

Oregon State Event Management Problem Statement

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Oregon State University Event Management App

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College of Business App

Abstract

The current process of spreading information and signing up for events at Oregon State University is unfavorable to many students and staff associated with the school. With the need for a smoother process in this area the college of business partnered with students to create an app focusing on school events. The work will be done using the React Native framework to build a web application capable of simplifying the current process.

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1 Background

Students at Oregon State University today all have the task of attending their classes, doing their homework, and staying on top of their school responsibilities. Beyond registered classes, there are many events that OSU holds for students, staff or outsiders to the college. These people most often find out about these events through emails, Canvas announcements, or word from their professors. This method of informing students can easily go forgotten about or sometimes not reach the recipient in the first place. The College of Business App will act as a platform where staff and students at OSU can schedule, plan, and sign up for events at Oregon State through a central application that holds all the necessary information about these events. This application will allow staff to manage events listed and create new ones, while students can easily browse through current events, or search for ones of their own interests. Beyond just creating and signing up for events, the application will support integration with calendars, allowing users to keep track of events they signed up for and set reminders. With this information being held within the application, event planners will be able to track physical attendance through capabilities supported by the app, to make sure which students signed up and which students showed up. As a whole, the College of Business App will act as the home for event planning, registration, and tracking for events taking place at Oregon State.

2 Vision Statement

Growth Hypothesis: Students and Staff at Oregon State will break the communication barrier that is currently in place surrounding events.

Students at Oregon State currently have a platform for managing their schedule and classes to help them complete their assignments on time and manage their time between each class they are enrolled in. Beyond classes, the tools available to students for extracurricular options show little presence. Many students miss out on events that they might be interested in, as there is no concrete way for reaching these students. With the College of Business App in place, a general 'home' for events will be set, allowing students an ease of exploration for events, and a general tool for planning and tracking events they find appealing. With this there will no longer be any interference in finding or being informed of events around campus. Along with increased awareness of these events, event organizers will be able to see exactly who was present, opening post-event possibilities.

Value Hypothesis: Attendance at Oregon State events will increase, creating possibilities for more events to take place.

With a tool in place for students to explore events around campus and attend those that they are interested in, the general attendance of these events will dwarf the numbers that the previous attendance displayed. The College of Business App will supply those students with information about events that they would otherwise be unaware of and, due to no knowledge of the event, fail to attend. With this situation eliminated, attendance will rise and hosting events at Oregon State will be more desirable, possibly reaching hosts that would previously not show interest.

Functional requirements - The project can offer different functions for students and administrators. Business students can view the current events, and to choose their own like to take part in the events of the content, and advising appointments sign up. The administration can browse through all events, and create or delete some events, and check the student's attendance.

Non-functional requirements - Students can check in by swiping a student ID card or scanning QR-code.

3 Success Measures

The first stage is to make an operation flow chart and draw an application interface. The success condition of this project is that the project owner decides to move forward with the design.

The second stage is to build a functioning prototype of the design. This prototype should have all integral features built while maintaining the look of the original design. This stage's success depends if the application can complete all goals the project partner planned on.

The final stage is the testing and polishing phase. The application will be deployed to test users to understand what's wrong with the application, what it does well, and what can be added or improved on. The exact success of this stage is vague due to the unknown amount of problems and fixes, but will be considered a success if the project partner and the team's TA is satisfied with changes made to the application.

4 Prioritized Project Constraints

Time:

The first constraint is time, because we are all senior students, we may not have too much time to do this project. Therefore, it is important to schedule time limits for completing projects, which can help us keep our tasks on time.

Resources:

In terms of resources, we can contact our project partner and our TA. The project partner can advise us on the functionality of our project so that our project will go in the right direction. TA can help us technically, and we can ask for solutions when we have problems with our code.

Scope:

On the scope of implementation, our team members hope to complete the design of all functions of the App and complete the basic website framework before the end of this semester. This will allow for implementation and testing to get started sooner. Our partners want to realize the function that students can check in by swiping a student ID card or scanning QR-code. This functionality will start after the basic function of the project is realized.

5 Stakeholders

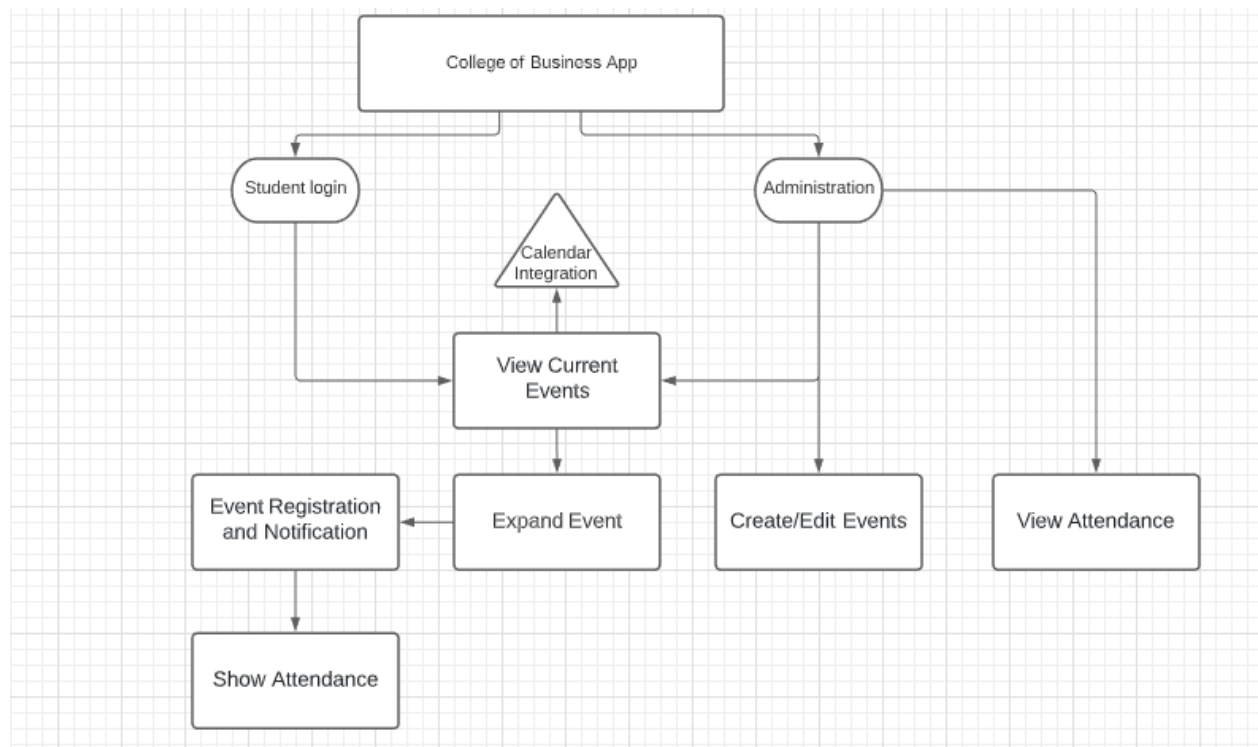
- **Omar Trinidad**
The project partner.
- **OSU Business Students**
Uses the application to view current events and expand events, and get event registration and notification.
- **Administration**
Uses the application to create or edit events, and get event registration and notification.

6 Risk

| Risk | Likelihood | Impact | Mitigation Strategy | Early Detection | Consequence |
|--|------------|--------|---|--|---|
| The deadline may not be possible with the size of the minimal required scope of the project. | Unlikely | High | To mitigate this, a review of current progress and an update to the plan will be done on a weekly basis so more resources can be brought in if required to accomplish the minimal required scope on time. Each update will provide an opportunity to assess current progress and decide if the project should move forward or if it should be scrapped or postponed | Weekly plan updates result in an iteration plan that goes beyond the deadline. | Should the mitigation strategy fail to prevent/avoid the risk, the project may be scrapped without any solution being deployed. |
| Team members may not be able to attend project meetings. | Unlikely | Medium | In order to alleviate this situation, team members should decide whether to attend the project meeting in advance, unless it's an emergency. | If they cannot attend the meeting for some reason, they will tell the rest of the team 24 hours early. | Should the mitigation strategy fail to prevent/avoid the risk, We will record the content of the project and tell team members who did not attend the meeting by email after the meeting. |

7 Scope

1.1 Process Flows



1.2 User Stories

As a business student, I need this College of Business App to help me find new events happening at Oregon State University. I should be able to see all important details about the event and can sign-up for the event if required.

As an administrator, I need this College of Business App to help me browse through all school events, and create or delete my own events. I can also check the list of students that sign-up for a specific event.

8 Iteration Plan and Estimate

The development will be divided into three stages. The first stage is to create an operation flow chart, draw App interface, and assign the design of different functions in the application to team members to carry out. This step will finish before the end of this term. The second stage is to complete the code. Our team members can divide the code into different modules and complete the code function in turn, and then upload it to GitHub for testing. This process will take ten weeks. The last stage is the testing phase. We can put the App in different environments for use and use the App according to the operation flow chart's requirements. If any bug is found in operation, we will fix it. I think it will take nine weeks to complete.

9 Alpha Functionality

9.1 Gregory Blood

Bio

Gregory Blood is a fourth year senior at Oregon State majoring in applied computer science with an emphasis on web and cloud development. He's done a small amount of freelance web development recently using primarily ReactJS. He's a second year TA for his college and plans to graduate in Spring and enter the workforce.

Work Completed

Due to being the most experienced in the field, Gregory has researched all tools that were going to be needed to get the application done. He first developed an interactive design for the mobile version of the application and then planned out a timeline to help guide the team to work asynchronously. After doing a bit of example front-end, he created a Heroku server and made the front-end talk to this new back-end. Then he converted the data, that was previously in a .JSON file, into a database he created on Postgres and hooked up to the front-end application. Any time new SQL queries are required Gregory is tasked to create them. He has also researched how to incorporate OSU's single sign-on (SSO) authentication into the application and how to keep API's secure.

Work to Be Completed

Gregory's current task list is to add the SSO to the application so only users with ONID's can log-on. After this he needs to make sure that the API can only be called from the application to make the database more secure. While there isn't anything planned out after this, he will need to check the overall security of the app and update the database with anything new. When the back-end is finished he will start work on the front-end.

Assessment

Gregory has helped organize the team to set goals for a steady development. He has completed all tasks by their recommended deadline and is on track to finish most of the back-end by the end of the term. He feels his team could do more in spreading out their workload for more consistent progress but is confident a usable prototype could be finished by the end of the Winter term. He is appreciative of having a team that communicates, a TA that offers help and guidance, and a project manager that has a clear goal and helpful organization recommendations.

9.2 Carson Lengwin

Bio

Carson Lengwin is a senior student at Oregon State studying computer science and minoring in business. Born in Grant Pass, Oregon, Carson moved to Corvallis at the age of four and has received the entirety of his education in town. While he is in school he is also a shift leader at the Dutch Bros Coffee located on the Oregon State campus. Carson is on track to graduate this spring, and with nothing currently in motion for life after school he hopes to apply his area of study to the company he currently works for in the future.

Work Completed

While the team works to create a react application capable of simplifying the event planning process, Carson has been focusing on front-end development such as javascript functions and the application's user interface. Carson's has been occupied primarily by creating the process of how users will interact with each individual event displayed in the application. Each event can be loaded in from the cloud hosted database and Carson has implemented the ability to tap on each event and expand them into their own page, displaying additional elements from the database corresponding to the specific event. From here users are provided with the option to sign up for the event that they have chosen as well as sync the event with their personal calendar.

Work to Be Completed

In the coming weeks Carson is going to begin implementing features surrounding attendance for each event, exporting the event information to the user's calendar, and allow administrators to remove events from the database through the application. Each user will add to the event's capacity upon signing up, and administrators will be able to view the capacity in the form of a progress bar displayed in the event card. Carson will also be converting information from the database into .ics files to allow calendar subscriptions from in the app for Apple devices as well as Google Calendar for other devices. His last task, as of now, will be to further implement interaction on the administrator side of the application, allowing them to remove events that are published.

Assessment

With a plan set prior to the second phase of the team's work, Carson has done his best to follow the team's plan and complete his work on the desired times. Carson has run into some roadblocks along the way, implementing a few changes to the team's plan, but ultimately finds himself on track to complete his proportion of the project by the end of the second phase. He finds himself satisfied with his teammates' contribution as well as his own, but hopes to further improve that of himself in the coming weeks.

9.3 Bowen Lin

Bio

Bowen Lin is a senior majoring in computer applications and minoring in business. He plans to pursue a master's degree in computer science or looking for a job in front-end development after graduation.

Work Completed

Bowen's main contribution to the College of Business app is the completion of the navigation bar section of the app to ensure that users could view features in the app. He also created the application calendar section. The calendar section can display the events that have been created in the database.

Work to Be Completed

Bowen's current goal is to complete the search function of the application so that users can search the events by name or description. Once that is completed he will flesh out the ability for an admin to create an event. Beyond this term, he will still work on polishing the front-end and help add additional features to the application.

Assessment

Bowen made the plan before the team's second phase, so he tried to follow the team's plan and get the work done in the time required. Bowen encountered a few obstacles along the way, and finally completed his second phase of the project. He is pleased with his contribution and his teammates, but hopes to further improve his contribution in the coming weeks and finish work on time.