Project: Clinic Reservation System (Phase 1: 100 points + 20 points bonus)

Imagine that we are designing a web application for clinic appointment reservations.

It is required to implement the following features:

1- Sign In (10 points)
2- Sign up (10 points)
3- Doctor set his schedule. (Inserting a slot) (10 points)
4- Patients select doctor, view his available slots, then patient chooses a slot. (10 points)
5- Patient can update his appointment by change the doctor or the slot. (10 points)
6- Patient can cancel his appointment. (10 points)
7- Patients can view all his reservations. (10 points)

Expectation:

- As per the stack specified for each team(setting the team tech stack is generated randomly Link here
- you need to implement.
  - Front end layer consists of simple screens to simulate successful flow
  - Backend layer contains 7 features APIs
  - Database layer
- Successful integration between the 3 layers (10 points)
- Application build successfully, flows are successfully implemented (10 points)
- Code (front end, backend) pushed on github (10 points)

Bonus (20 points):

Integrate a messaging feature like kafka or rabbitMq to notify doctor when a patient reserve, update or cancel a reservation.

By creating topic called “clinic_reservation”

Event structure:

{“doctorId”:”111”,

“patientId”:”222”,

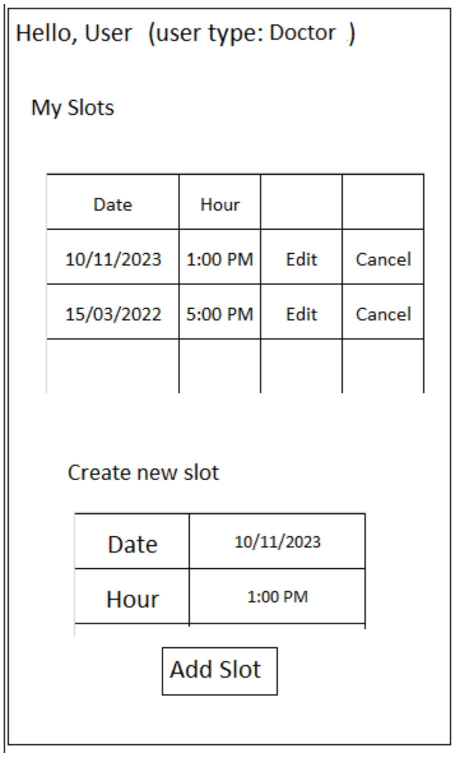
“Operation”:”ReservationCreated” **or** ”ReservationUpdated” or ”ReservationCancelled” }

Create page in doctor with one button to fetch the doctor’s messages.

Ground rules:

- **Projects will be submitted via google classroom.**
- **Deadline: 11 November 2023 11:59 pm**
- **Late Submission till 13 November 2023 11:59 pm with penalty -20 points AND bonus part will not be considered.**
- **Violating the technology stack for team: -20 points**
- **You need to submit one zip folder its name following schema: {GroupNum_ID1_ID2_ID2_TA name.zip}**
- **Violating naming convention: -5 points**
- **Cheating cases**: **-5 Marks (not points)** from the actual year work grades.
- **Project grading criteria** : Link
- **Additional resources: (suggested resources you can start with)**
  - Go lang : https://medium.com/@rasoky.maulana/create-a-crud-rest-api-using-mysql-golang-part-2-5af4942abdd2
  - Python: https://techarise.com/restful-api-in-python-mysql/
  - NodeJs: https://www.bezkoder.com/node-js-rest-api-express-mysql/
  - C # : https://www.youtube.com/watch?v=O5hKoBV3vaU
  - React: https://www.bezkoder.com/react-crud-web-api/
  - Angular https://www.bezkoder.com/angular-16-crud-example/

Suggested screens: feel free to add whatever you want but make it simple.



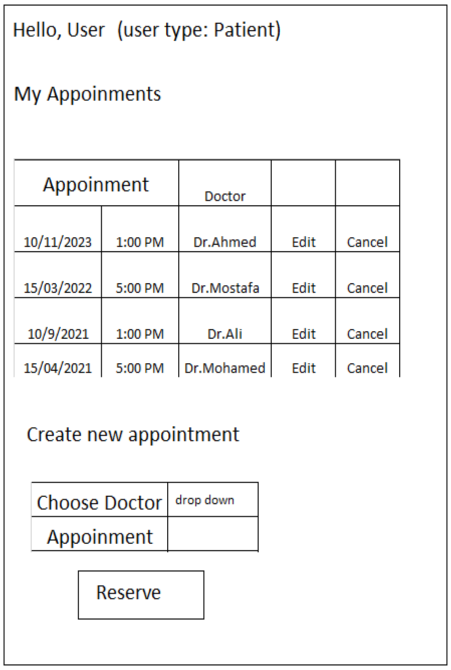
Hello, User (user type: Doctor)

My Slots

Date	Hour		
10/11/2023	1:00 PM	Edit	Cancel
15/03/2022	5:00 PM	Edit	Cancel

Create new slot

Date	10/11/2023
Hour	1:00 PM



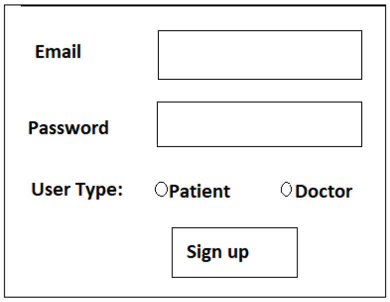
Hello, User (user type: Patient)

My Appoinments

Appoinment		Doctor		
10/11/2023	1:00 PM	Dr.Ahmed	Edit	Cancel
15/03/2022	5:00 PM	Dr.Mostafa	Edit	Cancel
10/9/2021	1:00 PM	Dr.Ali	Edit	Cancel
15/04/2021	5:00 PM	Dr.Mohamed	Edit	Cancel

Create new appointment

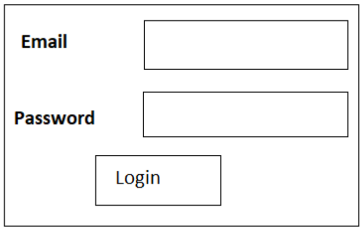
Choose Doctor	drop down
Appoinment	



Email

Password

User Type: ○Patient ○Doctor



Email

Password