**Project Title:** Online Tutoring Application

**Website Name: Tutor-asium** 

## 1. PROJECT DESCRIPTION:

Major functionalities:

- User signup: Register a new user to the system.
  - Check the new username or email address if it's already registered to the system using AJAX.
  - o Form validation: Check if all mandatory fields are filled out.
  - Check if the password is strong enough. Define the rules of having a strong password.
     User passwords should be hashed, and hashed versions of passwords should be stored in the database.
- User login
- List all tutors in the system. Users should be able to "Search" for a specific tutor name or search for tutors for a given subject (area of expertise).
- Users will be able to add tutors to their favorite list, access their favorite list, and remove tutors from the list.
- Users should be able to rate a given tutor. They will also enter their feedback/comments.
- Tutors will be able to sign-up for a tutor account. They will enter their detailed information (subject list, about me, working hours) and upload a profile picture. They should be able to edit and update these details as well.
- Users will be able to make appointments with a tutor of their choice. For making appointments, the availability of the tutor should be checked (both working hours and previously booked appointments).
- For users, upcoming appointments should be listed along with tutor name, date, and time information.
- For tutors, upcoming appointments should be listed along with student, date, and time information.
- For users, total tutoring hours completed should be shown.
- For tutors, total tutoring hours completed, and average rating should be shown.

## 2. DATABASE DESIGN:

### **TUTORS:**

```
[{
    "_id": {
        "$oid": "62560653ac7a63e1af0cf0a2"
    },
    "name": "Victor Jay",
    "about_me": "I have been tutoring for 10 years now and it's truly been one of the most rewarding experiences of my life.",
```

```
"experience": "15",
 "expertise": [
  "Physics"
 "tutor_img": "",
 "hours": "10",
 "rating": "5"
},{
 "_id": {
  "$oid": "62560653ac7a63e1af0cf0a5"
 "name": "Adam",
 "about_me": "Adam, a master tutor, graduated from Montclair State University and has been a passionate educator
for thirteen years.",
 "experience": "13",
 "expertise": [
  "Arts"
 "tutor_img": "",
 "rating": "4.5",
 "hours": "12"
},{
 "_id": {
  "$oid": "62560653ac7a63e1af0cf0a7"
 "name": "Asha",
 "about_me": "Hello, I am Asha. I am passioante about teachinh. My areas of expertise include general science and
Math.",
 "experience": "7",
 "expertise": [
  "Math"
 "tutor_img": "",
 "hours": "14",
 "rating": "3.8"
},{
 "_id": {
  "$oid": "62560653ac7a63e1af0cf0a8"
 "name": "Ellen",
```

```
"about_me": "I am a recent retired college professor of environmental engineering. I have degrees in computer
science and chemical engineering.",
 "experience": "15",
 "expertise": [
  "Chemisrty"
 "tutor_img": "",
 "hours": "6",
 "rating": "4.8"
},{
 "_id": {
  "$oid": "62560653ac7a63e1af0cf0aa"
 "name": "Martin A.",
 "about_me": "I am highly motivated math and science tutor with over 15 years of experience. I have over 10 years of
hands-on experience working as a research chemist.",
 "experience": "15",
 "expertise": [
  "Math"
 "tutor_img": "",
 "hours": "5",
 "rating": "4.9"
},{
 "_id": {
  "$oid": "62560653ac7a63e1af0cf0ab"
 "name": "Matthew M.",
 "about_me": "Matthew, a master tutor, is a caring, compassionate, and a thorough teacher and tutor. ",
 "experience": "3",
 "expertise": [
  "Math"
 "tutor_img": "",
 "hours": "13",
 "rating": "3.9"
},{
 "_id": {
  "$oid": "627c3b4a8f071e8aa1bb9706"
```

```
"name": "Rock.",

"about_me": "Good teacher ",

"experience": "5",

"expertise": [

"Math"

],

"tutor_img": "",

"hours": "14",

"rating": "4.0"

}]
```

### **USERS:**

```
[{
 "_id": {
  "$oid": "627a869022ba0bd3b0a664e0"
 "username": "emily",
 "email": "emily@abc.com",
 "password": "$2a$10$qIWQ5pubinhVH5I72zJYUuAgPdoBmI1EJcUMQcE0hDBu4A8.ZYp8K",
 "favorites": [
  "62560653ac7a63e1af0cf0a2",
  "62560653ac7a63e1af0cf0a2"
 "hours": "14"
},{
 "_id": {
  "$oid": "627be2c83ad963f03698fb3a"
 "username": "jacob",
 "email": "jacob@abc.com",
 "password": "$2a$10$qIWQ5pubinhVH5I72zJYUuAgPdoBmI1EJcUMQcE0hAbcde.ZYp8K",
 "favorites": []
},{
 "_id": {
  "$oid": "627c1e96c5f4c71328d1afea"
 "username": "jane",
 "email": "jane@abc.com",
 "password": "$2a$10$qIWQ5pubinhVH5I72zJYUuAgPdoBmI1EJcUMQcE0hAbcde.ZYp8K",
```

```
"favorites": []
}]
```

#### **APPOINTMENTS:**

```
[{
    "_id": {
        "Soid": "627c3bfbc5f4c71328d1aff4"
    },
    "tutor": "Victor Jay",
    "username": "emily",
    "date": {
        "$date": "2022-05-11T22:00:00Z"
    }
},
    "_id": {
        "Soid": "627c3c16c5f4c71328d1aff5"
    },
    "tutor": "Victor Jay",
    "username": "jacob",
    "date": {
        "$date": "2022-05-11T23:00:00Z"
    }
}]
```

## **RATINGS:**

```
[{
    "_id": {
        "$oid": "627c3686c5f4c71328d1afed"
},
    "username": "emily",
    "tutorId": "62560653ac7a63e1af0cf0a5",
    "ratings": "4.5",
    "feedback": "Good explainer"
},{
    "_id": {
        "$oid": "627c3726c5f4c71328d1afee"
},
    "username": "emily",
```

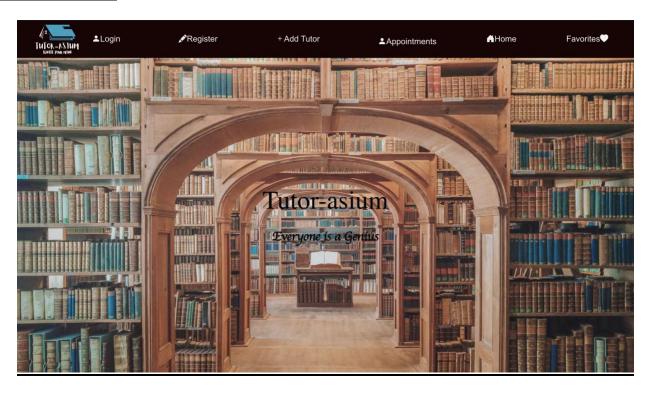
# 3. <u>LANGUAGES/FRAMEWORK USED:</u>

Front-end: HTML, CSS, JavaScript, Bootstrap, React.js

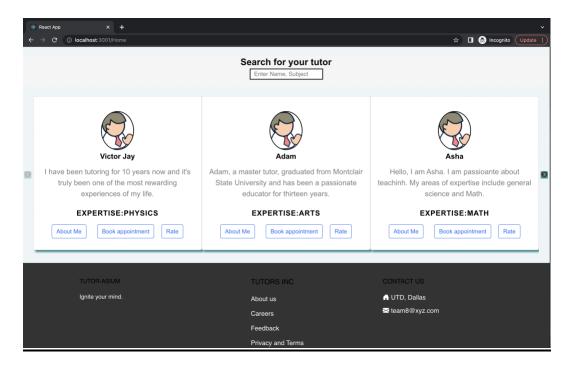
Back-end: JavaScript, Node.js, Express.

Database: MongoDB

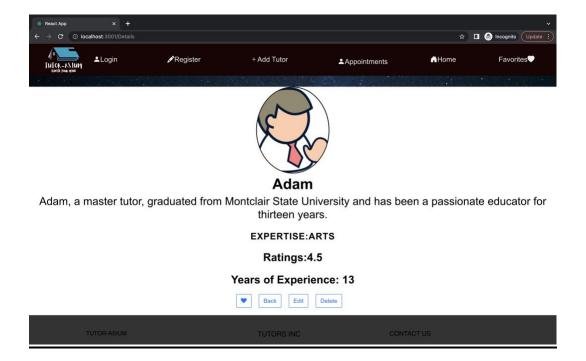
# 4. **SCREENSHOTS:**



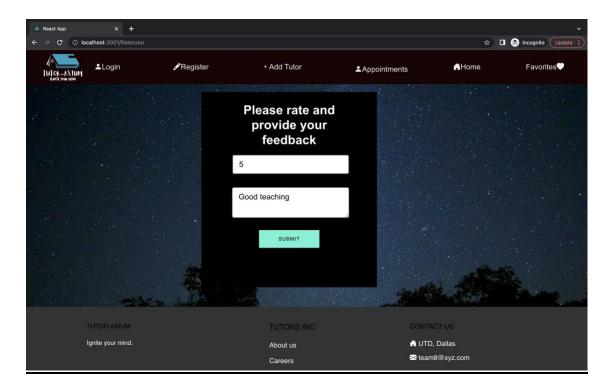
Screenshot 1: Home Page



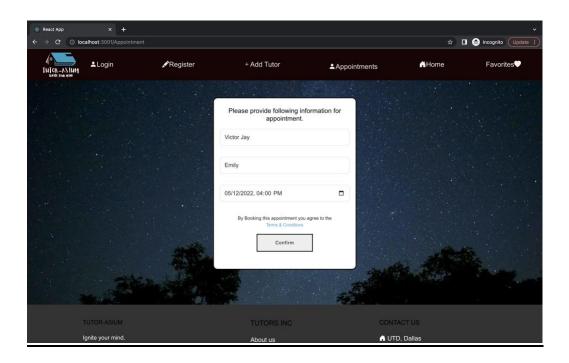
Screenshot 2: Home Page (Tutor List page)



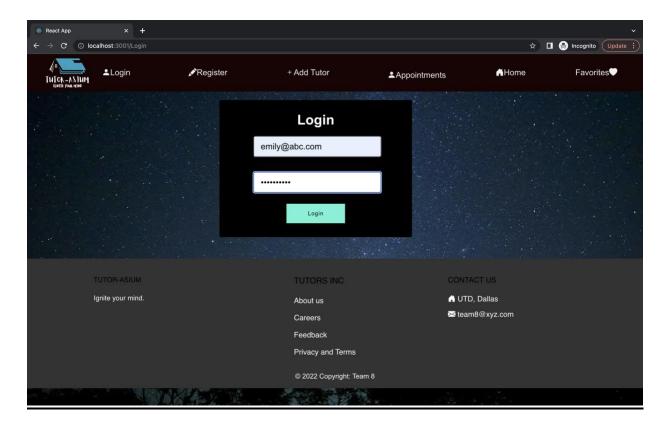
Screenshot 3: Tutor detail



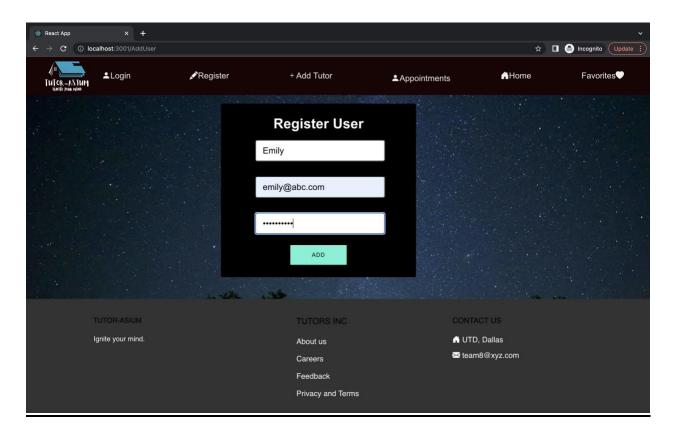
Screenshot 4: Feedback page



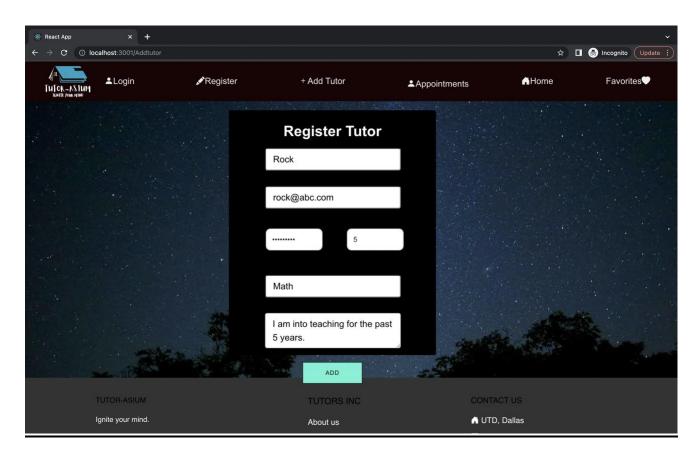
Screenshot 5: Appointment Page



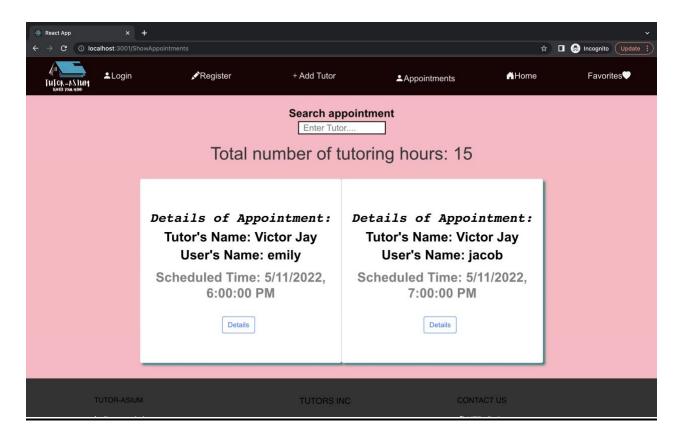
Screenshot 6: Login Page



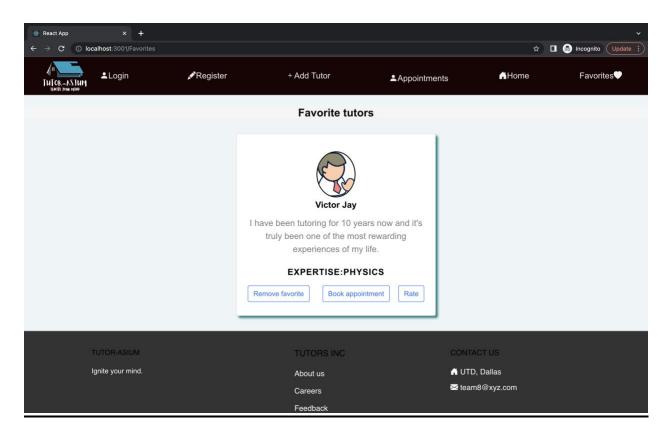
Screenshot 7: Register User Page



Screenshot 8: Register tutor Page



Screenshot 9: Appointments Page



Screenshot 20: Favorite tutors Page