

Indaba Project Plan

Indaba Team Members

Paul Adams	adamspa@oregonstate.edu
Everett Williams	williaev@oregonstate.edu

Introduction

Currently, there are a wide variety of scheduling tools at OSU. This situation creates the potential for missed meetings for attendees who do not have the required accounts. It also forces our OSU teammates to sign up for and monitor numerous redundant scheduling accounts, some of which may only be used once. The use of third party services also creates the potential for Family Educational and Privacy (FERPA) violations, possibly violating of a students' privacy rights. Faculty, students, and administrative personnel find the current state of affairs frustrating, unnecessary, and possibly in violation of privacy regulations.

User Perspective

Indaba Is designed to consolidate meeting scheduling activities within one application. The system will only be accessible to users who have valid ONID credentials. There are two user roles: event creators and event attendees.

Event creators' experience will begin by logging into Indaba via CAS. Then, they may navigate to a page to create a new event. Here, they can fill out a form with their event's details, and select time slots on a calendar-based interface. They will enter email addresses to which they would like to send invitations, and Indaba will generate and send these invitations. After an event is created, its creator can manage it in the web app via the event management portal. Here they can change event details, add or edit time slots, send new invitations, and delete their event. They will also be able to view, edit, and delete existing reservations. If they choose, they can also add additional event administrators who will gain full privileges. Event creators may register for time slots in their own events if they choose.

The role of an event attendee begins when they receive an emailed invitation. To RSVP, they must follow a link and log into the web app using their ONID credentials. Once logged in, they can view the event details and choose to reserve 1 or more time slots or decline the invitation. Once an attendee has made a reservation, it will be visible on their personal homepage under the heading "Your Schedule". Adjacent to each

reservation, there will be an area where users can send a message and upload a file to other attendees of their slot. If a user wishes to edit or delete their reservation, they may click on the event's name in their schedule which will redirect them to the event's reservation portal. A page listing past reservations will be accessible from the homepage and the menu

A users who have created events, the personal homepage will also display any events they are currently managing. Clicking on the name of an event they are managing will redirect them to the event management portal described above. A separate page listing past events will be accessible from the homepage and the menu.

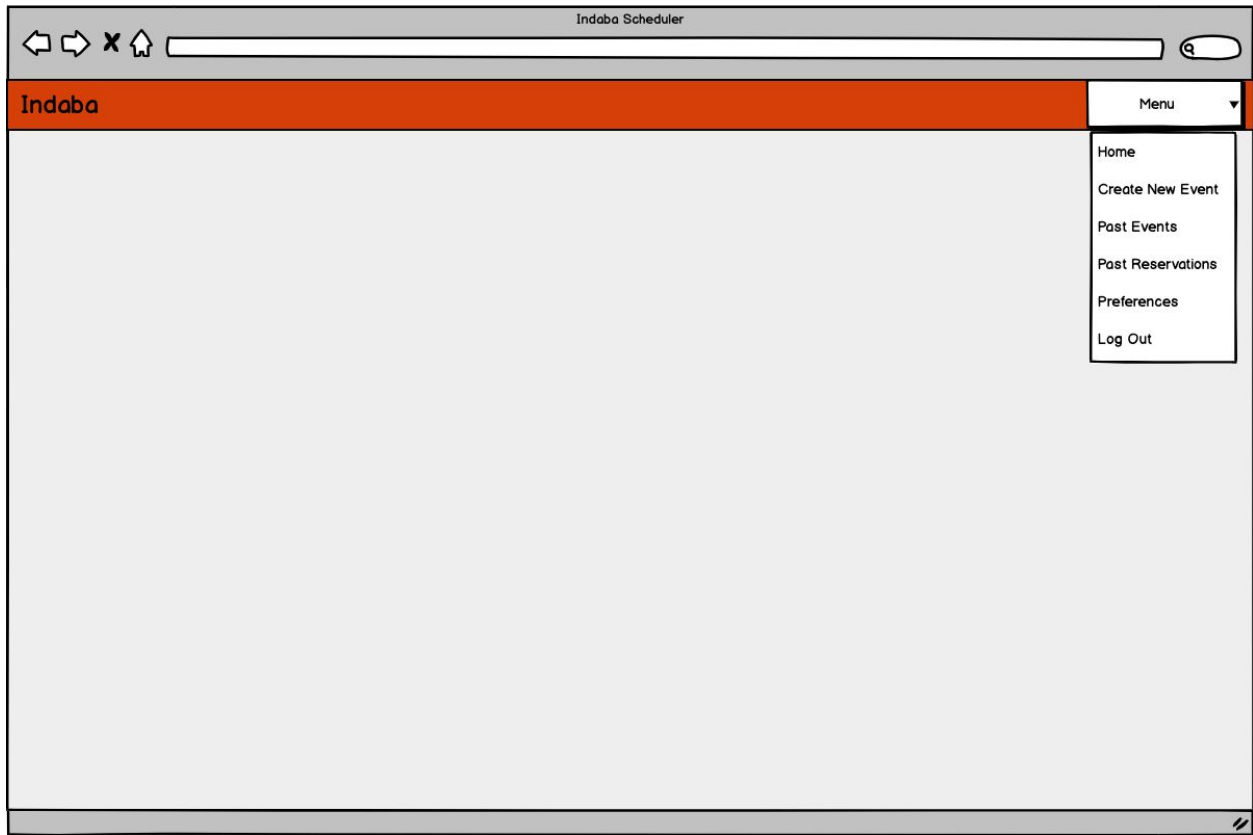
The software will provide feedback via email and SMS notifications to the appropriate users when an action occurs that requires their attention, such as a reservation cancellation. In addition, attendees may select personalized preferences about which types of actions will trigger notifications and how those notifications will be transmitted.

Wireframes

Landing page



Navbar and Menu



Personal Homepage

Indaba Scheduler

Indaba

Menu

Hello, Joe

Start organizing an event by clicking the button below!

Create New Event

Manage your events:

[CS 443 Recitations](#)

[Department Colloquium](#)

View Past Events

Your Schedule:

To edit or delete a reservation, click on the event name

[Robotics Week Demos](#)
Created by Mindy Kranz
Description: Join the robotics club for a week of demonstrations of the latest autonomous tech

Your Reservation(s):
May 8 2019 3:00pm - 5:00pm Borlotti Hall RM 227

Who else signed up:
Kerstin Julianna juliake@oregonstate.edu
BB Larmore larmobb@oregonstate.edu

Messages	Posted by	Files Uploaded
Here's the schedule!	BB Larmore	schedule.pdf

Message other attendees or Upload file

May 10 2019 12:15pm - 12:45pm CS Department Lobby

Who else signed up:
Bogomir Jaga jagabog@oregonstate.edu
Chantel Marika marikch@oregonstate.edu

Messages	Posted by	Files Uploaded

Message other attendees or Upload file

Enter your message here:

Choose File (optional)

Submit

[CS_467_Group_7_Week_5_Meeting](#)
Created by Jorge Jorgeson
Description: -

Your Reservation(s):
May 15 2019 10:00am - 10:30am EECS Department Lounge

Who else signed up:
Ismail Keinan keinais@oregonstate.edu
Adil Nassim nassiad@oregonstate.edu

Messages	Posted by	Files Uploaded
Uploaded project plan	Rosie Rivers	plan.pdf

Message other attendees or Upload file

View Past Reservations

Create New Event

Indaba Scheduler

Indaba

Menu

Create New Event

Event name:

Description (optional):

Add additional event organizers:
WARNING: These users will be able to make changes to your event.
WARNING: This action cannot be undone!

☒

Location:
(you can change this for individual slots)

Max attendees per time slot:
(You can change this for individual slots. Leave blank for no limit)

Max reservations per attendee:
(leave blank for no limit)

Time slot duration:
(you can change this for individual slots)

hours minutes

Allow invitees to see who is registered for each slot?

☒ Yes, make names visible

☐ No, keep names hidden

Choose time slots:

5/10/19 - 5/16/19

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
08:0							
09:0							
10:0		10:00am - 12:00pm Culver 537			10:00am - 12:00pm Culver 537		
11:0							
12:0						12:00pm - 2:00pm Culver 537	
13:0			1:00pm - 3:00pm Baker 226				
14:0							
15:0							
16:0							

Edit details

Start time:

End time:

Location:

Max attendees:

Delete

Enter email addresses for people you'd like to invite:

Create your event!

Event Management Portal

Indaba Scheduler

IndabaMenu

Welcome to the Organizer Portal!

Edit event details, modify or create time slots, and manage attendance all from this page.

Need to reserve a time slot for yourself? Just click below:

Reserve time slot

Manage your event

Event name:

CB 443 Recitations

Save name change

Description (optional):

Review course material with a TA

Save change

Enter email addresses below to invite more people:

manibha@oregonstate.edu

Send invitations

Add additional event organizers:

WARNING: These users will be able to make changes to your event.
WARNING: This action cannot be undone!

notesia

Enter a valid ONID

Add organizers

Allow invitees to see who is registered for each slot?

☒ Yes, make names visible

☐ No, keep names hidden

Save change

Edit time slots:
(click on a blank area to add a new slot)

SundayMondayTuesdayWednesdayThursdayFridaySaturday

08:0

09:0

10:0

11:0

12:0

13:0

14:0

15:0

16:0

10:00am - 12:00pm
Culver 537

10:00am - 12:00pm
Culver 537

10:00pm - 12:00pm
Culver 537

Edit details

Start time:1200pm

End time:200pm

Location:Culver 537

Max attendees:40

Who's signed up

Giacomo Guizzoni

Marco Botton

Messages:This is the agenda

Posted by:Marco Botton

Files Uploaded:agenda.pdf

Save changes

Delete slot

Reservations:

Name	Response	Reservation	
Giacomo Guizzoni gugli@oregonstate.edu	reserved	May 11 10:00am - 12:00pm Culver 537	Delete
Zayne Zither zithz@oregonstate.edu	reserved	May 12 10:00pm - 3:00pm Baker 226	Delete
Zayne Zither zithz@oregonstate.edu	reserved	May 14 10:00am - 12:00pm Culver 537	Delete

Make a reservation for someone

New reservation

Name

Giacomo Guizzoni

Zayne Zither

Time slot

May 11 10:00am - 12:00pm
Culver 537

May 12 10:00pm - 3:00pm
Baker 226

May 14 10:00pm - 12:00pm
Culver 537

May 15 12:00pm - 2:00pm
Culver 537

Reserve

Delete Event

Past Events

Indaba Scheduler

Indaba

Menu

Your past events

Earth Day Service Hours:

Organizers: Joe Cornelius, Korneli Cayetana

Description: Join us to help clear litter from the streets of Corvallis. Safety gear will be provided. Snacks will be available at the end of each session

4/12/19 - 4/18/19

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
08:0		8:00am - 10:00am 123 E St					
09:0							
10:0		10:00am - 12:00pm 123 E St					
11:0							
12:0		12:00pm - 2:00pm 123 E St					
13:0							
14:0		2:00am - 4:00pm 123 E St					
15:0							
16:0							

Reservations:

Name	Response	Reservation
Amy Ash asham@oregonstate.edu	reserved	May 13 10:00am - 12:00pm 123 E St
Leny Litterer litterle@oregonstate.edu	cannot attend	-
Rahul Redwood redwora@oregonstate.edu	reserved	May 13 2:00pm - 4:00pm 123 E St
Rahul Redwood edwora@oregonstate.edu	reserved	May 13 12:00pm - 2:00pm 123 E St

Event Reservation Portal

Indaba Scheduler

Indaba

Menu

Make a reservation

Event name: CS 443 Recitations

Created by: Joe Jenkins

Description: Review course material with a TA

Click on a time slot select it:
(You can pick as many as you want!)

5/10/19 - 5/16/19

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
08:0							
09:0							
10:0		10:00am - 12:00pm Culver 537			10:00am - 12:00pm Culver 537		
11:0							
12:0						12:00pm - 2:00pm Culver 537	
13:0			1:00pm - 3:00pm Baker 226	Who's signed up Giacomo Guilizzoni Marco Botton			
14:0							
15:0							
16:0							

Selected time slots:

5/11/19 10:00am - 12:00pm

Culver 537

5/12/19 1:00pm - 3:00pm

Baker 226

☐ I can't make it (You can only mark this if you haven't selected any time slots)

Submit

Past Reservations

Indaba Scheduler

Indaba

Menu

Your past reservations

VegFest Volunteer Sessions

Created by Kuhl Rabi

Description: Duties assigned at time of meeting

Your Reservation(s):

March 18 2019 6:00pm - 10:00pm

Avocado Tent

Delete

Who else signed up:

Sebastião Robertina roberse@oregonstate.edu

Messages	Posted by	Files Uploaded
Send me playlist requests!	Tom Ato	-
"Vegetable" by The Beach Boys	Polly Flower	-

March 19 2019 12:00pm - 4:00pm

Campground

Delete

Who else signed up:

Božo Pembe pembeb@oregonstate.edu

Dipak Alda aldadi@oregonstate.edu

Jehosheba Bala balaje@oregonstate.edu

Messages	Posted by	Files Uploaded
Remember to wear boots	-	-

Delete All Past Reservations

Preferences

Indaba Scheduler

Indaba

Menu

Preferences

Add your phone number for SMS notifications:

+1 123 456 7890

How would you like to receive notifications?

Upcoming reservation reminder

☒ Email
☒ Text Message

Someone posts a message or uploads a file to a slot you've reserved

☒ Email
☐ Text Message

A new time slot is opened in an event you've already reserved a slot for

☒ Email
☐ Text Message

Your reservation is canceled by the event creator

☒ Email
☒ Text Message

The details of your time slot are changed by the event creator

☒ Email
☒ Text Message

You're added as an organizer to an event

☒ Email
☒ Text Message

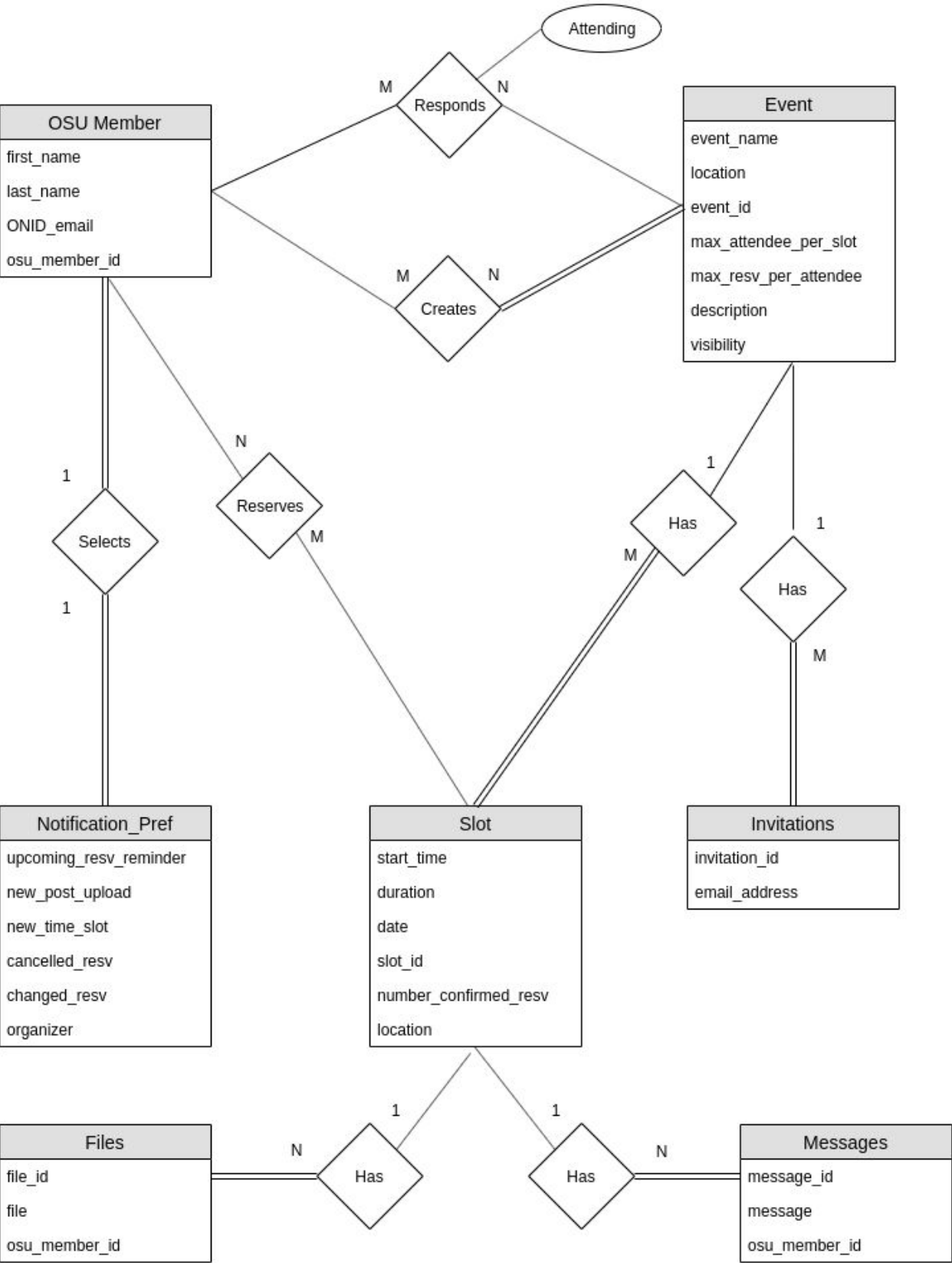
Save Preferences

ER Diagram Details:

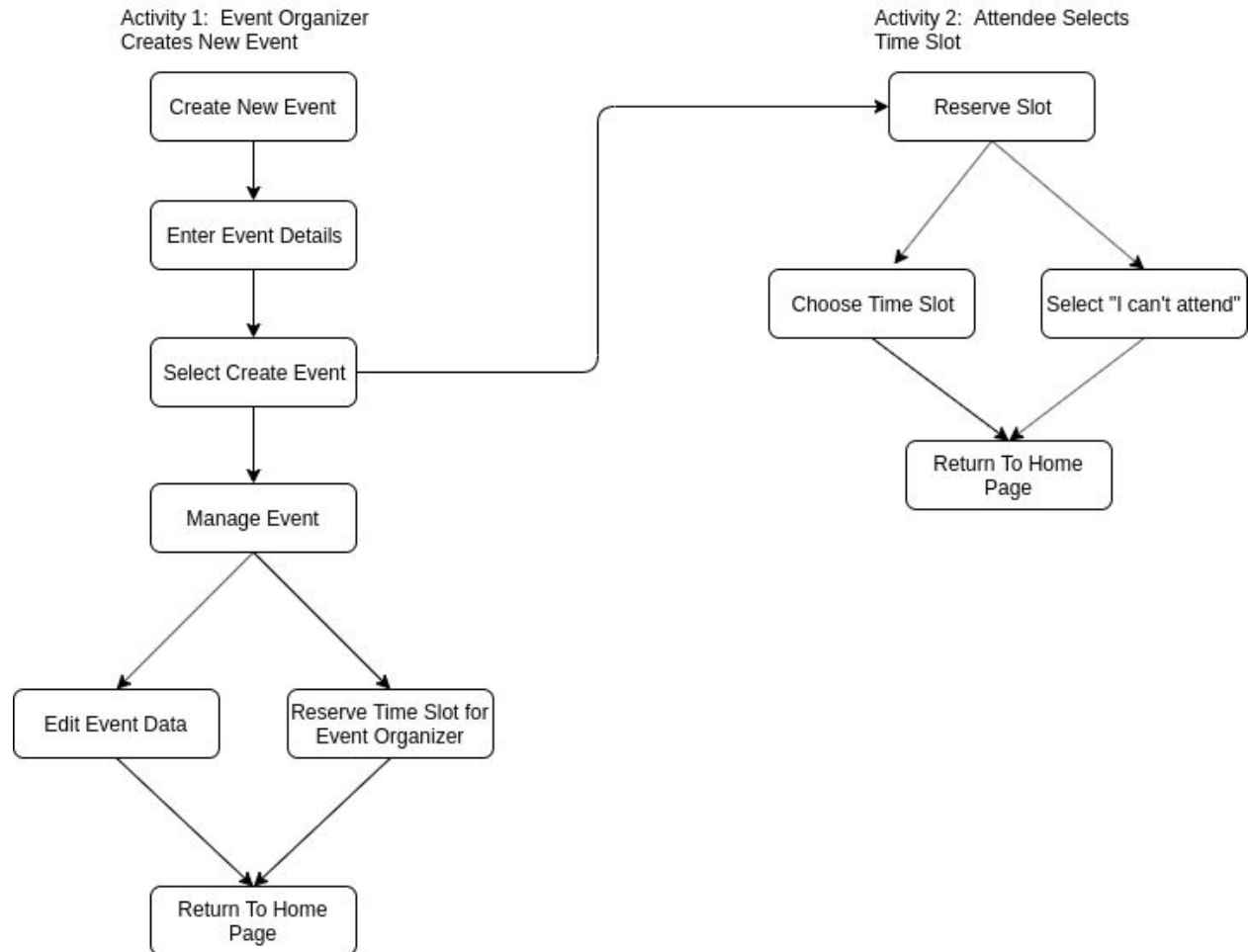
- OSU Member: Any Individual with OSU's ONID Credentials.
 - ONID_email: OSU assigned email address.
 - osu_member_id: Unique number assigned by the database.
- Event: Any activity organized by an OSU Member for other OSU members. Events can have multiple creators to account for individuals who may not have created the event, but are given editing rights.
 - event_name: Name of event
 - location: General location of event, although individual slots can have their own specific location.
 - event_id: Unique number assigned by the database.
 - max_attendees_per_slot: Maximum number of people who can sign up for individual slot associated with the event.
 - max_reservations_per_attendee: The number associated slots the attendee can sign up for in a specific event.
 - description: brief description of the event.
 - visibility: Toggle for selecting whether or not attendees and see who else is attending the event.
- Slot: 1 to M slots associated with each event that attendees can select.
 - number_confirmed_resv: Total number of current reservations for the slot.
 - slot_id: Unique number assigned by the database.
 - location: This is the exact location attendees will meet if selecting this time slot.
- Invitations: 1 to M invitations sent to desired attendees. This entity is used to support the storing of attendee email addresses during event creation.
 - invitation_id: Unique number assigned by the database.
 - email_address: attendee's email address.
- Notification_Pref: Holds the users notification preferences.
 - upcoming_resv_reminder: Stores preferences for notification of upcoming reservations.
 - new_post_upload: Stores preferences for notification when a new file or message is uploaded by a fellow attendee.
 - new_time_slot: Stores preferences for notification of a new time slot being added to an event for which the user is registered.
 - cancelled_resv: Stores preferences for notification of cancellation of a reservation.
 - changed_resv: Stores preferences for notification of changes to a timeslot reserved by a user.
 - organizer: Stores preferences for notification when a user is added to an event as an organizer and given event organizer rights.
- Files: Optional user files that are attached to each time slot
 - file_id: Unique number assigned by the database.
 - file: message provided by user.
 - osu_member_id: ID used to associate a user with a file.

- Messages: Optional user messages attached to each slot
 - message_id: Unique number assigned by the database.
 - Message: message generated by user.
 - osu_member_id: ID used to associate a user with a message.

ER DIAGRAM



Creating an Event and Reserving a Time Slot



Technologies

The software's back end will be a Node.js web app using the Express framework. The front end will be constructed with the Bootstrap 4 framework and the handlebars templating engine. FullCalendar will be used to display calendars in the app. MySQL will be used for persistent data storage. Authentication services will be provided by CAS. Visual prototyping was completed using Balsamiq.cloud and draw.io. The final application will be hosted on OSU servers.

Software Structure

On a macro level, Indaba is a web application which incorporates elements of client-server, publish-subscribe, and repository architectures. The server will be provided by a node.js application, the client by a user's browser, and the repository by a MySQL database. Aside from the landing page, all pages that a user visits will involve the client sending a request to the server, the server generating a response that incorporates data pulled from the database, and the response being sent back to the client for rendering. The handlebars templating engine will be used to automate the creation of webpages personalized to each user. The server will retrieve data from the database, convert it into Javascript objects, and then use those objects to construct and populate the DOM.

The behavior of the application on the client will often be altered by user actions without any interaction with the server by making use of Javascript events. For example, selecting a time slot on the "Make a reservation" page will create and populate a row in the "Selected time slots" table with the reservation's details. The client side of the application will also make use of the FullCalendar package to facilitate time slot creation and selection.

Many user actions, like submitting a "Create Event" form, will involve sending information to the server to be parsed, which may result in database entries being created, edited, or deleted. Some actions, like modifying an event's description, will also trigger a notifications module, which will generate and send email and/or SMS messages to addresses stored in the database. Some notifications may trigger automatically, like upcoming reservation reminders.

Client

Donald Heer, an OSU ECE professor working towards his Ph.d, is the client. His motivation for the project is to simplify meeting scheduling which is a common task performed throughout the institution and to ensure OSU is compliant with FERPA regulations. Mr. Heer specified the following requirements:

- Create a web tool on OSU web servers that uses OSU ONID credentials for authentication via Central Authentication Service (CAS)
- Webtool has a 'reserver' portal and an admin portal for seeing reservations.
- Webtool support Chrome, Firefox, Opera, and Edge browsers with identical functionality.
- If requested, reservation can have files attached viewable by the admins and by other users who have reserved the same time slot.
- Users can message all other users in a slot via a web form.
- Time slots can have 1-N reservation slots.
- Administrator can override user selections
- Front end web design uses Bootstrap 3 or 4
- Assume 1200 or 1280px widescreen
- Calendar integration for confirmed reservations

Notification Templates

Received new invitation

Text notification: N/A

Email notification:

Subject: Invitation to {{Event}}

Message:

Hello,

{{Name}} has invited you to {{Event}}!

{{Event Description, if available}}

Click below to check out the event details and make your reservation.

[RSVP on Indaba](#)

New message or file upload

Text notification: {{Name}} has posted a new message/file for {{Event}}. View at {{Link}}

Email notification:

Subject: New message/file posted for {{Event}}

Message:

Hello,

{{Name}} has posted a new message/file to your reservation for {{Event}}

Message

{{Message text}}

File

{{filename, if available}}

[View on Indaba](#)

New time slot created

Text notification: New time slot now available for {{Event}}. View at {{Link}}

Email notification:

Subject: New time slot now available for {{Event}}

Message:

Hello,

A new time slot has been created for {{Event}}

When

{{Date / Time}}

Where

{{Location}}

[RSVP on Indaba](#)

Reservation cancellation

Text notification: Your reservation to {{Event}} was cancelled by the organizer. Make a new reservation at {{Link}}

Email notification:

Subject: Reservation cancelled for {{Event}}

Message:

Hello,

The following reservation(s) to {{Event}} were cancelled by the event organizer:

When

{{Date / Time}}

Where

{{Location}}

[Make a new reservation on Indaba](#)

Event cancellation

Text notification: {{Event}} was cancelled by the organizer. Your reservations have been deleted.

Email notification:

Subject: {{Event}} cancellation

Message:

Hello,

{{Event}} was cancelled by the event organizer. Your reservations have been deleted:

When

{{Date / Time}}

Where

{{Location}}

Change to event details

Text notification:

{{Event}} renamed to {{New Event Name}}. View at {{Link}}

-or-

Description for {{Event}} edited by the organizer. View at {{Link}}

Email notification:

Subject: Change to event details: {{Event}}

Message:

Hello,

{{Event}} was renamed to {{New Event Name}} by the organizer.

[View on Indaba](#)

-or-

Hello,

{{Event}} description was edited by the organizer.

{{New Event Description}}

[View on Indaba](#)

Change to reservation details

Text notification:

Location change for your reservation to {{Event}}. View at {{Link}}

-or-

Time change for your reservation to {{Event}}. View at {{Link}}

Email notification:

Subject: Change to reservation details: {{Event}}

Message:

Hello,

The location for your reservation to {{Event}} was edited by the organizer.

When

{{Date / Time}}

Where

{{Location}}

[View on Indaba](#)

-or-

The time for your reservation to {{Event}} was edited by the organizer.

When

{{Date / Time}}

Where

{{Location}}

[View on Indaba](#)

Added as event organizer

Text notification: You've been added as an organizer to {{Event}}. Start managing this event at {{Link}}

Email notification:

Subject: Added as an organizer to {{Event}}

Message:

Hello,

{{Name}} has added you as an organizer to {{Event}}. You can now edit event details and manage reservations.

[View on Indaba](#)

Invitation reminder

Text notification: N/A

Email notification:

Subject: Don't forget to sign up for {{Event}}!

Message:

Hello,

Don't forget to RSVP to {{Event}}! If you've already signed up, please disregard this message.

{{Event Description, if available}}

[RSVP on Indaba](#)

Reservation Reminder

Text notification: Your reservation for {{Event}} is tomorrow! View at {{Link}}

Email notification:

Subject: Reminder: Your reservation for {{Event}} is tomorrow

Message:

Hello,

You have an upcoming reservation for {{Event}}!

Reservation details: {{date / time / location}}

Click below to check out the event details or change your reservation.

[View on Indaba](#)

Build Schedule

Week 3		
Summary: Create DB, get a skeleton app working with CAS		
Task	Time est. (hrs)	Group member
create mysql DB on OSU servers	2	Everett
create tables in DB	2	Everett
populate example data in DB	2	Everett
create html for landing page (before user login)	1	Paul
create node.js server with single route to landing page	2	Paul
set up project directory (public folder, views folder etc)	1	Paul
create empty handlebars layouts	2	Paul
set up middleware: express, express-sessions, express-handlebars, body-parser, middleware	2	Paul
set up mysql middleware	2	Everett
select and set up CAS middleware	4	Paul
create dummy homepage, pulling user's name from session (must set up CAS first)	3	Everett

Week 4		
Summary: Create basic Bootstrap 4 design, get user accounts working, make (empty) "personal homepage"		
Task	Time est. (hrs)	Group member
design navbar	3	Paul
link "home" in navbar menu to personal homepage	0.5	Paul
set up "log out" option in navbar menu	1	Paul
design base handlebars layout	4	Paul
design personal homepage handlebars template	2	Paul

write backend code to create new account in DB upon initial login	5	Everett
write backend code to retrieve account info from DB for subsequent logins	4	Everett

Week 5		
Summary: Populate user's schedule of reservations on personal homepage, write mid report		
Task	Time est. (hrs)	Group member
User's reservation schedule: design html template for each event they're registered for (event name, created by, description, reservations section)	2	Paul
User's reservation schedule: design html template for each reservation (ignore message/file feature)	3	Everett
write backend code to display a user's events, populating template with info from DB	4	Paul
write backend code to display each event's reservation, populating template with info from DB	6	Everett
midpoint report: describe project status	2	Everett
midpoint report: walk-through	5	Paul

Week 6		
Summary: Set up FullCalendar, make "create event" page and link to database		
Task	Time est. (hrs)	Group member
make "create event" HTML form inputs (ignore calendar)	2	Paul
set up input validation for "Event name", "Description", "Location", "Max attendees", "Max reservations", "Time slot duration", Allow invitees"	2	Paul
set up dynamic input validation for "Add additional event organizers" with visual cue	2	Paul
set up dynamic input validation for "Enter email addresses" with visual cue	2	Paul
dynamically create additional inputs for "Add additional event organizers" after each valid entry	1	Paul

install FullCalendar	1	Everett
display calendar for current week with option to change weeks	2	Everett
display new time slot in calender upon click	1	Everett
create "Edit details" form to display upon creating new slot	2	Everett
set up input validation for "Edit details" form	1	Everett
write backend code to generate new form fieldset for each new slot	1.5	Everett
set up route to access "create event" page	0.5	Paul
write backend code to handle form submission	4	Everett
create link in navbar menu to "create event" page	0.5	Paul

Week 7		
Summary: Make "manage event" and "past reservations" pages and link to database		
Task	Time est. (hrs)	Group member
(Manage Event page) "Welcome to the Organizer Portal": create jumbotron with working link to event's "Make a Reservation" page	0.5	Everett
(Manage Event page) "Event name": create form, set up input validation, write backend code to handle upon submit	1.5	Paul
(Manage Event page) "Description": create form, set up input validation, write backend code to handle upon submit	1.5	Paul
(Manage Event page) "Enter email": create form, set up input validation, write backend code to handle upon submit	1.5	Paul
(Manage Event page) "Add...organizers": create form, set up input validation, write backend code to handle upon submit	1	Paul
(Manage Event page) "Allow...to see who is registered": create form, set up input validation, write backend code to handle upon submit	0.5	Paul

(Manage Event page) "Edit time slots": display existing slots on calendar	1	Paul
(Manage Event page) "Edit time slots": upon clicking on an existing slot, create "Edit details" form, populate with data from DB, set up backend code to handle upon submit	2	Paul
(Manage Event page) "Edit time slots": upon clicking empty space in calendar, create new time slot and display "Edit details" form, populate with default values, set up backend code to handle upon submit	2	Paul
(Manage Event page) "Reservations": design table, populate table with data	2	Everett
(Manage Event page) "Reservations": create "delete" buttons for each reservation, write backend code to make them work	1.5	Everett
(Manage Event page) "Make a new reservation for someone": create form, populate with data from DB, write backend code to handle upon submit	2	Everett
(Manage Event page) "Delete Event": create button, write backend code to display warning and handle upon confirmation	1.5	Paul
(Manage Event page) set up route to access "manage event" page (limit access to event organizers)	1	Paul
(Past Reservations page) make "past reservations" page handlebars template	0.5	Everett
(Past Reservations page) write backend code to display a user's events, populating template with info from DB	1.5	Everett
(Past Reservations page) write backend code to display each event's reservation, populating template with info from DB	2.5	Everett
(Past Reservations page) set up route to access "past reservations" page	0.5	Everett
(Past Reservations page) create link in navbar menu to "past reservations" page	0.5	Everett

Week 8		
Summary: Make "reserve slot", "past events", and "preferences" pages and link to database		
Task	Time est. (hrs)	Group member
(Reserve Slot page) make "reserve slot" page handlebars template	0.5	Everett
(Reserve Slot page) calendar: display time slots by pulling data from DB	1	Everett
(Reserve Slot page) calendar: upon clicking slot, show names of registrants (if applicable)	1.5	Everett
(Reserve Slot page) "Selected time slots": design table, write backend code to display a row when a slot is selected in calendar and hide/delete row when deselected	1.5	Everett
(Reserve Slot page) "I can't make it" button: disable when time slots are selected	1	Everett
(Reserve Slot page) write backend code to handle form submission	2	Everett
(Reserve Slot page) set up route to access "reserve slot" page	0.5	Everett
(Past Events page) make "past events" page handlebars template	0.5	Paul
(Past Events page) calendar: display time slots by pulling data from DB	1	Paul
(Past Events page) "Reservations" table: create and populate with data from DB	1.5	Paul
(Past Events page) set up route to access "past events"	0.5	Paul
(Past Events page) create link in navbar menu to "past events"	0.5	Paul
(Preferences page) make "preferences" page handlebars template	0.5	Everett
(Preferences page) make "preferences" HTML form	2	Everett
(Preferences page) populate form with data from DB	2	Paul

(Preferences page) write backend code to handle form submit	2	Paul
(Preferences page) set up route to access "preferences" page	0.5	Paul
(Preferences page) create link in navbar menu to "preferences" page	0.5	Paul

Week 9		
Summary: Set up notifications, calendar integration		
Task	Time est. (hrs)	Group member
select and install SMS notification package	1	Paul
select and install email notification package	1	Paul
create a flexible notification system that can generate and send the correct notifications to affected users based on the trigger	6	Paul
set up notifications for new invitation	1	Everett
set up notifications for message/file upload	1	Everett
set up notifications for new time slot created	1	Everett
set up notifications for reservation cancellation	1	Everett
set up notifications for event cancellation	1	Everett
set up notifications for event details change	1	Everett
set up notifications for reservation details change	1	Everett
set up notifications for added as event organizer	1	Everett
set up notifications for reservation reminder	1	Everett
set up notifications for RSVP reminder	1	Everett
install and configure package for external calendar integration	5	Paul

Week 10		
Summary: Make finishing touches, complete documentation		
Task	Time est. (hrs)	Group member
write Final Report	8	Both
make Poster	8	Both
Record demonstration	2	Both

Conclusion

The Indaba team's scheduling webtool will increase productivity at OSU by simplifying the unnecessarily complex task of scheduling. The webtool will secure interactions via CAS, meeting FERPA requirements and protecting the privacy rights of students. The webtool will also provide our OSU teammates an intuitive and enjoyable user experience, consolidating scheduling functionality within one application. Development of this project requires approximately 200 man hours and is designed to use tools readily available to faculty, students and administrative personnel who comprise the OSU family.