Online Event Scheduler Requirements Document

1. Introduction

Online Event Scheduler-Master's Project to be developed for the course work CSE 611 Masters project Developement under "built-by-UB-CSE611" category.

1.1 Overview

The Online Event Scheduling is aimed at developing an application to schedule, monitor, plan and re-plan meetings to help UB's faculties and students schedule their meetings on the go. It eliminates email and phone tag, and ensures a satisfying scheduling experience for all attendees. This web app also augments the reliability and enhances the usability by providing an intuitive and easily navigatable user interface which in turn provides a secure ecosystem for managing a collection of individual calendars for the purposes of group scheduling and individual one on one meetings.

1.2 Scope of the Product

The application will be a progressive Web App built from scratch and it will have front-end, backend supported by REST APIs, Databases.The following bulletin summarizes the scope of the product.

1. Scheduling one-to-one and multi-user meetings
2. Dealing effectively with overlapping events
3. Providing a wide range of calendar viewing options
4. Support conflict resolution
5. Gathering the feedback from attendees.
6. Get reminders about the scheduled events.
7. Get event suggestions based on students' timetables.

1.3 Business Case for the Product

Why is this product required?
- One stop place to handle focuses on optimal planning and scheduling of events including one on one meeting, group meetings,reservations of venues and other group events seamlessly.
- To check the schedule of a person or your own

- To save time from contacting a person regarding their availability
- To block your time for an event or meeting
- To Support meeting conflict resolution
- To access and book different venues for the event

How will it contribute to the goals of your institution?
- To to able to check office hours/ free time of professors/TAs/RAs
- To schedule a meeting with professors/TAs/RAs
- To conduct an event within the availability of the speakers/guests
- To provide fully documented, public domain source code for use by other academic communities.

2. General Description

The Major obstacle faced by students and faculties in academia is they spend a lot of time in identifying and blocking the right schedule which eventually results in improper time management and creates a hassle in managing their own schedule.Also it becomes arduous for the academia community to keep track of events that are happening all over the place and get recommendations for events based on their schedule.

Based on the above drawbacks, the event scheduler will act as the one stop place for solving the above pain points and it will also comprise the various features that focuses on optimal planning and scheduling of events including one on one meeting, group meetings,reservations of venues and other group events seamlessly.

Additional features like timely notification,reminders,meeting invite acceptance deadline set by the organizer/initiator will eventually help the participants and the initiators plan events accordingly.
The academia community will be bolstered by extending this application to various universities across the globe.

2.2 Product Functions

1. Register and Login into the application.
2. Choose your university
3. Look at the available slots of professors/TAs/RAs
4. Create a 1:1 meet
5. Schedule an event
6. Look at the available venues
7. Capacity of the venue
8. Select a time slot
9. Create the event/meeting

10. Register for an event
11. Check your events scheduled for the current day
12. Get notified of your events

High-level functional flow
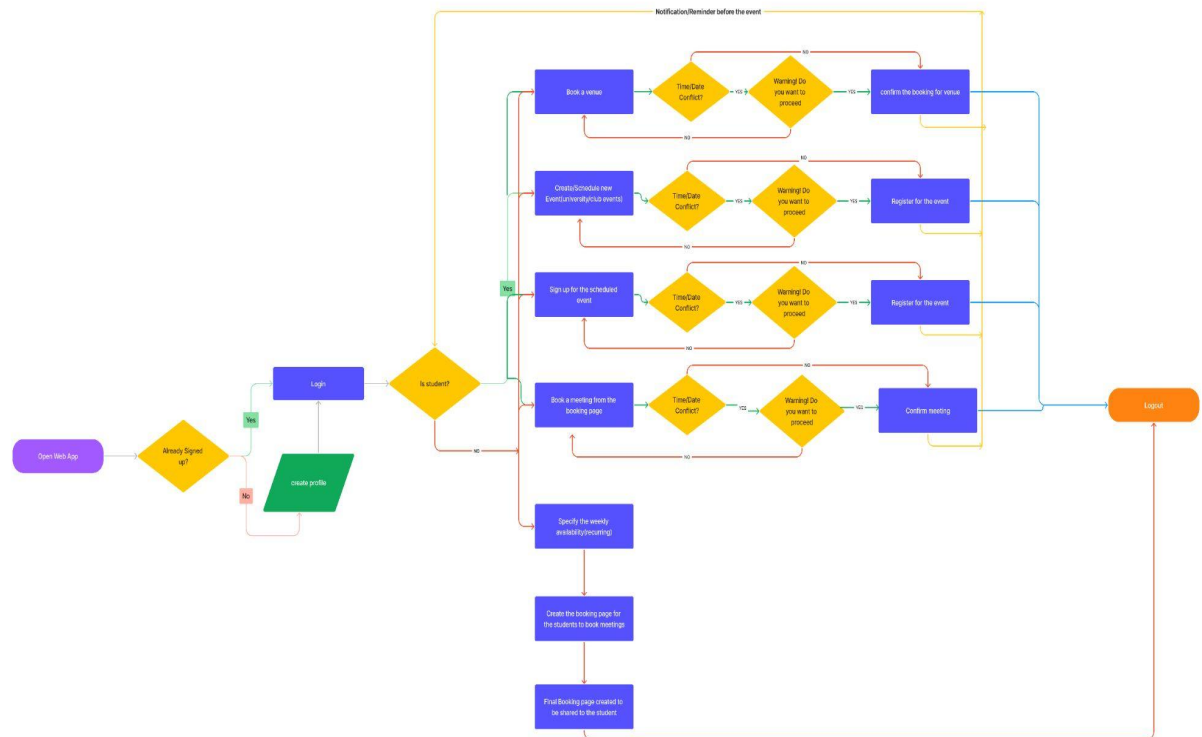
2.3 User Characteristics

Who do you expect to use your finished product, and why?

- Students
- Professors
- TAs
- RAs
- Speakers
- Event guests
- Other university staff

This is a university specific event scheduling website.

What is their technical background, their training or education, their motivation to use it?

- People from any background with basic knowledge on working of the calendar
- To schedule a meeting or an event with their co-students/professors/TAs/RAs
- To showcase their availability of office hours

What obstacles might they encounter, and what specialized skills will they need?

- Conflicting events or meetings
- Venue capacity might restrict the event registration count

2.4 General Constraints

- The application requires the student's time table which is dependent on the university database.
- Outlook Calendar API downtime can impact the application.
- Users should be able to access the application over the network.
- Deployment dependency and conflict issues.

2.5 Assumptions and Dependencies

- Event scheduler will require the university(Student, Faculties and Employees) database along with their timetables and calendars.
- Outlook calendar API available to block calendars.
- IBM/ GCP cloud for deployment.
- Event schedule data for syncing with the application.
- Access to venue availability data.

3. Specific Requirements

3.1 User Requirements

Professor/RA/TA Requirements
- User should be able to login/sign up to the web page
- User should be able to create meeting poll
- User should be able to create the booking page by mentioning their availability
- User should be able to book,reschedule,cancel or update the booking

- User should be able to access both the features (meeting scheduling feature and event scheduling feature).
- User should be able to schedule events.

Student Requirements
- User should be able to login/sign up to the web page
- User should be able to create meeting poll
- User should be able to book,reschedule,cancel or update the booking
- User should be able to access the event scheduling feature.
- User should be able to schedule only events.
- User should be able to accept or deny the meeting invite.
- User should be able to see the productivity metrics with respect to the meetings accepted.

Admin Requirements
- Admin should be able to see the meeting metrics via analytics.

3.2 System Requirements

- This Event Scheduling system basically begins from the login component with a two factor authentication
- The individual's non-trivial information including passwords and other confidential data will be encrypted.
- The management of bookings(create/update/Reschedule/cancel) in the calendar screen which involves handling multiple parallel asynchronous events for retrieving,storing and validating the available and unavailable slots.
- The application will have two views: one for meeting schedule (Initiator and participants) and another one for event scheduling(Organizer and participants).
- The REST APIs are designed as per the two views for data retrieval and the delta(Data exchange) call for retrieval of data must happen instantaneously.
- Also, updates to the backend must also follow the same timeframe as the retrieval.
- Since the system also involves sending timely notifications based on specific events, the schedulers need to be implemented(for triggering notifications).
- The number of meetings booked and events scheduled can be tracked via the analytics dashboard.
- System should be given required access to the student/university employee database.

3.3 Interface Requirements

- The below mockup showcases an intuitive user interface with the functions proposed.
- The toggle views will show the event view and individual scheduling view.
- The calendar view shows the various events scheduled as per the user tags.

- Create an event option to schedule new meetings/events.
- Venue menu shows the options available to book the venues.
- Time chart option shows the meetings across the various parameters like day, week and month.
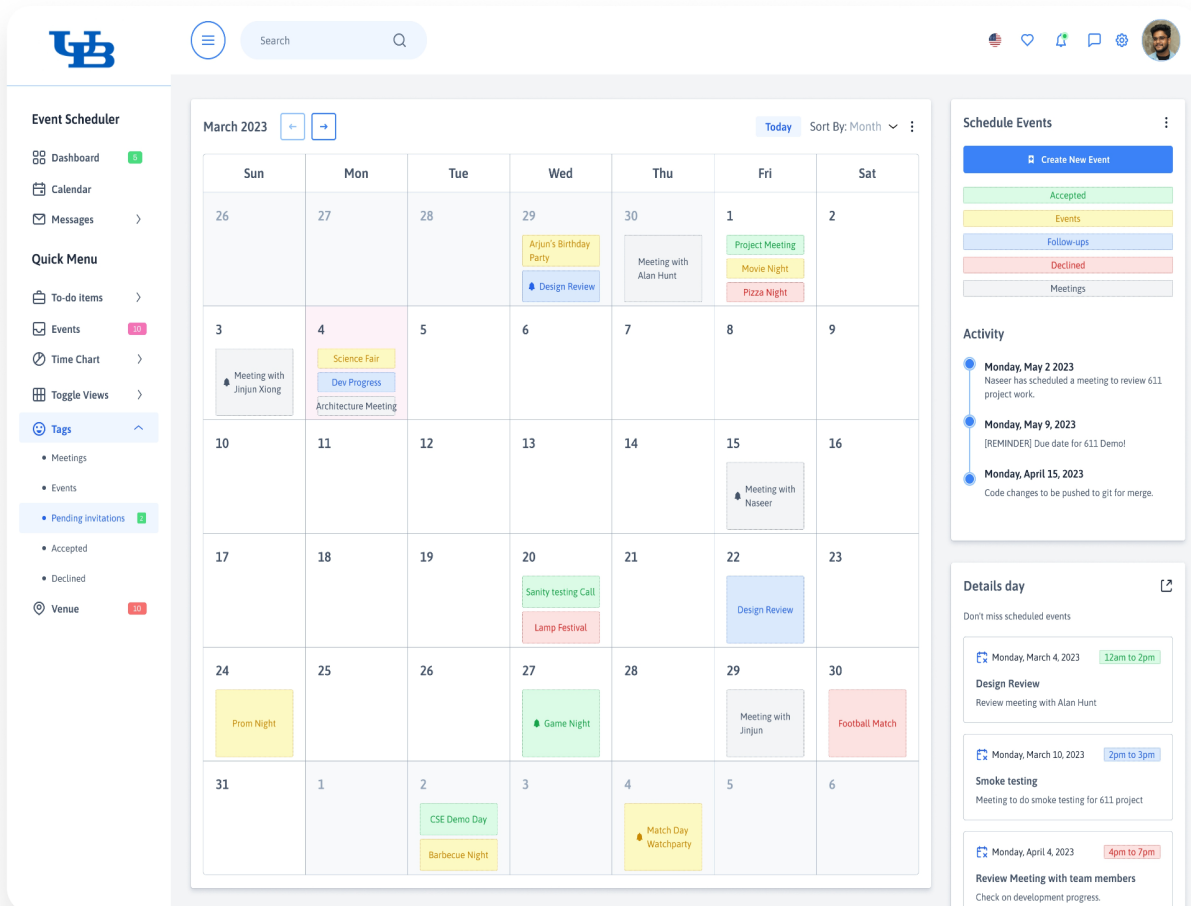
4. Appendices

This section comprises of information that is associated with event scheduler project
- Outlook API/react calendar component for calendar functionality
- IBM/GCP for cloud deployment
- Doodle is an existing online meeting scheduling platform taken as a reference for our project.
- Our event scheduler differs from doodle in terms of narrowing the focus on a particular category like academia community and eventually addressing a wide range of features including conflict resolution,time management and management of schedules as a one stop solution.

5. Glossary

RA-Research Assistant
TA- Teaching Assistant
API- Application Programming Interface
REST-Representational State Transfer
GCP-Google Cloud Platform

6. References

https://www.figma.com/community/file/1163829368060240534
https://doodle.com/
https://learn.microsoft.com/en-us/outlook/rest/get-started
https://www.g2.com/categories/event-management-platforms
https://www.ijraset.com/research-paper/event-scheduler
Naman Jain1 , Shaik Abhishaik1 "Event Scheduler" International Journal for Research in
Applied Science & Engineering Technology (IJRASET)