Online Event Scheduler

REQUIREMENTS DOCUMENT

1. Introduction

1.1 Overview

The Online Event Scheduler is a web-based application designed to assist individuals in efficiently scheduling, verifying availability, and organizing both individual and group meetings for University at Buffalo (UB) students and faculty members. This platform eliminates the need for manual availability checks and streamlines the process of identifying a suitable common meeting time. The application prioritizes security measures and offers a user-friendly interface, ultimately saving users valuable time.

1.2 Scope of the Product

We're initiating a full-scale web application redevelopment to improve stability and performance. This entails revamping both front-end and back-end components, integrating RESTful APIs, and bolstering database support for a robust and reliable system.

Our project encompasses an array of key features that expand the scope comprehensively:

- **Meeting Scheduling:** Users will have the capability to schedule both one-on-one and group meetings seamlessly.
- **Anonymous Poll Creation:** The system will enable users to create polls without the need for authentication or logging in, ensuring accessibility and ease of use.
- **Recurring Room Reservations:** Users will enjoy the convenience of reserving rooms for recurring meetings, streamlining the process for regularly scheduled gatherings.
- **Availability Showcase:** A user-friendly feature will allow individuals to display their availability, facilitating easy booking of meetings by others, enhancing collaboration and scheduling efficiency.

1.3 Business Case for the Product

The web application's purpose is to streamline event scheduling and organization. It provides a user-friendly platform for hosts and participants to collaboratively schedule meetings. The primary objective is to enhance people's lives by simplifying collaboration and meeting scheduling, eliminating the need to inquire about availability. The project seeks to create a seamless, publicly accessible environment for various communities.

2. General Description

- With traditional methods, it can be challenging to see the availability of all participants immediately and when dealing with participants from different time zones, it can be challenging to find a suitable time that works for everyone.

- Human errors, such as miscommunication, forgetting to update schedules, or making mistakes when writing down appointment details and involve back-and-forth communication to finalize event details. In some cases, it may be susceptible to loss of event information.

- As the number of participants and events increases, managing schedules manually becomes increasingly complex and prone to errors. Also, typically manmade and traditional event scheduling systems lack automated reminders, making it more likely for participants to forget about upcoming events or meetings.

- To address these issues, we will create digital event scheduling tools and software, which offers features like automated reminders, real-time availability checks, shareable QR-code and the ability to easily reschedule and coordinate with participants from different time zones.

- The online event scheduler is user-friendly for students, teachers, TAs/RAs, special guests, and university staff. It requires basic web app skills and effective calendar usage for coordinating events and meetings.

2.2 Product Functions

In addition to the previously developed project, the following enhancements will been incorporated

- Email-based reminders: The system will send reminders via email.
- Sharable QR-Codes for events: QR codes are generated for events, making them shareable. However, participants are required to log into the website to access the events, ensuring secure access.

2.3 User Characteristics

The online event scheduler will be used by following people:

- Students
- Teachers
- TA/RA
- Special guests
- Other University staff

Our product is user-friendly and does not require any technical expertise to use. Users only need a basic understanding of how to use a web application, such as how to create a meeting, view someone's calendar, and create polls.

It can be challenging to schedule non-overlapping events or meetings, especially if you are trying to coordinate with multiple people. That is why it is important to learn how to use a calendar effectively. This includes understanding how to create events, invite people, and view your schedule. With a little practice, you will be able to use your calendar to book meetings and events without any problems.

2.4 General Constraints

Leveraging third-party services and APIs, such as Google or Microsoft Calendar integration, can introduce constraints related to service availability.
For group bookings, ensuring the availability of all participants is contingent upon each user's individual calendar, adding a layer of complexity to scheduling.
Accessing the application across various networks may impose specific constraints.

2.5 Assumptions and Dependencies

Assumptions:

- The online event scheduler relies on participants accurately indicating their availability, considering their schedules and providing honest responses.
- Participants must promptly respond to polls to ensure effective and efficient online scheduling.
- Participants must have internet access to use the scheduling poll.

Dependencies

- Internet connectivity is crucial for participants to schedule events using online applications; lack of connectivity reduces efficiency.
- Efficient handling of timezones is essential for participants scheduling events.
- Deploying the application to the cloud may involve dealing with certain constraints.

3. Specific Requirements

In this section of the document, we outline the detailed requirements for an online event scheduling platform. These requirements are grouped into three essential categories:

- ***User Requirements:*** These are the specific needs and desires of the people who will be using the online event scheduler. It includes user stories, specific needs of the user. For example, they might want an easy way to input event details, check availability, and receive notifications.

- ***System Requirements:*** These are the precise specifications that define what the online event scheduler must be capable of doing. It is a detailed instruction manual for the system, outlining its functions and capabilities. For instance, it should be able to handle multiple events simultaneously, automatically adjust for different time zones, and send automated reminders to participants.

- ***Interface Requirements:*** These requirements revolve around how the user interface should look and function. They can be expressed in various forms, such as lists, detailed descriptions, or visual mock-ups of the screens. For instance,

the interface should include a user-friendly calendar view, clear event descriptions, and easy navigation through screens, buttons, etc.

3.1 User Requirements

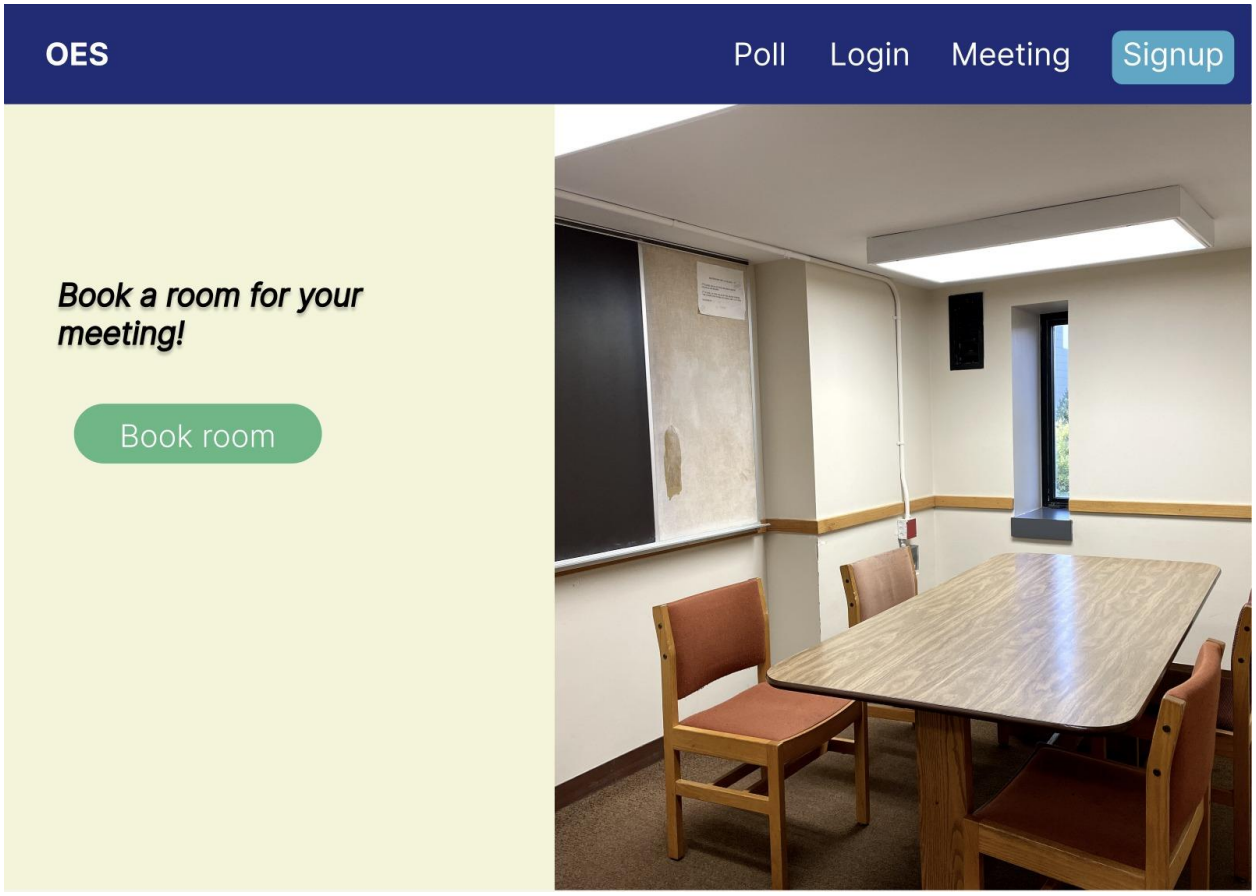
- Admin:
  User will be able to manage the web application
  User will be able to edit the schedule
  User will be able to manage calendar
  User will be able to manage resources
  User will be able to access the control
- Owner:
  User will be able to login/sign up to the web application
  User will be able to create Meeting
  User will be able to own the room
  User will be able to make room reservation
  User will be able to constraints of the room
- Normal User:
  User do the functionalities without login
  User will be able to create poll
  User will be able to create meeting

3.2 System Requirements

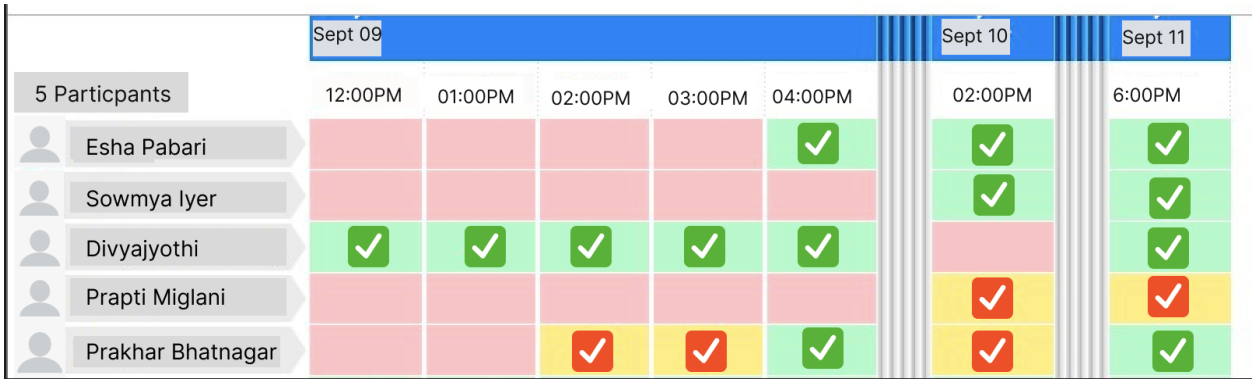
When a user logs in, the 2 factor authentication must be active and all the sensitive information like passwords and other confidential data should be encrypted.
The number of meetings scheduled should be tracked via analytics.
Develop two distinct screens: one for administrators/schedulers and another for end-users.
The system should be able to handle multiple asynchronous requests like event scheduling, canceling or rescheduling.
The system should respond to user requests within a maximum of 2 seconds for 95% of the interactions.
The application should be compatible with the latest versions of popular web browsers, including Chrome, Firefox, Safari, and Edge.
Bandwidth usage should be minimized to accommodate people with slower internet connections.

3.3 Interface Requirements

- The mockup shows a UI for booking a room for any user.



- The below mockup displays the calendar availability for different users.



4. Appendices

This section contains details related to the event scheduler project, including the following:

1. We will outline the data privacy and security policies in place to protect user information and event data.
2. We can offer a troubleshooting guide with common issues and solutions.
3. We will document a history of user feedback and suggestions, as well as how these have been addressed and implemented in the system's development.
4. We are planning to provide user guides or manuals that explain how to use the online event scheduler. Include step-by-step instructions, screenshots, and tips for various user roles.
5. We have used Doodle, Connecteam, When2Meet as our references for digital online event scheduling platforms.

5. Glossary

RA-Research Assistant
TA- Teaching Assistant
API- Application Programming Interface
REST-Representational State Transfer

6. References

https://doodle.com/en/
https://www.when2meet.com/
https://www.figma.com/files/recents-and-sharing/recently-viewed?fuid=1281744226312050772
https://www.microsoft.com/en-us/microsoft-teams/group-chat-software
https://www.microsoft.com/en-us/microsoft-365/outlook/email-and-calendar-software-microsoft-outlook