

LabCom

with React and Node.js

In this website, I'll show the different framework skills used and the functional and technical specifications used for LabCom website. I will also explore a Test Case Presentation for reserving a test from a preferred lab and a work situation that required research.

Framework Skills Covered

React

React is a JavaScript library used for building user interfaces and UI components. It enables developers to create reusable UI components and efficiently update and render UI elements based on data changes.

Node.js

Node.js is an open-source, cross-platform JavaScript runtime environment. Node.js enables developers to run server-side JavaScript code, which is essential for building web applications and APIs with JavaScript.

Express.js

Express.js is a popular Node.js web application framework used for building APIs and web applications. It provides a set of built-in features and middleware for handling requests and responses, routing, and more.

LabCom Functional Specifications

LabCom is a web-based application designed to facilitate convenient and secure reservations for a variety of medical laboratory tests across different locations. It provides users with access to detailed laboratory information such as testing categories, appointments, and fees. Users can create an account, manage requests, schedule appointments, and view test results.

Technical Project Specifications

Programming Language	JavaScript
Framework	Node.js / Express.js / React
Database	MongoDB
Authentication	Passport.js / JWT
Hosting Services	AWS
Payment Gateways	Stripe / PayPal
Testing Framework	Jest / Enzyme
Hosting Environment	Docker Containers

Test Case Presentation: Reserving a Test from a Preferred Lab

Reserving a test from a preferred lab requires certain preconditions to be met and certain steps to be followed:

1. Preconditions:

- User account creation and authentication via Passport.js
- Laboratory search and selection
- Availability of Desired Test

2. Steps:

- Login to the website
- Navigate to the laboratory search field and select the preferred location
- Select the desired test and view lab availability
- Click on the desired lab and schedule a date and time for the appointment

3. Expected Results:

- User gets confirmation of successful booking

Description Of A Work Situation That Required Research

Recently, we had a request from a client to implement an SMS notification system for their laboratory services to provide the necessary updates and reminders for their clients. The team had to research and evaluate different SMS gateway providers, security protocols and decide on an implementation approach that would work best with the existing architecture. After thorough research, it was decided to use [Twilio API](#), a cloud communications platform that allows us to send SMS messages in a scalable, secure and cost-effective manner.

Top 5 Medical Lab Testing Categories

1 Blood Test

Blood tests are used to determine the composition of your blood, such as the number of red and white blood cells and platelets, hemoglobin levels, and more, which may give insight into various health conditions.

2 Urine Test

Urine tests are used to detect and diagnose various urinary tract and kidney infections and diseases, including bladder infections, kidney stones, and more.

3 DNA Test

DNA testing is used to identify genetic abnormalities and diagnose hereditary diseases, including cancer and other illnesses.

4 X-Ray Test

X-rays are used to produce images of bones and internal organs, to detect bone fractures, and locate hidden foreign objects.

5 Heart Test

Heart tests are used to detect and diagnose heart diseases such as heart attacks, arrhythmia, valve disorders, blockages, and more.

Top 3 Tips for a Successful Medical Test Experience

Arriving Early

Arriving 10-15 minutes before the scheduled appointment can help in reducing the time spent and help avoid rescheduling issues due to unpreparedness.

Following Pre-Test Instructions

Following pre-test instructions can help ensure accurate test results. Not following instructions may result in false negatives or positives, or the need for rescheduling a test.

Communicating with Your Doctor and Lab

Communicating with your doctor and lab can help improve your overall testing experience. Asking questions, sharing concerns, and providing feedback can help your doctor and lab customize the testing process to your needs.