

SpaceJam 2021 Project Description

Team Name: Internal Server Error

Team Members:

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Project Title: MMA-MakeMyAppointment

Project Domain:

Web Development, Natural Language Processing.

Abstract:

Ever since the COVID-19 Pandemic happened, people are getting more and more concerned about their well-being and health. Testing labs for various diseases are flooded with loads of appointments and due to lack of proper management of the appointments, applicants end up waiting a lot especially during rush hours. We will try to develop a solution for this problem using geolocation APIs with the added functionality of providing users with negative as well as positive feedbacks of the centers they choose.

Introduction:

The main problem at hand is the spreading of the COVID-19 virus majorly due to overcrowding at various places. Testing Centers stand out among these. These conditions majorly arise due to poor resource management on the part of testing centers and these centers mostly overestimate their capacities and end up getting overcrowded.

Our solution aims at developing a robust portal that will give the user multiple options for different types of tests with complete details of all slots for a particular date including their vacancies. We will be filtering testing centers based on their reviews and also the distance from the user using geolocation APIs.

One existing solution for this is online booking on websites of different centers but users will prefer seeing multiple options with proper details on a single portal rather than navigating on the web and wasting their precious time.

Approach

(The workflow might change)

1. Registering users and centers with details including phone number, email id, address and verifying the same using different APIs. Medical licenses are asked additionally from the centers.
2. Rendering different centers based on a request by the user where the request includes the date and test required, the centers being rendered are selected based on their verification status and address authenticity.
3. Users are given several options to choose from and upon selection of a particular center, users are provided with complete details of the center and also all the available time-slots with their respective vacancies.
4. Upon confirmation, an appointment is saved in the database which can be accessed by the user and well as the center in which the appointment is booked
5. Additionally the user will have the feature of viewing all their previous appointments and alter their profiles.
6. Centers will have the feature of viewing all appointments scheduled for a particular date and also have the option of canceling appointments if unavoidable circumstances arise and also intimating users of their results.

Advantages of your Solution [OPTIONAL]

Our Project is a robust portal which manages all of the users' appointment as efficiently as possible and also we currently do not store any kind of results of any users, maintaining the privacy of the users completely.

Pitfalls of your Solution [OPTIONAL]

The NLP Model that we are using may not be 100% accurate and also the geolocation APIs may not accurately depict the locations.

Future Scope [OPTIONAL]

Making a complete health solution with added functionalities of uploading and storing results as well as prescriptions of users and also enabling users to book appointments with doctors and embed a video conferencing feature too.

Ease of Implementation [OPTIONAL]

It would be quite easy as it would be a website with a good UI/UX aimed at making the appointment booking process easier than ever with users getting tons of choices to choose from.

Tech Stack

Tools:

- Visual Studio Code
- Sublime Text
- Postman
- Robo 3T
- Chrome Developer Tools
- Google Colab

Languages:

- Python
- Javascript

Frameworks:

- Reactjs
- Nodejs