, M.T.H. Road, Ambattur, Chennai - 600053.

Call Us

044-20569940

044-26580181

044-20581010

Have our Customer Service Representative call you

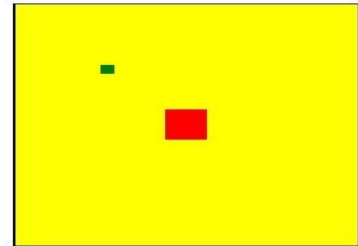
Name:

Phone:

Email:

Query:

Queries are submitted to the database.



Time left is 55 seconds

Congrats !!! Your score is

Let's see how many green bugs can we catch using the red square

Click the start button and use the arrow keys to move the red button

Click the button to start game

[Try It]

Game has a link in the blog

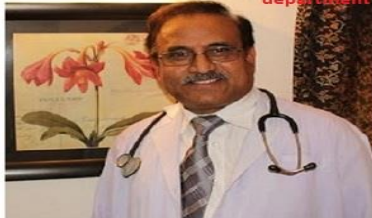
Login link



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Link to search for doctor

based on name or department



Welcome to Essvee Hospital ESSVEE Multi-Speciality Hospital caters to patients from all classes of society. Under the leadership of Chief Surgeon and Laparoscopic Surgeon, DR. S. VARADARAJAN, M.S., F.I.C.S., ESSVEE Hospital has been providing medical care and surgical services with patient-centered approach. Multiple Medical and Surgical Specialities are available under one roof, provided by various Specialist Doctors with utmost dedication.

ESSVEE Hospital is proudly striving forward into its 21 st Year in Healthcare in this region. Hailing from nearby towns, villages and even many areas of Chennai City extending upto 40 Kms radius from Ambattur. Our patients' testimonies are teemed with high satisfaction regarding quality of medical care and our approach towards patients at our Centre. We welcome you to ESSVEE Hospital to experience a high quality Medical and Surgical Care and be part of our Healthcare journey. We wish you a speedy recovery.

vii. Super user 'admin'

Super user admin can login and directly add, delete and update the database.

Again note : super user admin's username is admin and password is admin.

User name table

id	usertype	username	password
1	admin	admin	admin
2	doctor	nitya	nitya
3	doctor	chocka	chocka
4	doctor	neethu	neethu
5	doctor	neha	neha
6	admin	admin1	admin1
7	patient	paddy	paddy
8	patient	pikachu	pikachu
9	patient	donald	donald