Title

Online Seminal Hall and Auditorium Booking Website

Submitted to.:
Nikita Kaushik

Submitted by:
Section: K19EG

Aditya	04
Souvik Ghosal	05
Tasnim Zotder	06

Contents

About the problem

Online hall booking the system is a very crucial and important part of an institution. Especially for a career-ready path like engineering needs frequent meetings and interactions with professionals to improve their skills. This helps a student to grow with the current needs of the global technological field. But unfortunately, many of the education institutes are unable to provide the seminar facility. Although some of the institutes have seminal hall and auditorium, due to the more number of course branches, it becomes harder to manage the system with traditional booking System.

Taking this basic problem in mind we created a simple platform for the booking system as a web platform. A department can simply scroll and select the required auditorium or seminar hall according to the targeted options and book their place. As the booking request undergoes a verification by the higher authority or the hall management, there is a less chance of misuse the platform. Here the highest authority personal is the principal of the institute. He has the access of view, edit and report.

Working Modules

There is mainly for module

Maintenance of user and seminal hall

It consists of Signup, Login and Update details of the seminal halls, users. The Administrator creates a separate account for each Department, Seminal hall in-charge, other cells like placement and training, EDMC etc, and Principal.

Booking the seminar hall

Each department has its username and password to book the seminar hall for their requirement. Through this, they can view the available dates of the seminar hall and the facilities in the hall like capacity, mic, projector, marker board and more. This provides a user-friendly environment while booking the seminar hall based on capacity and availability. The concern department head can view the list of requests. The acceptance and rejection can be viewed by the user through that log in or even by the email id.

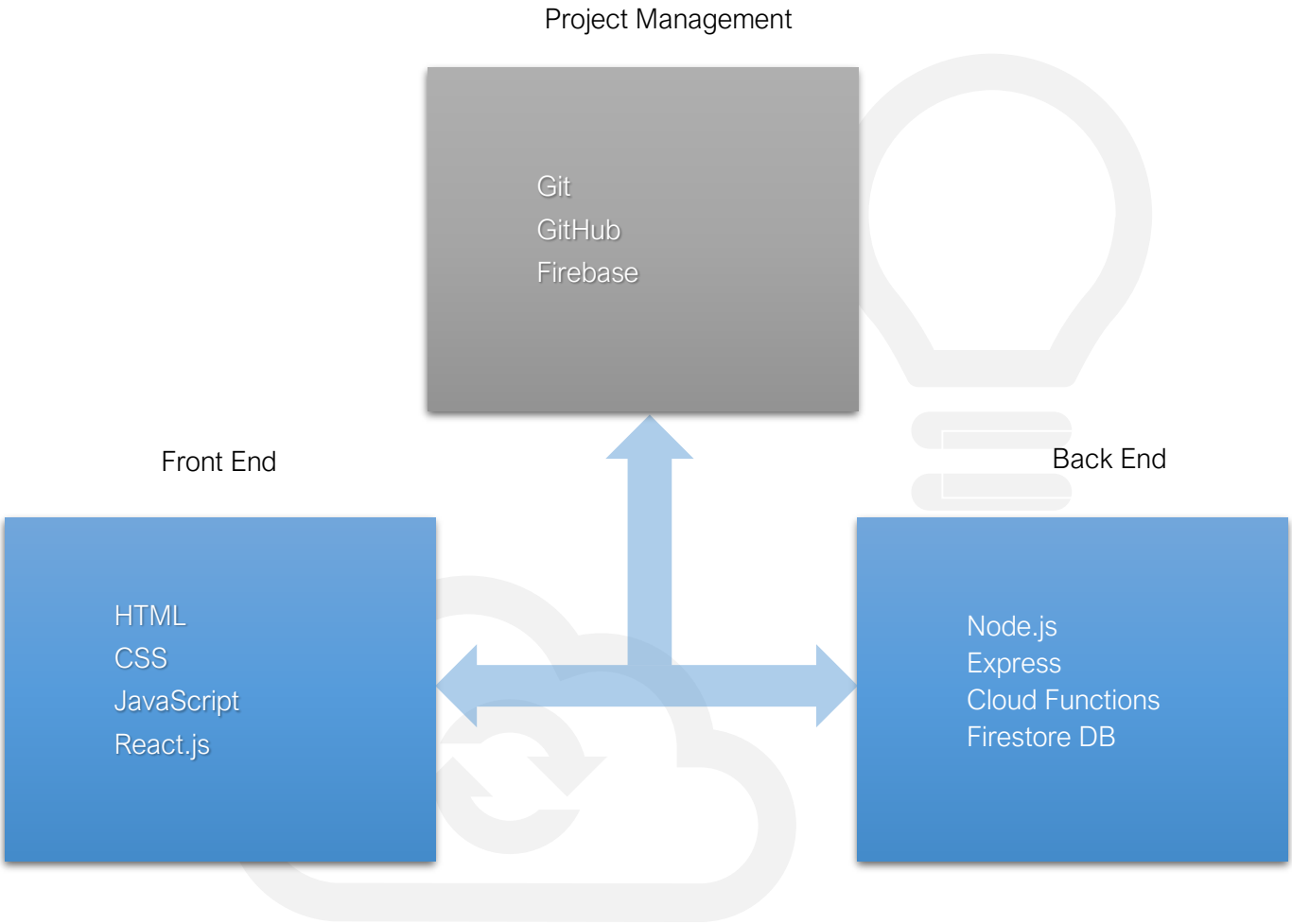
Approval and rejection by in-charge

The role of seminal hall in-charge is to check the request came to the seminal hall. When in-charge login into their account the list of new requests are displayed on their page. The request can be either accepted or rejected based on the priority of the request. If more then one request is made for the same seminar hall on the same date, after approving a particular request by seminar hall in-charge, the remaining requests are automatically rejected and the email is sent to the bookie and also it is notified on their page.

Role of Principal

The principal can view the entire process which is happening on the website and can fetch the data from the past to present who all are used the seminar hall. In an emergency case, he rejects the accepted request and the email will be sent to the booker as well as the seminar hall in-charge by suggesting alternate seminar halls.

Technology Stacks



Front End

1. HTML

Version: 5

HTML (Hypertext Markup Language) is the most basic building block of the Web. It defines the meaning and structure of web content. "Hypertext" refers to links that connect web pages, either within a single website or between websites. Links are a fundamental aspect of the Web.

2. CSS

Version: 3

Cascading Style Sheets (CSS) is a stylesheet language used to describe the presentation of a document written in HTML or XML (including XML dialects such

as SVG, MathML or XHTML). CSS describes how elements should be rendered on screen, on paper, in speech, or on other media.

We used this to make the website beautiful and meaningful by adding colours and other important UI elements.

3. JavaScript

Version: 6 (JS ES6)
JavaScript (JS) is a lightweight, interpreted, or just-in-time compiled programming language with first-class functions. Also, it is a prototype-based, multi-paradigm, single-threaded, dynamic language, supporting object-oriented, imperative, and declarative (e.g. functional programming) styles.

JavaScript is used in the front-end to add functionality to the website. This is also used to handle the API created in the back-end. Here we used ES6 JavaScript.

Back End

1. Node.js

Version: 13.x
Node.js is an open-source, cross-platform, JavaScript runtime environment that executes JavaScript code outside of a browser.

APIs were created using Node.js. Besides all the major works were using this including connecting to the database, request handling, authentication and many more.

2. Express

Version: 4.17.x
Express, is a web application framework for Node.js, released as free and open-source software under the MIT License. It is designed for building web applications and APIs.[3] It has been called the de facto standard server framework for Node.js.

3. Firestore

Firestore is a NoSQL database. It is provided by Google Cloud.

Project Management

1. Git

Git is a distributed version control system for tracking changes in source code during software development.[8] It is designed for coordinating work among programmers, but it can be used to track changes in any set of files. Its goals include speed,[9] data integrity,[10] and support for distributed, non-linear workflows.

2. GitHub

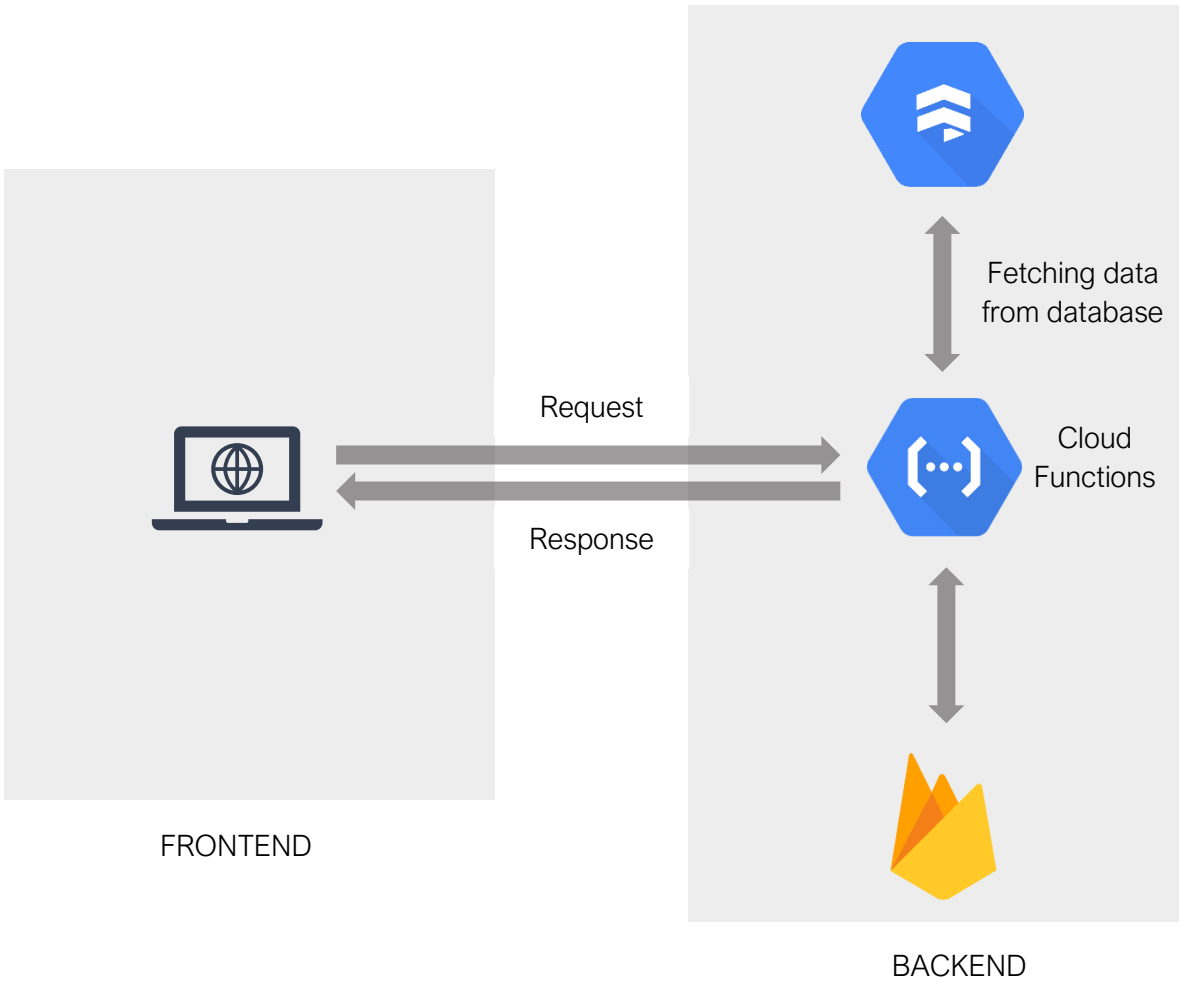
GitHub is a US-based global company that provides hosting for software development version control using Git. It is a subsidiary of Microsoft, which acquired the company in 2018 for US$7.5 billion.[3] It offers the distributed version control and source code management (SCM) functionality of Git, plus its features. It provides access control and several collaboration features such as bug tracking, feature requests, task management, and wikis for every project.

3. Firebase

Firebase is a Backend-as-a-Service — BaaS — that started as a YC11 start-up and grew up into a next-generation app-development platform on Google Cloud Platform.

We used Firebase as a hosting purpose.

Working



When a user makes a request on the browser, the request goes to backend using the help of API. Then the request undergoes a verification process which is done by Node.js. If the request comes valid then according to the request, data is fetched from database. When the data received, it sends back to the frontend as a response.

Contributors

Aditya Kashyap

Registration No.: 11903284
Roll No.: 04

Contributions

1. Website Design
2. Code Review
3. Documentation
4. Testing

Souvik Ghosal

Registration No.: 11903286
Roll No.: 05

Contributions

1. Website Design
2. Front-end Development
3. Code Optimization
4. Documentation

Tasnim Ahmed Zotder

Registration No: 11903295
Roll No.: 06

Contributions

1. Front-end Development
2. Back-end Development
3. Database Management
4. Project Management