CA2 – CRUD Application

Module Name	Lecturer Name
Front-End Development	Mohammed Cherbatji

Title of Brief
Medical Clinic Application

Percentage of Overall Grade	50%
Date handed out	06 November 2025
Due date	**Code:** 15 December 2025 **Screencast and Self-Assessment Form**: 18 December 2025
Individual or Group	Individual

Description

You are required to create a React application that allows a user to view and manipulate data about doctors, patients, appointments, prescriptions, and diagnoses at a medical clinic. Access to the data is provided by a REST API, which is provided with this assignment.
The requests supported by the REST API are outlined below. (See Appendices)

API Documentation (https://ca2-med-api.vercel.app/docs)

POST Requests to /login or /register do not require authentication.

GET requests to /doctors or /patients do not require authentication

All other endpoints require authentication (A JSON Web Token).

The REST API is implemented within a backend application. You are required to extend this application by building a React frontend application which allows a user to login, and once they are logged in, to view, create, edit and delete doctors, patients, appointments, etc. Your code must be commented to explain how it works.

You are required to submit a screencast (as an MP4 file; 15 minutes) explaining the principles of front-end web application frameworks, as well as the design, implementation, and testing of your application.

Your screencast must also showcase and explain the following:

- A wireframe/lo-fi prototype of your application using Figma or similar.
- The role of the different elements of the React environment that you have used, for example React components and the React router;
- The structure and role of your React components; ie. Pages/components/utilities
- The relevant details of any library that you have used.

- Demo your application and discuss how you have designed, implemented, tested, and debugged the application

Upload the following in Teams:

- Screencast,
- Self-Assessment Form,
- Link to GitHub repository containing the source code,
- and Link to the online hosted version (if hosted).

README.md file:

- Describe what is in the repo
- This content is used to showcase your application to visitors of your site
- Include link to hosted version (if hosted)

You must regularly commit and push to GitHub ensuring commit messages and code comments document your understanding of how your application works.

If you use any online resources, including tutorials, you must provide references to these resources and you must document how you used them.

A combination of following are required for a B+/A grade:

- Styling using a Tailwind CSS based CSS Framework (DaisyUI, Material, ShadCN)
- Transitions & Animations (Motion, React Bits)
- The use of an additional API
    - https://www.abstractapi.com/holidays-api
    - https://calendarific.com/
    - https://developer.accuweather.com/apis
    - https://openweathermap.org/current
- The API list above is an example, you could use them to show weather reports, public holidays, etc.
- Complex deletion logic (e.g. deleting a doctor also deletes related appointments and prescriptions)
- Hosted online with a link to the application in your presentation
    - Firebase
    - Netlify
    - Vercel
    - Cloudflare Pages

Deliverables

1. Source code via GitHub including README.md file describing your repo
2. Screencast
3. Self-Assessment Form
4. Relevant Links (GitHub repo, online version, other)

Submission

Medical Clinic Application
The deadline for the final git commit is **11:59pm Sunday 15th December**
The deadline for your Screencast and Self-Assessment Form is **11:59pm Tuesday 18th December**

- **Source code** with comments and README file via GitHub
- **Screencast** uploaded to Teams assignment
- **Completed Self-Assessment Form** uploaded to Teams assignment
- **Link to your code**
- **Link to the live site, if applicable**

For each day that your assignment is submitted late, 5% will be deducted. Assignments submitted more than 7 days late will not be accepted. Late submissions must be submitted to the programme co-ordinator, along with a late submission form.
You may also be required to demonstrate your application and code to your lecturer. This is a pass/fail component of the assignment, i.e. if you do not schedule and demonstrate your code satisfactorily you will receive a grade of F.

Marking Scheme

Category	Description	Weighting %
Wireframes/Rest Client	• Testing API Endpoints in a REST Client • Designing a wireframe	5
Login/Registration	• Protected routes • Prop drilling vs Context • Custom hooks	7.5
Home page & UI Design	• Overall UI/UX design of you web application. • Charts/Dashboard • Linking to other pages	10
Doctors & Patients CRUD	• How doctor/patient information is displayed (UI/UX) • CRUD operations working correctly • Error Handling	7.5
Appointments CRUD	• How appointment information is displayed (UI/UX) • CRUD operations working correctly • Error Handling	10
Other CRUD	• Diagnoses, Prescriptions (UI/UX) • CRUD operations working correctly • Error Handling	15
Code/Component Structure	• The overall code quality and structure of your application. (Pages, Routes, Components)	5
Extras – deployment, styling, state, animations/transitions, APIs etc.	• Hosting • Frameworks • State Management • Animations • See list of extras • Complexity	15
Presentation – GitHub, README, Demonstration, Reflection	• GitHub README file • Submitted all relevant files • Discuss design and implementation of your web application • Reflection • Demo	25

Notes

In case of problems:	If you feel your progression is being affected due to matters beyond your control, it is your responsibility to discuss this with the relevant lecturer(s), programme chairperson or another representative of the Institute. They will advise you on how to proceed.
Late submission:	If you cannot submit an assignment before the specified deadline, please inform the programme chair and relevant lecturer(s) that you will be submitting an assignment late before the deadline has passed. You should also indicate the date when you will be able to submit the assignment. If you miss a deadline for an assignment for any reason, you must complete a Late Submissions Application Form, which is available in the programme handbook. This form, along with the completed assignment, should be submitted to the Programme Chair as soon as possible. Individual lecturers should not be approached regarding late submissions. **Note: that late submissions are not 'automatically' granted, a valid justification must be provided.**

Appendices

API Documentation (https://ca2-med-api.vercel.app/docs)