

# CSE471 : System Analysis and Design Project Report Project Title : Auto-Advising

Group No:, CSE471 Lab Section: 03, Summer 2023			
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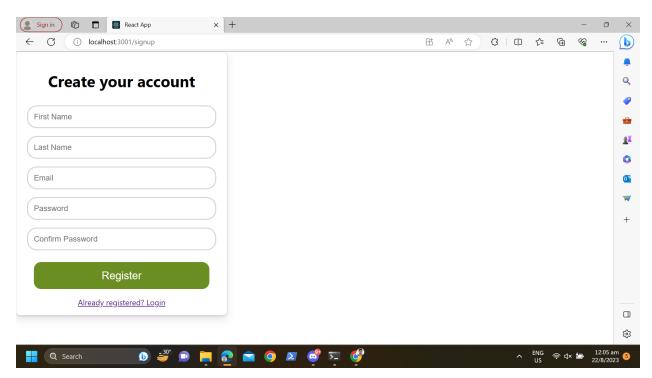
#### Introduction

Universities that have an open credit system often have a Course Advising period for students at the start of the semester. Students take courses, reserve seats and make routines out of a long course list. This can be very stressful for students, because fitting the right course at an appropriate time can sometimes require more research than the actual course. Also sometimes some students' timetables can have large gaps, which can hamper their study. The web application "Auto - Advising" is built to reduce the work and hassle of Advising. The app will take time and course name as inputs and organize a routine for the user.

#### **Functional Requirements**

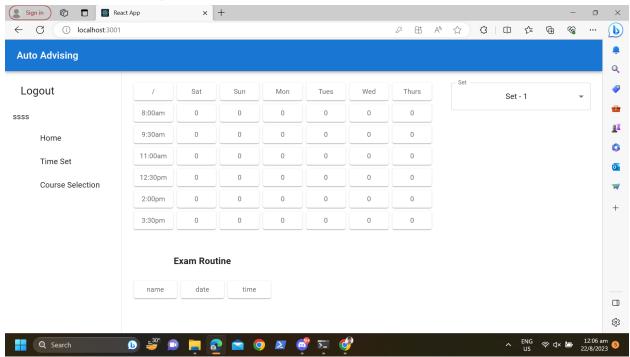
- 1. Users can Register
- 2. Users can Login
- 3. Users can set their preferred time
- 4. Users can give input about how many courses they are willing to take
- 5. Users can define group courses in 3 sets, each set can have overlapping courses
- 6. Users can see the routine and exam schedule after the auto-advising process

**User Manual** 



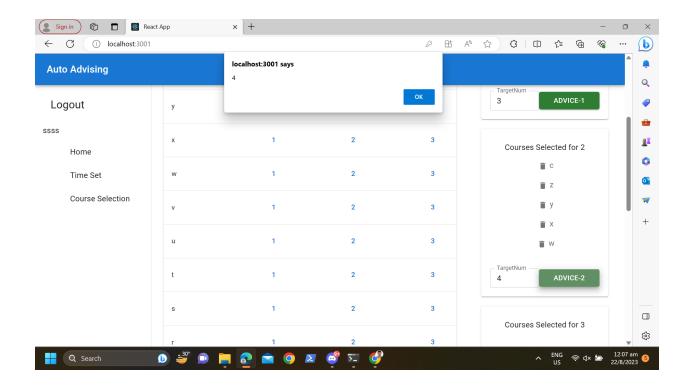
At first a new user needs to register with appropriate credentials.

Then the user will login with the same credentials.

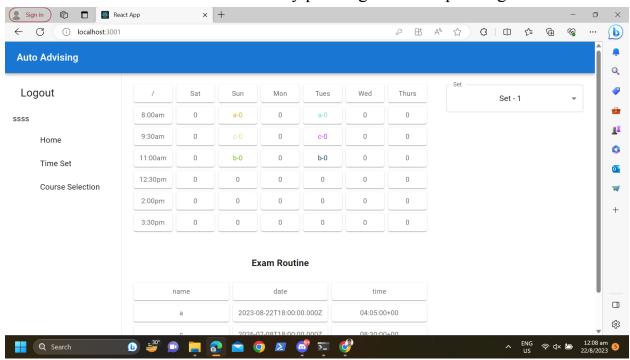


Then the user will see the homepage, it will hold an empty routine.

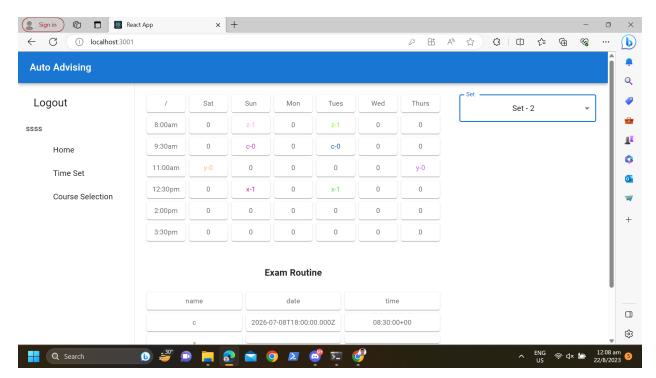
Then the user will set time in timeset tab, he will select the preferred timeslots



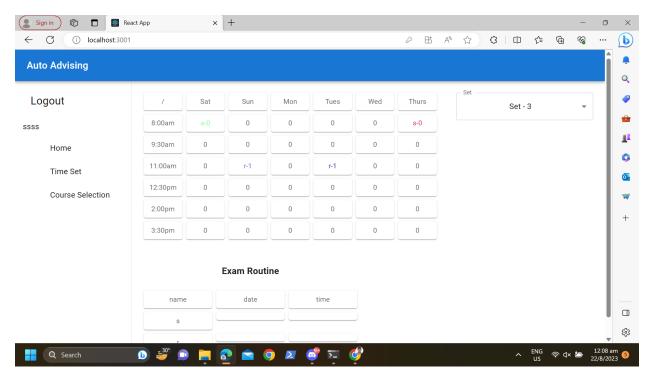
After that he will need to select courses and the number of courses he wants to take in different sets. Then he will submit by pressing the corresponding buttons.



Then at the home page he can see his advised courses. He can see 3 sets of advising results from the select button on the right.



This picture shows set 2 results



This picture shows set 3 results.

#### **Frontend Development**

The frontend was developed using React, a frontend library of JavaScript. Material UI was used on top of React to easily use prebuilt components.

#### **Backend Development**

Backend was developed using Express, a backend library of JavaScript. An API was built to fetch and save data to the database using Express, which also automatically arranges courses to the preferred time slot.

### **Technology (Framework, Languages)**

PERN tech stack was used to develop the webapp. PERN consists of Postgres, Express, React, Node. All of them except postgres is JavaScript based.

## **Github Repository**

 $Link: https://github.com/MahamudulHimel/Auto\_advising.git$ 

#### **Individual Contribution**

ID	Name	Contribution
2030139	Mahamudul Hasan Himel	Everything 🙂