**SEMINAL HALL AND AUDITORIUM BOOKING WEBSITE**



End Term Report

*By*

**Name of the candidates -**

Section: K19EG

Aditya Kashyap – 04 - 11903284

Souvik Ghosal – 05 - 11903286

Tasnim Zotder – 06 – 11903295

**Department of Intelligent System**

**School of Computer Science Engineering**

**Lovely Professional University, Jalandhar**

**April – 2020**

**Student Declaration**

This is to declare that this project has been written by us. No part of the report is copied from other sources. All information included from other sources have been duly acknowledged. We aver that if any part of the report is found to copied, we shall take full responsibility for it.

Aditya Kashyap

Roll No.: 4

Souvik Ghosal

Roll No.: 5

Tasnim Zotder

Roll No.: 6

Place – Jalandhar

Date – 08 April 2020

BONAFIDE CERTIICATE

Certified that the project report **Seminal Hall and Auditorium Booking Website** is the bonafide work of **Aditya Kasyap**, **Souvik Ghosal** & **Tasnim Zotder** who carried out the project work under my supervision.

Nikita Kaushik

TABLE OF CONTENTS

|  |  |
| --- | --- |
| Title | Page |
|  |  |
| Background and Objectives of Projects Assigned | 5 |
| Description of Work Division in Terms of Roles Among Students | 6 |
| Technologies and Framework Used | 7 |
| Swot Analysis | 8 |

# Background and objectives of projects assigned

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.

# Description of Work Division in terms of Roles among students

## Roles of Students

1. Aditya Kasyap
   1. Website Design
   2. Code Review
   3. Documentation
   4. Testing
2. Souvik Ghosal
   1. Website Design
   2. Front-end Development
   3. Code Optimization
   4. Documentation
3. Tasnim Zotder
   1. Front-end Development
   2. Back-end Development
   3. Database Management
   4. Project Management

## Working

The web app contains a home page where all the available auditoriums and halls can be viewed. Each auditorium panel contains its details like capacity, location, department etc. Besides this, the home page contains a statistics panel where current status of the app is shown. When a new auditorium is added or new booking is done or a new message is received, it automatically updates the statistics located in the home page. To book any auditorium, a user needs to fill the pop-up booking form after clicking the **BOOK HALL** button. If succeed a snack bar comes up showing that the booking is successful. And any user can contact the administrator via the contact form.

All the administrator panels are separated in a different sector. In the admin section there is three pages. The profile page shows the details of the current administrator. Next the contacts page, all the feedbacks, suggestions and contacts live here. All the contacts are in ascending order of date. Besides, the admin can see all the booking made by users. The bookings are grouped by auditorium name.

# Technologies and Framework used

## Technology stack

1. HTML

It’s a markup language. This language is used to make the skeleton of the web app.

1. CSS

This language is used to design the UI.

1. JavaScript

To handle all the logical operations and handle the API request, this language Is used.

1. Node.js

Node.js is used in the backend, in Cloud Functions. This handles the APIs and connects with database named Firestore.

1. Cloud Functions
2. Firestore

Firestore is a scalable NoSQL database provided by Google Cloud. To store the data, this DB is used.

1. Cloud Storage

This is high performance cloud storage provided by Google Cloud. To store the images, this storage is used.

1. Firebase

Firebase is a Saas (Software as a Service). To maintain the backend and host the web app, this SaaS is used.

## Framework / Library

1. React.js

React.js is a JavaScript library for building user interface which provides component-based structure. The web app is made single-page application using this library.

1. Material UI

This is a user interface design library. This library is used along with React.js

# SWOT Analysis

1. Strength
   1. Strong UI
   2. Use cloud API to fetch data
   3. Cloud Function manages the backend
   4. Data are stored in Firestore DB
   5. The web app responds fast
   6. Use authentication(simple) to POST data
2. Weakness
   1. No authorization required to view Admin Panel
   2. Not optimized from mobile view
   3. Sometimes requires time to fetch all data
   4. Less information is provided in the web app
3. Opportunities
   1. The web app can be scaled up to use for commercial purpose
   2. Can be implemented in institutes
4. Threats
   1. Major competitor is - Meetup