Ourglass

A Full Stack Web Application for making the process of organising public workshops and classes easier

What is Ourglass?

Ourglass is a website where people can come together to create events, classes, and workshops to share skills, network, and volunteer their time to give something back to their local community. Whether you are a skilled, qualified technician of some kind, such as an electrician or mechanic, or if you just have some basic knowledge of how to use specific technology and want to help others improve their lives with it, or just someone looking to learn more about a certain topic, Ourglass is the best place to do just that.

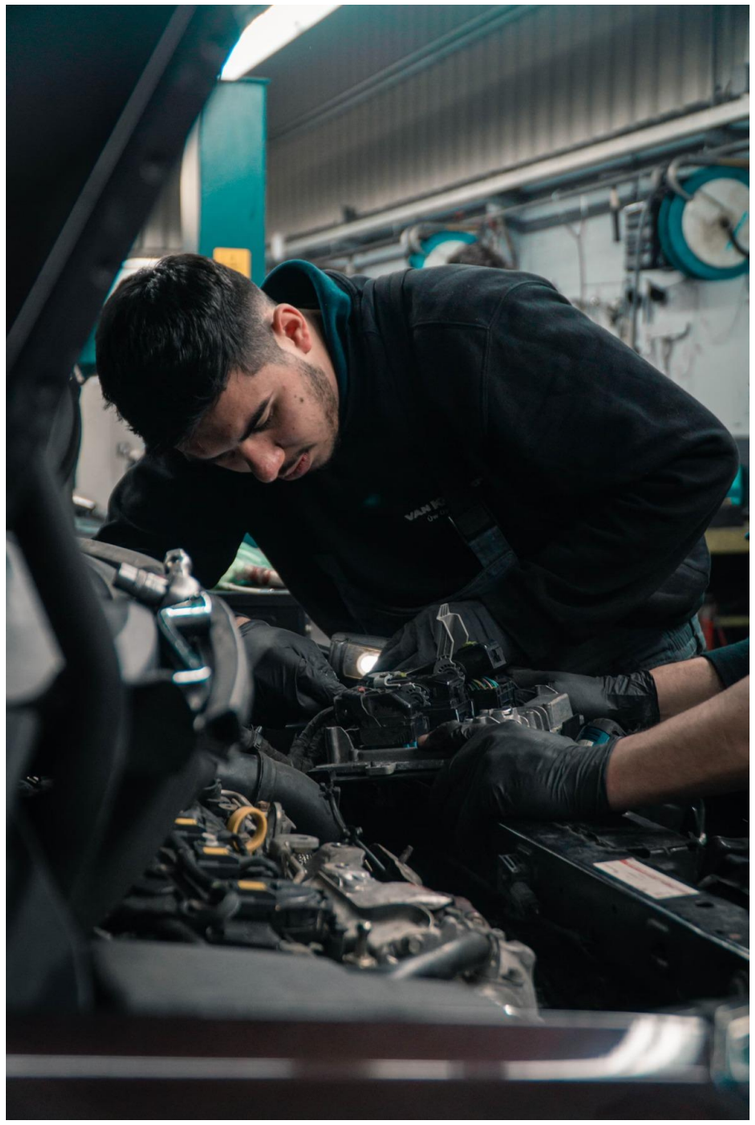
While the above use cases for Ourglass are non-commercial, there are also potential commercial uses for the site - if you are a professional chef looking to sell courses on cooking, offering free introductory sessions through Ourglass is a way to get people interested in what you have to offer. Think of it as a way to offer a sample before people purchase the main course.

Ourglass is a way of using technology to bring people together. Many people today feel that technology isolates people and pulls communities apart - especially social media websites, where it is only possible to see a feed of curated experiences. Ourglass gets people in the same room, learning new skills, having conversations, and bonding over shared experiences.

The Ourglass name comes from 'Our' + 'Hourglass' - it's a way of sharing your time with other people.

Personas

Let's look at some of the people who may want to use Ourglass.



Persona 1 - James

James is a 35 year old man who works as a professional mechanic. Finding himself to be handy with tools and enjoying the process of fixing things and learning how they work from a very young age, he left school and learned to become a mechanic through an apprenticeship with a local auto repair shop.

He thoroughly enjoys his work, and loves being able to help make people's lives easier. Taking to his profession well, he soon found himself opening his own repair center where he makes a good living continuing to diagnose and fix people's car problems.

James feels that with cars getting more and more complex, and with people generally 'specialising' more in other things, the average person today is 'not as handy at diagnosing and fixing problems as they used to be' back when he was younger. He worries that the average person might need to rely on professionals like him to perform simple maintenance tasks, and fears that this may lead to them overpaying for services at less reputable repair centers.

James believes that fixing cars has given him a good, stable job and a well lived life - he wants to give back to the community he services by offering simple afternoon classes showing people how to perform basic car maintenance - changing headlight bulbs, changing oil filters, adjusting tire pressure, changing out a flat tire, and similar things.

What does James need in Ourglass?

'It should be easy for me to schedule a class. It shouldn't take me more than two minutes.'
'I know cars, but I don't really use a computer much. It shouldn't be too technical to use.'
'I need feedback on how people like the classes. If people aren't finding them useful, there's no point.'
'I want a way to talk to people taking the class to see if they have any questions.'

Identified Needs:

- Website should be easy to use, and should have a clear user interface and simple user experience.
- Making a class needs to be quick and simple. The options for the class should be self-explanatory.
- There needs to be a way for attendees to give feedback on the class.
- James would like a way to message people, and for people to message him, to find out more about any questions they have.

Identified Fears:

- James doesn't want the website to be too technical, or he won't be able to use it.
- James doesn't want to feel like he's wasting people's time, or people are wasting his time.
- James doesn't want to have to jump through hoops to give people answers to questions.
- James worries that if people don't like his classes, they might not be able to tell him how to improve.

Persona 2 - Dolores

Dolores is a 74 year old retired woman, who used to work as a secretary for a large communications company. She spent her working life helping her boss plan meetings, arrange sales appointments, keep notes and help create presentations. She used to be more familiar with technology, especially computers, but hasn't really needed to use one since retirement. While this hasn't affected her life too much, she is very much a family woman and a loving grandmother, and wants to keep in touch with her children and grandchildren, who live far away and can't visit often.

Dolores daughter bought her a phone for Christmas last year, but she has been really struggling to use it. Her eyesight isn't what it used to be, but she isn't sure how to make the font sizes on the screen larger - and making calls on the small screen is frustrating to her.

Dolores has asked her grandchildren when they visit to help her learn to use the phone, but she doesn't get to see them very often, and she doesn't want to feel like she's being annoying by asking them every time they visit.

Dolores would like to attend a local class or event aimed at older people and people who are less skilled with modern technology, but isn't sure where she can find out about such an event. Dolores has tried checking with her local library to see if there are any such classes, but she finds it difficult to get to the town very often to check due to mobility issues. She wants a way to know for sure that when she goes somewhere, she'll be able to attend an event specifically for her.

What does Dolores need in Ourglass?

'I'm still a bit uncomfortable with technology. I hope a class can be easy to find.'

'How will I know where the class is? I don't want to have to travel only to not find it.'

'Will there be someone to help me there, and after? I might still need support.'

'If I like it, I want more people like me to know it's a good class!'

'But if I dislike it, I want other people to know why, so they can avoid it!'

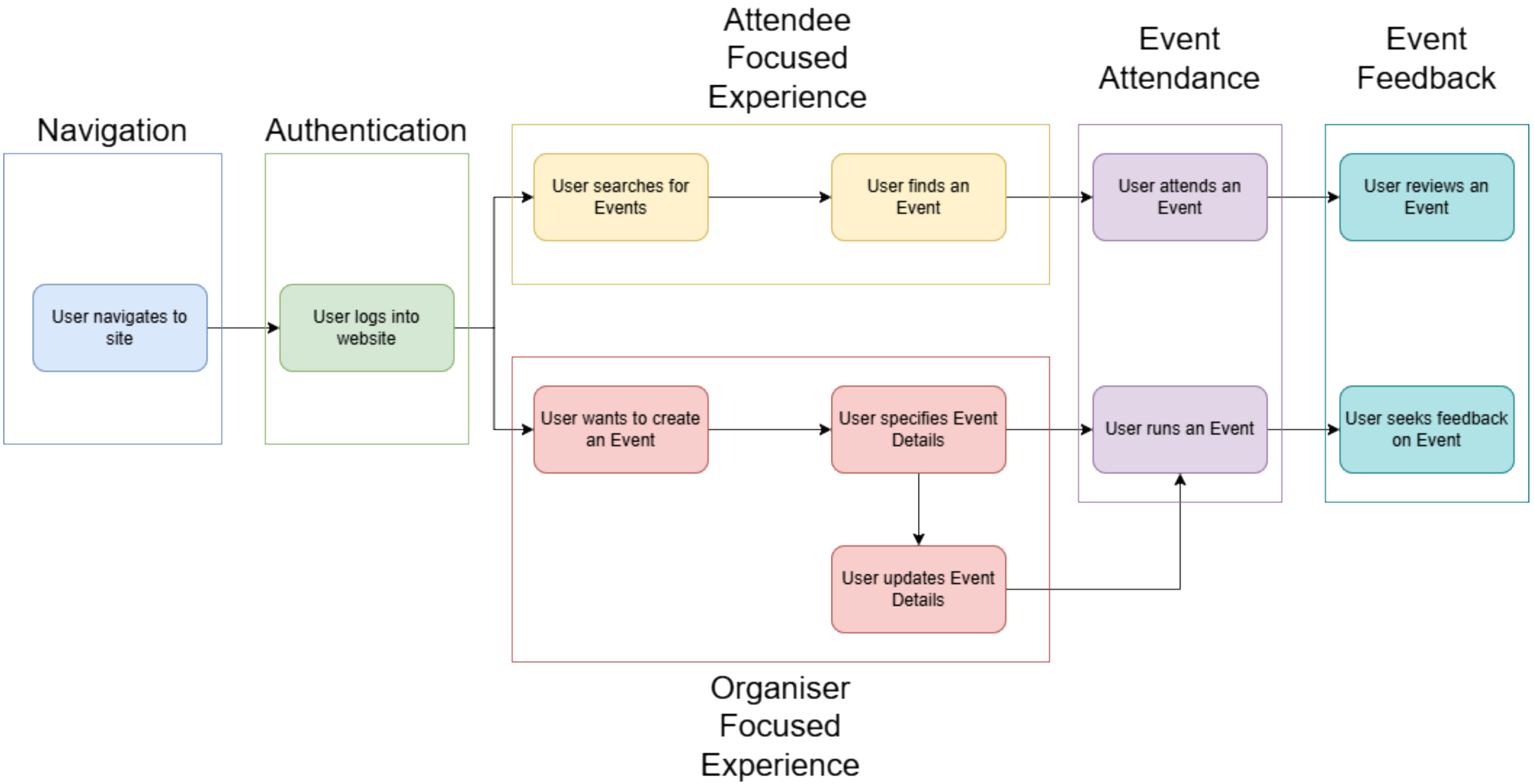
Identified Needs:

- Website should have a simple, non-complex layout, with large fonts and icons for accessibility.
- Being able to search for a class that's local to Dolores is important, as she can't move too far.
- Dolores wants to be able to keep in touch with the event organizer for additional support.
- Dolores is very community-minded, and wants to tell people about classes she likes, and warn them about classes she doesn't like.

Identified Fears:

- Dolores doesn't want to travel a long way only to get lost or dislike the class she attends.
- Dolores needs a way to find out about classes that is easy for her to use, and doesn't assume the user "knows" their way around modern technology.

What does the user journey look like?



There are several aspects of the user journey which will be broken down into features in subsequent pages.

User Stories: Site Navigation

These user stories are primarily concerned with how the navigation of the site works.

As a **site user** I can **navigate to different parts of the site** so I can **find what I am looking to do on the website**.

Acceptance Criteria:

AC1 - Website has a functional navigation bar for both desktop and mobile users.
AC2 - Navigation bar contains links to access all parts of the site, based on relevancy to the user (e.g. if the user is not logged in the option to sign in or sign up is present - if the user is logged in, the option to log out will appear instead)

As an **event organiser** I can **easily go to a page that features the events I've created** so I can **update, delete, and manage my events easily.**

Acceptance Criteria:

AC1 - When logged in, a "My Events" button should appear on the navigation bar.
AC2 - Clicking this button should take them to a page where their events are listed - default sort order is by closest event date, but there should be options to sort by event name or location. If I have organised the event, there should be a note in the card for the event which states that I am the "event organiser".
AC3 - Clicking on one of the options on the My Event page should take the user to the full page for that event.

As an **event attendee** I can **easily go to a page that features the events I'm attending** so I can **view and manage my event attendance easily.**

Acceptance Criteria:

AC1 - When logged in, a "My Events" button should appear on the navigation bar.
AC2 - Clicking this button should take them to a page where their events are listed - default sort order is by closest event date, but there should be options to sort by event name or location. If I am attending the event, there should be a note on the card for the event which states that I am an "event attendee".
AC3 - Clicking on one of the options on the My Event page should take the user to the full page for that event.

As an **site user** I can **navigate to the homepage of the site** so I can **be prompted to log in, which allows further access to the advanced features of the site**.

Acceptance Criteria:

AC1 - When not logged in, the homepage should contain a hero image directing the user to log in or sign up to the site.
AC2 - The home page should also contain some information about the purpose of the site, allowing the user to decide if they wish to sign up for the site at all.
AC3 - Clicking on one of the options to log in or sign up takes the user to the specified page for authentication and account creation.

As an **logged-in site user** I can **navigate to the homepage of the site and use a search bar** so I can **search for events that are near me**.

Acceptance Criteria:

AC1 - When logged in, the homepage should change the prompts to log in to a search bar that allows me to find events.
AC2 - This search bar should allow me to insert a keyword/keywords to find events, as well as a separate text entry area for a location, so I can search for events near me.
AC3 - Entering information into the search bar will take the user to a list of events relevant to the search terms entered.

User Stories: Authentication

These user stories are primarily concerned with how users log in to the website.

As a **site user** I can **register an account with the website** so I can **attend or create events**.

Acceptance Criteria:

AC1 - User can navigate to a sign up page on the website.
AC2 - User then fills out a form containing their requested username, password, and email address.
AC3 - The user is then sent a verification email which, when confirmed, creates the account and allows them to log in.

As a **logged in user** I can **log out of my account** so I can **ensure the security of my account**.

Acceptance Criteria:

AC1 - When logged in, users will see an option to log out of their account in the navigation bar.
AC2 - Clicking the log out button will log the account out, meaning the user will need to sign in again to access their events.

As a **site administrator** I can **manage registered accounts** so I can **moderate site usage and assist users with account management**.

Acceptance Criteria:

AC1 - Created user accounts should be visible in the administration panel for the website.
AC2 - Selecting a user account will allow me to perform actions such as viewing the users events and comments, as well as their account details such as username.
AC3 - I should be able to send the user an email through the administration panel prompting them to reset their password.

User Stories: Attendee Focused Experience

These user stories are primarily concerned with how users who wish to **attend events** using the website.

As an **event attendee** I can **see an event summary** so I can **read event details quickly to see if they are suitable for me**.

Acceptance Criteria:

AC1 - After using the search bar, cards for each event are displayed with a summary of information about the event.
AC2 - This information should include the event name, date, a brief description of the event, and the location, as well as distance from the user's location in the search terms.
AC3 - User can then click on an individual card to view more details on the event, which takes them to the event page, where they can read further details on the event and register attendance if desired.

As an **event attendee** I can **leave messages on event pages** so I can **ask questions about the event**.

Acceptance Criteria:

AC1 - Navigating to the event page shows a comment section beneath the event description, where a logged in user can leave messages for the event organiser.
AC2 - Comments are left with information about the commenters username, date of comment, and text message.
AC3 - Other users can provide replies to a comment, including the event organiser (who has a note in their comments indicating that they have organised the event), answering any queries they may have.

User Stories: Organiser Focused Experience

These user stories are primarily concerned with how users who wish to **create events** using the website.

As an **event organiser** I can **create a new event** so I can **allow attendees to attend my event**.

Acceptance Criteria:

AC1 - The navigation bar for a logged in user should include an option to create a new event.
AC2 - Clicking the create new event button takes the user to a form page, which asks them for the event name, date and time, location, maximum number of attendees, a brief description of the event, an image to represent the event, and a further description of the event.
AC3 - Submitting the event details above creates a new event, which can be found by searching for keywords in the event name, or by the event organiser clicking the "My Events" button on the navigation bar.

As an **event organiser** I can **update the details of an event** so I can **reschedule, or increase the accuracy of the description of an event**.

Acceptance Criteria:

AC1 - When an organiser navigates to one of their events, there should be a button to edit event details.
AC2 - This allows them to edit individual details, such as the event name or location, or delete the event entirely.

As an **event organiser** I can **leave messages on event pages** so I can **provide further information or answer queries about the event**.

Acceptance Criteria:

AC1 - Navigating to the event page shows a comment section beneath the event description, where a logged in user can leave messages for the event organiser.
AC2 - Comments are left with information about the commenters username, date of comment, and text message.
AC3 - The event organiser can then reply to these comments, answering queries that event attendees and users may have about the event.

User Stories: Event Attendance

These user stories are primarily concerned with how **event attendance** is indicated to event attenders and organisers.

As an **event attendee** I can **see how many people are attending an event** so I can **decide whether to attend that event**.

Acceptance Criteria:

AC1 - When on an event page as a user who is not the event organiser, I can see how many people have registered to attend the event.
AC2 - I can also see how many places are left on the event, so I know to register my interest quickly if necessary.

As an **event organiser** I can **see how many people are attending an event** so I can **make decisions about the scheduling of that event**.

Acceptance Criteria:

AC1 - When on an event page as a user who **is** the event organiser, I can see how many people have registered to attend the event, and the usernames of the registered attendees.

User Stories: Event Feedback

These user stories are primarily concerned with how **event feedback** is provided after an Event.

As an **event attendee** I can **leave a review after the event date** so I can **notify other users about how the event went**.

Acceptance Criteria:

AC1 - After an event's date has elapsed, event attendees are able to leave review on the event's page.
AC2 - These reviews should include a 1-5 Star rating, the attending user's username, and a text area for them to go into detail about the event.

As an **site administrator** I can **approve submitted reviews** so I can **ensure they do not violate the content policy for the site**.

Acceptance Criteria:

AC1 - When a user submits a review, this should show on the review page as awaiting approval.
AC2 - The submitting user and administrators can see the review, but the review is invisible to all other site users.
AC3 - An administrator can then approve the review, making it visible to other site users.

User Stories: Miscellaneous

These user stories are primarily concerned with how **event feedback** is provided after an Event.

As an **site user** I can **contact the site administrators** so I can **ask questions and get information about the website**.

Acceptance Criteria:

AC1 - The website has a contact us page that all users can access.
AC2 - The user can then fill out a form requesting their name, email (which should auto-fill if they are an authenticated user), and their query, which is received by the site administrators for the purpose of contacting the user directly by email.

Site Models

An Entity Relationship Diagram Demonstrating how the site models work.

Event (models.Event)			
Key	Name	Type	Additional Info
PK	event_id	PositiveIntegerField	used to generate url for event
	event_name	CharField	max length = 75 |
	event_date	DateTimeField	date of event occuring, to be validated in the input form
	is_online	BooleanField	default = false | if event is online user is prompted to provide a url to join visible only to attendees when the event goes live. If not online user is prompted to enter an address below
	url_or_address	Char	max length = 100 | name of field on form changes depending on if is_online is true or not
	maximum_attendees	PositiveSmallIntegerField	
FK	current_attendees		many-to-many relationship with user model via the booking table
	short_description	TextField	max length 200 characters
	image	CloudinaryField	Cloudinary to be used to store event images, image required to submit event, validated in form
	long_description	TextField	max_length = 3000 | Formatting to be enhanced using summernote.
FK	event_organiser	User Model	many-to-one relationship to User model - method to return event organiser's full name included
	created_on	DateTimeField	auto_now_add = true
	updated_on	DateTimeField	auto_now = true

Booking			
Key	Name	Type	Additional Info
PK	booking_id	PositiveIntegerField	
FK	event	PositiveIntegerField	many-to-one relationship with Event Model
FK	ticketholder	PositiveInteger	many-to-one relationship with User Model
	tickets	PositiveSmallInteger	choices = (1, 2, 3, 4) | only allow 4 tickets per ticketholder max for fairness

User (Default Django models.User - relevant fields only)			
Key	Name	Type	Additional Info
PK	user_id	PositiveInteger	
	username	CharField	max_length = 25 |
	first_name	CharField	max_length = 25 |
	last_name	CharField	max_length = 25 |
	email	EmailField	
	password	CharField	encrypted by user model by default
	is_staff	BooleanField	default = false | required true for admin panel access
	is_active	BooleanField	default to false before email verification - also can be triggered if user is "banned"

Comment			
Key	Name	Type	Additional Info
PK	comment_id	PositiveInteger	
FK	event	Event Model	many-to-one relationship to Event Model
FK	author	User Model	many-to-one relationship to User Model
	date	DateTimeField	auto_now_add = true |
	content	TextField	max_length = 300 |
FK	parent	Comment Model	blank = true | allows a comment to be a reply to another user's comment. many-to-one relationship to comment model. If blank, comment has no parent and is not considered a reply to another comment

Review			
Key	Name	Type	Additional Info
PK	review_id	PositiveInteger	
FK	event	Event Model	many-to-one relationship to Event Model
	rating	PositiveSmallIntegerField	choices option used in this field (choices are 1,2,3,4,5) reflecting number of stars the user rates the event, default choice is 5 stars
	author	User Model	many-to-one relationship to User Model
	content	TextField	max_length = 300 |

Technologies

Technologies used in the development of Ourglass

HTML

- Basic Page Structure and Content

CSS

- Custom page appearance and styling

JavaScript

- Page Interactivity
- JavaScript Testing Functionality

Bootstrap

- Mobile-first customisable framework for implementing HTML, CSS and JavaScript front end capabilities.

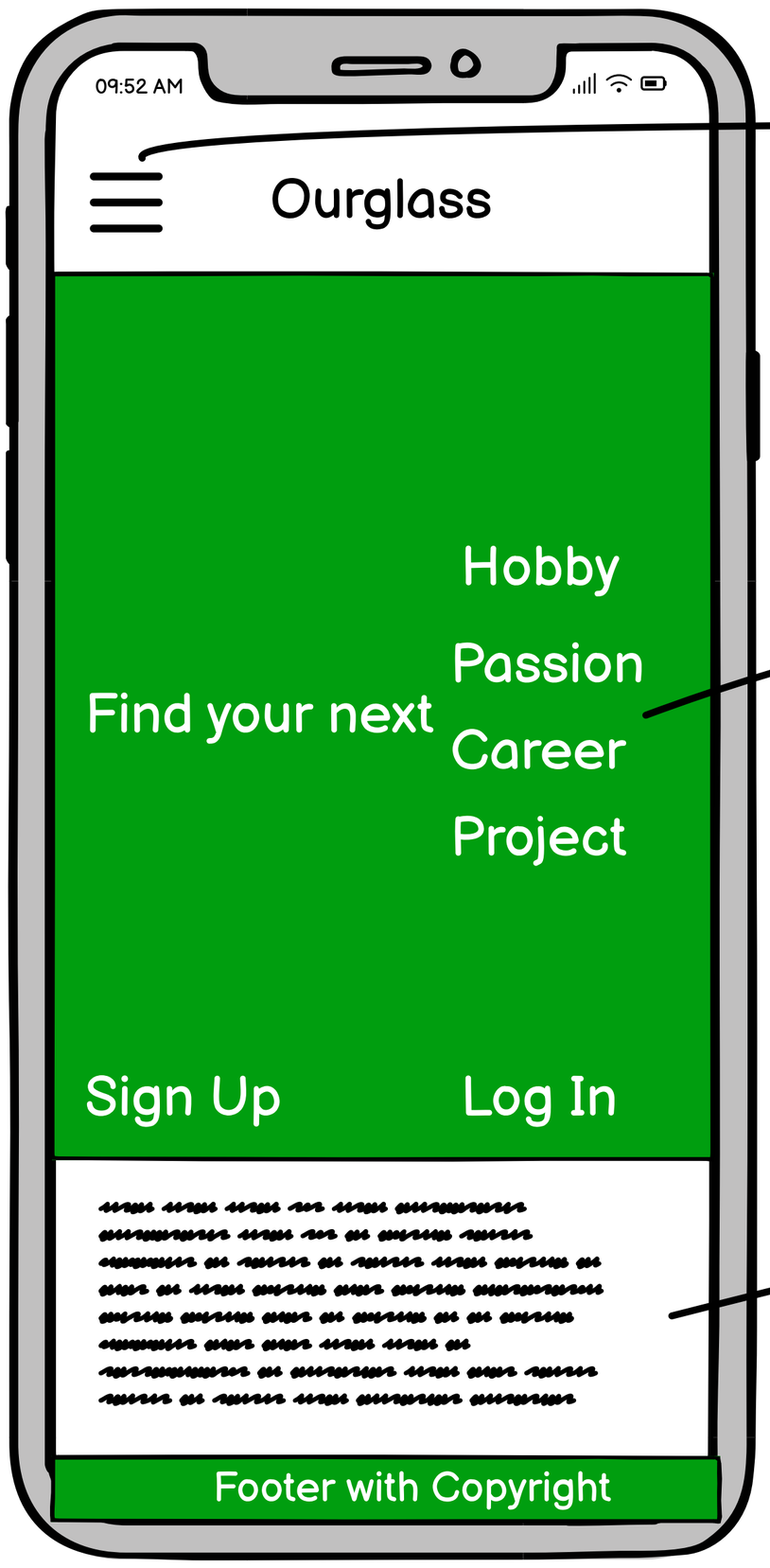
Python

- Back-end structure
- Existing libraries for further back-end functionality
- Python Testing Functionality

Django

- Back-end framework for implementation of full stack web applications.

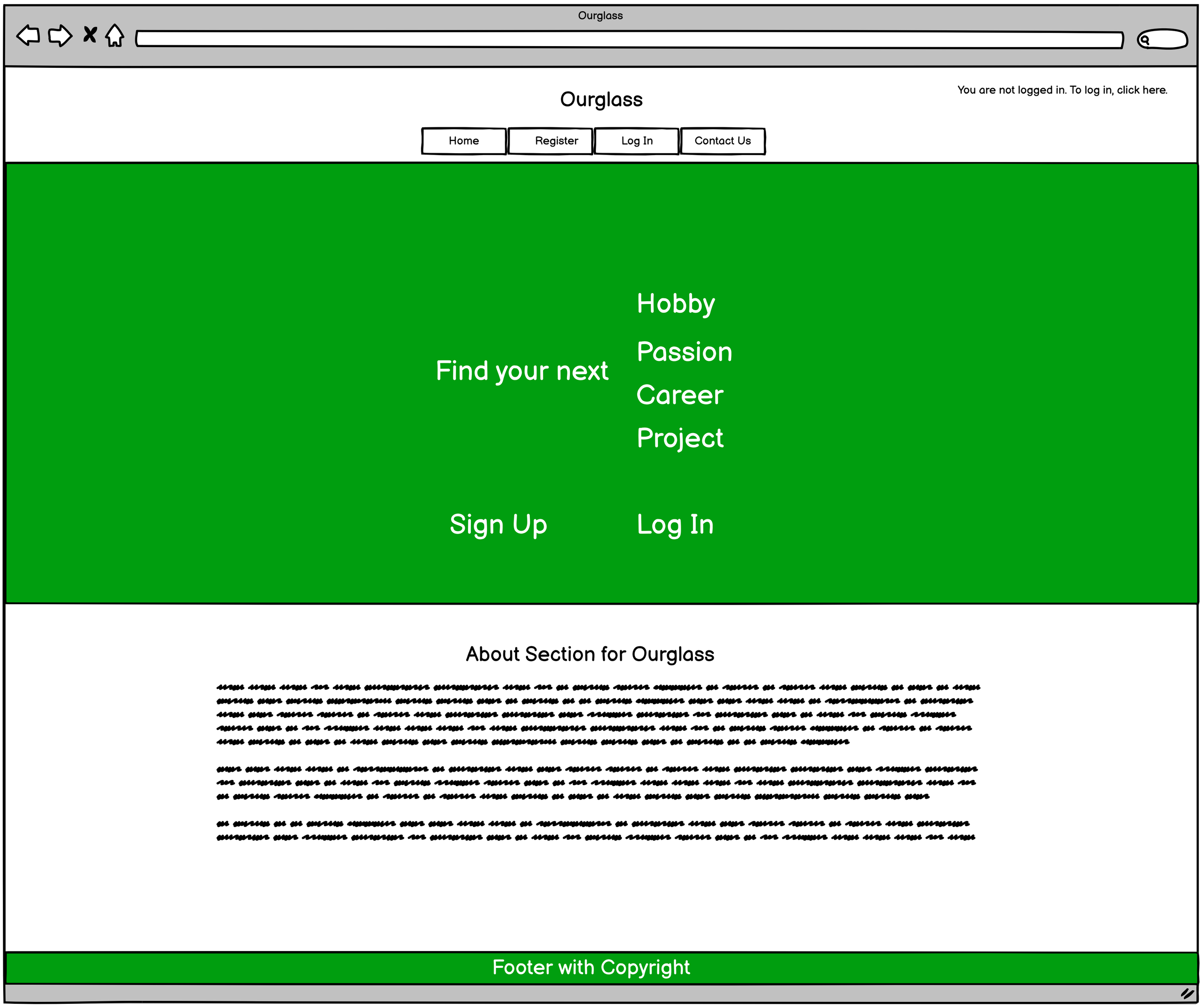
Landing Page: Not Logged In



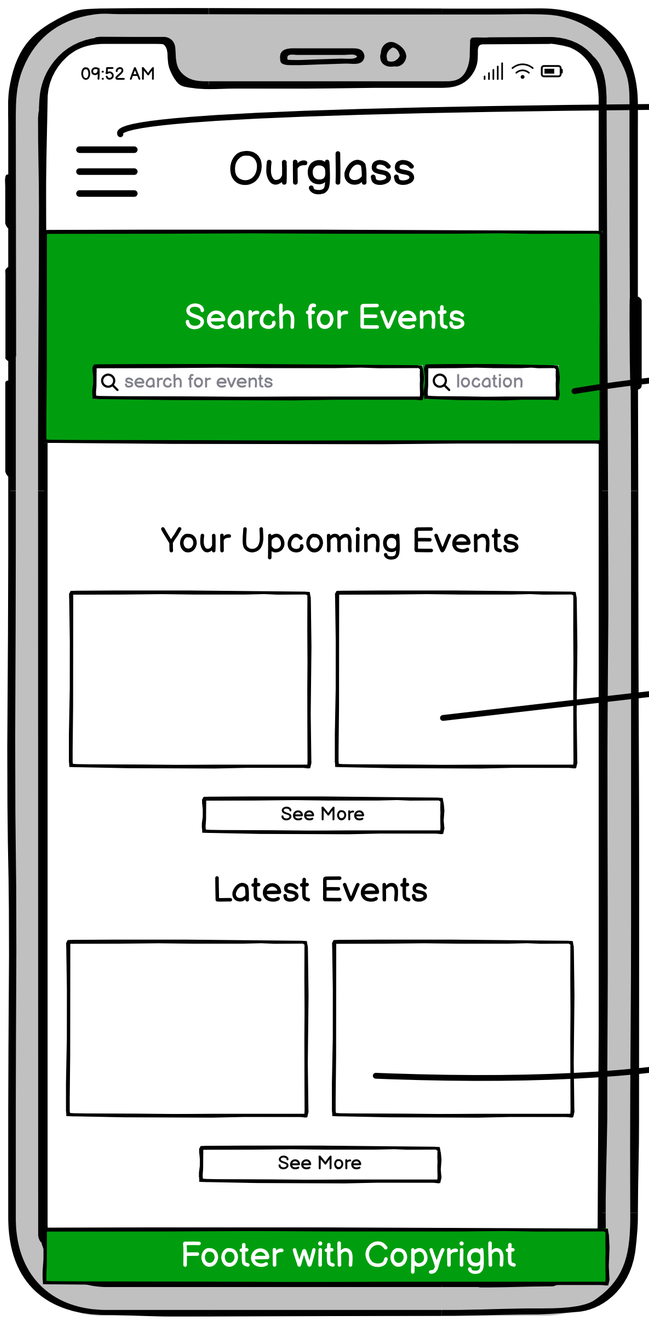
Menu Options
- Home
- Register
- Log In
- Contact Us

Vertical Text Marquee outlining available options
- Hobby
- Passion
- Project
- Career
- Event
- Lesson
- Etc.

Brief outline of information about Ourglass



Landing Page: Logged In

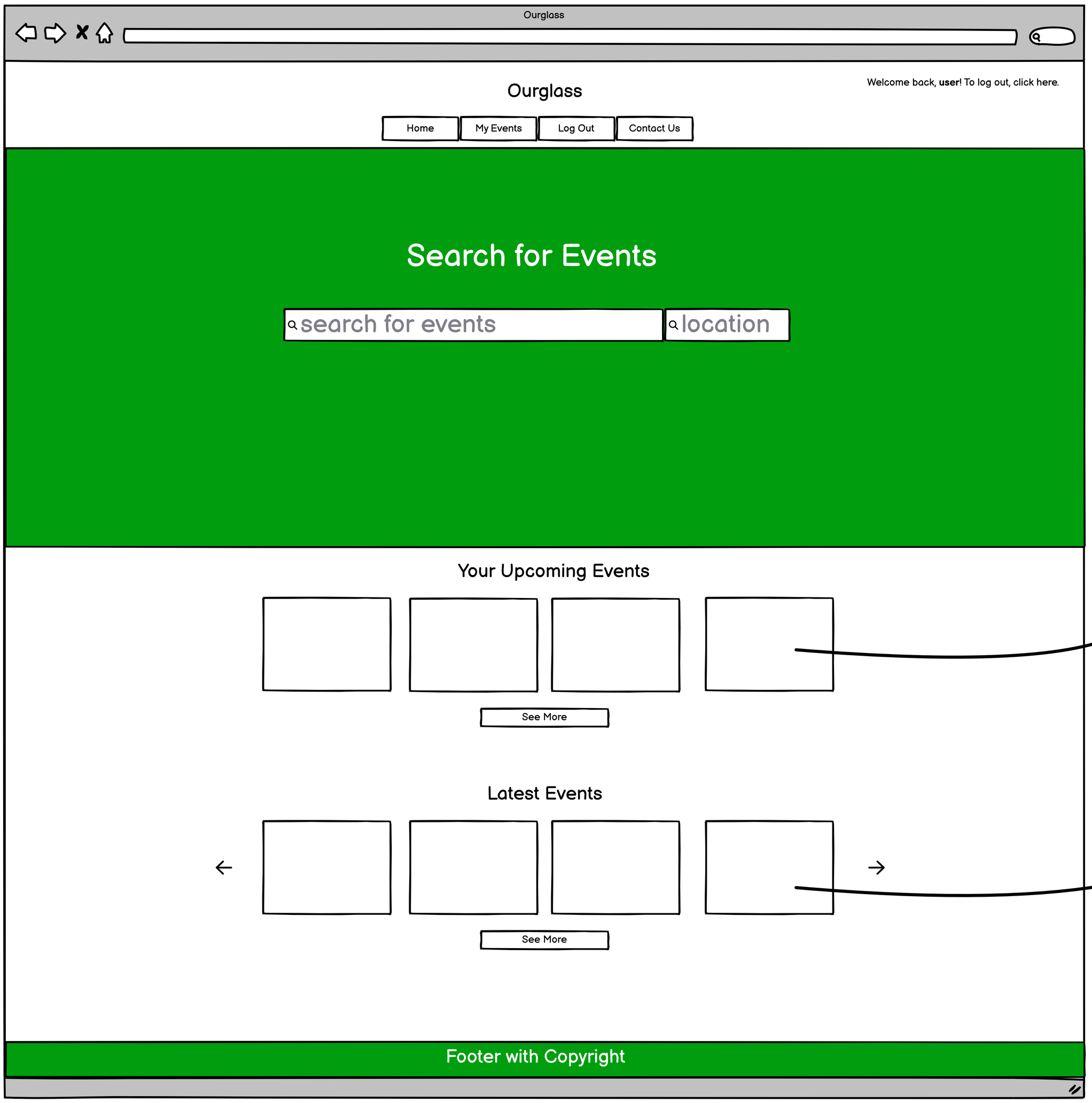


Menu Options
- Home
- My Events
- Log Out
- Contact Us

Search for Events Based on Location

Your Upcoming Events
- Shows the 2 nearest upcoming events that the user has either marked as attending or created.
- Clicking See More takes to a page where events the user is part of are listed by date

View Latest Events
- Most recently submitted events appear here as a horizontal marquee
- Clicking See More takes to a page where events are listed by newest creation date



Your Upcoming Events
- Shows the 4 nearest upcoming events that the user has either marked as attending or created.
- Clicking See More takes to a page where events the user is part of are listed by date

View Latest Events
- Most recently submitted events appear here as a horizontal marquee
- Clicking See More takes to a page where events are listed by newest creation date

Sign Up Page

Information about Signup

- Brief Information advising users on the sign-up process
- Also contains a link to the login page in case the user has clicked sign-up on accident instead of log in

Sign Up Page: Email Verification Sent

09:52 AM

Ourglass

Footer with Copyright

Signup Confirmation

- User is informed they have been sent an email to verify their email address.
- Users can follow link in email to mark account as active and log in

Image for confirmation page

- Likely just stock photo of an event taking place just to occupy whitespace and make this page less basic

Ourglass

Ourglass

You are not logged in. To log in, click here.

Home | Register | Log In | Contact Us

Signup Confirmation

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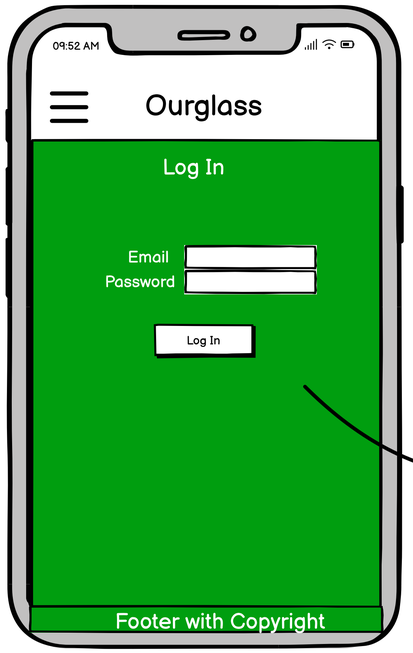
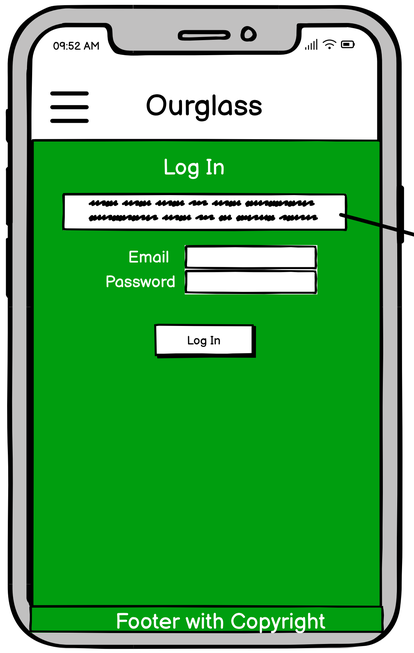
Log In Page



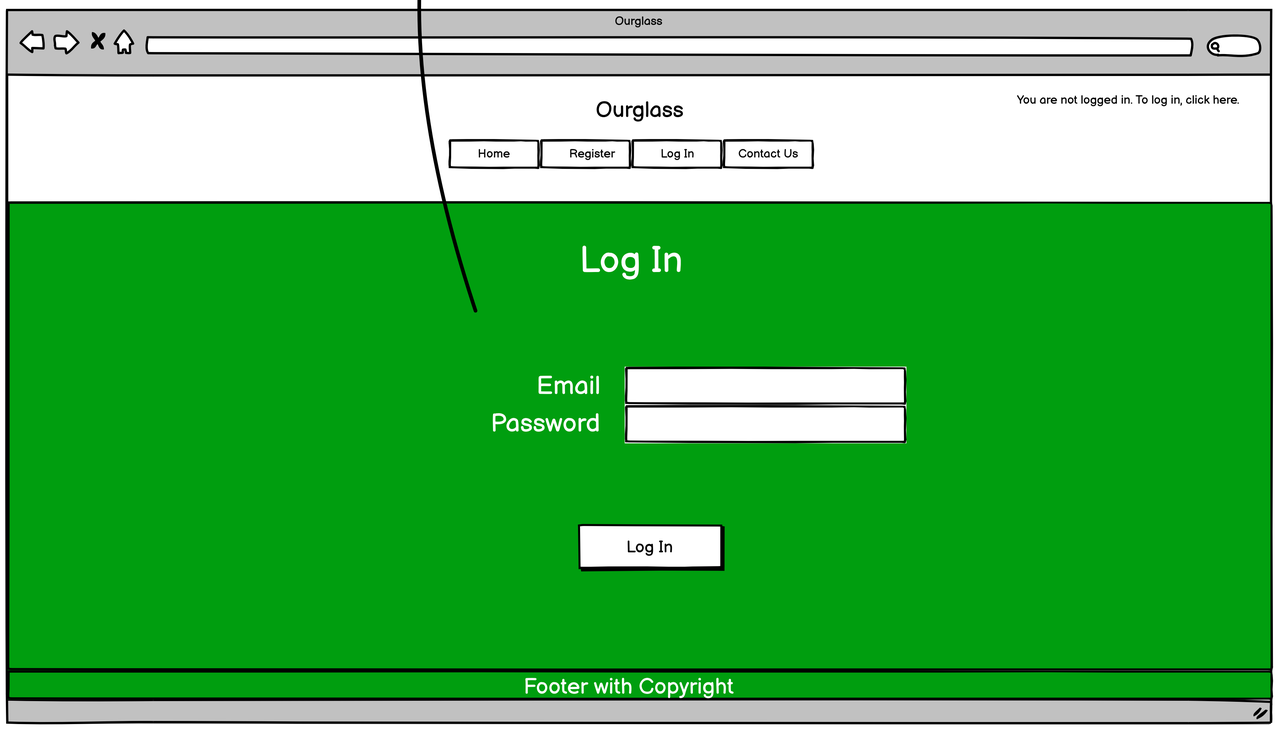
Log In Page

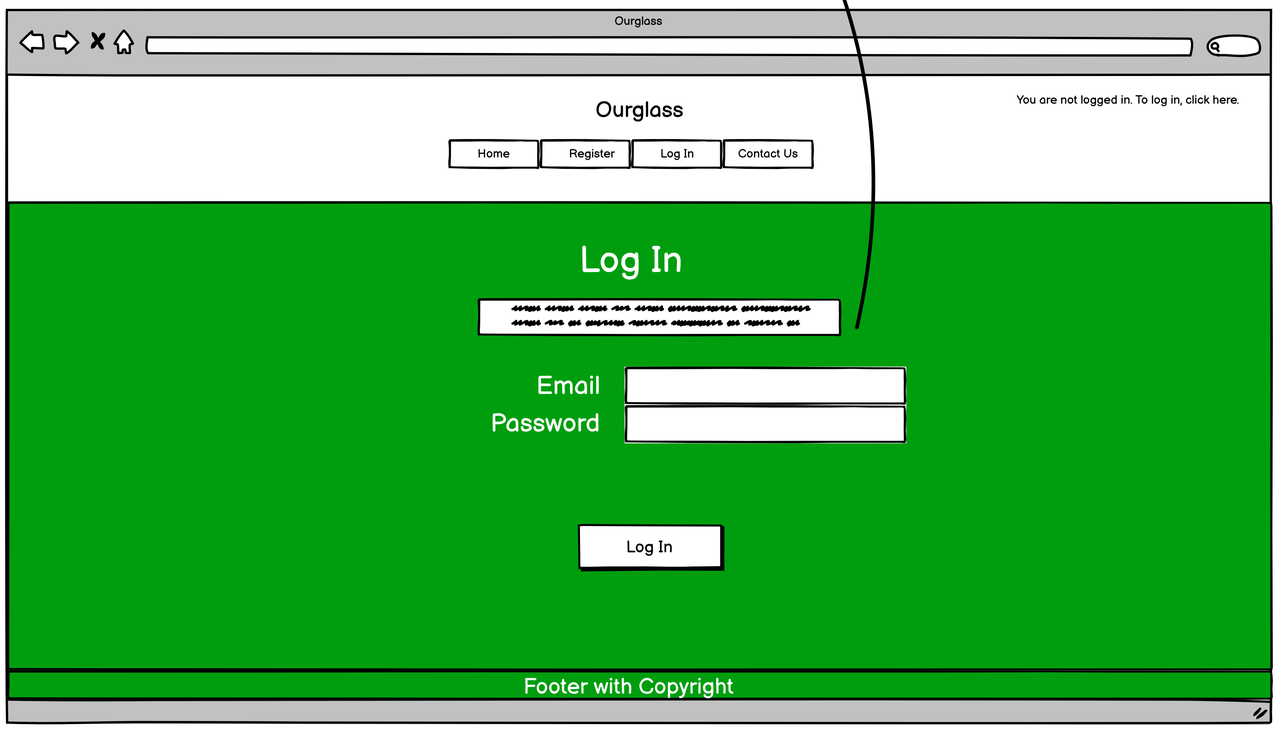
- Log In Page is fairly self explanatory - user inputs their email and password and clicks the log in button. If successful, this will redirect them to the landing page for logged in users.



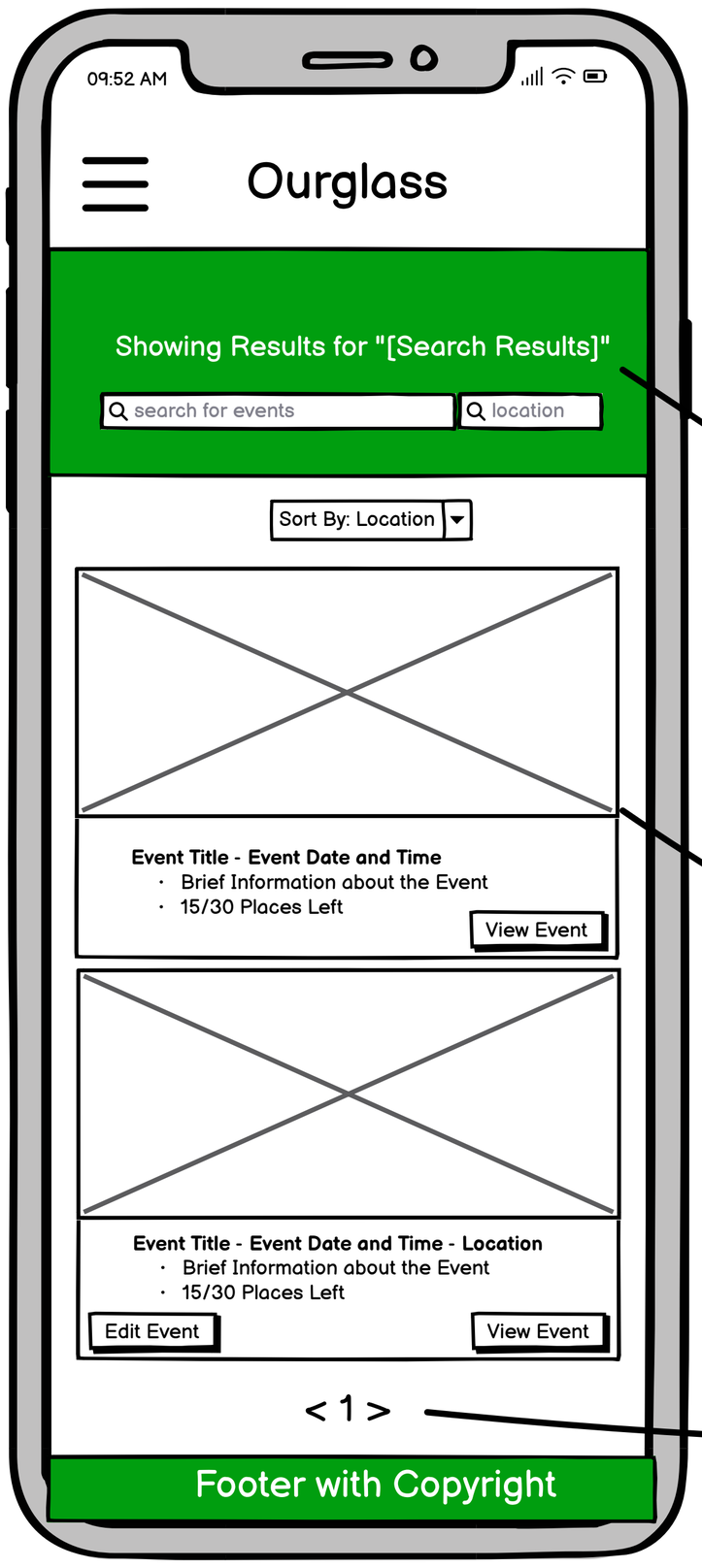
Unsuccessful Log In

- If the user fails to enter a correct email/password combination, they will be informed by a text message at the top of the log-in section.





Searching for Events



Search Bar Remains at Top of Page
- Confirms that the search has gone through for the requested results
- Search bar remains so that user can change their search parameters without going back to the homepage

Events displayed as cards containing summary
- Option at the top of the page to sort by Location, Newest, or Nearest to current date, or recently updated
- Lists the event name, date and time, event summary and remaining places left
- Button to go to the main event page to confirm attendance, read comments
- If the displayed event is organised by the user, a button appears to edit the event

Pagination
- Implement Pagination to show multiple pages of events

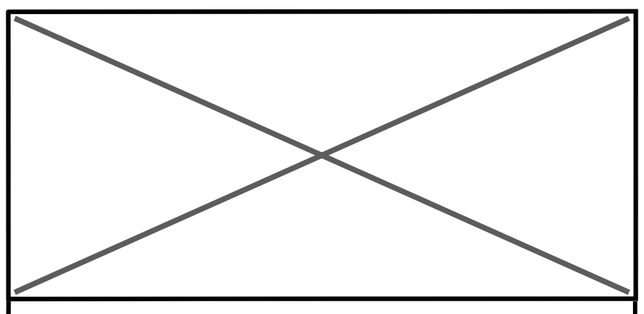
My Events Page

09:52 AM

Ourglass

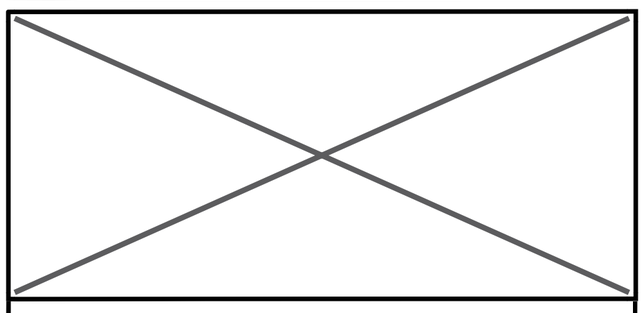
My Events

Sort By: Location



Event Title - Event Date and Time - Location
- Brief Information about the Event
- 15/30 Places Left

View Event



Event Title - Event Date and Time - Location
- Brief Information about the Event
- 15/30 Places Left

Edit Event | View Event

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Footer with Copyright

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Pagination
- Implement Pagination to show multiple pages of events

Ourglass

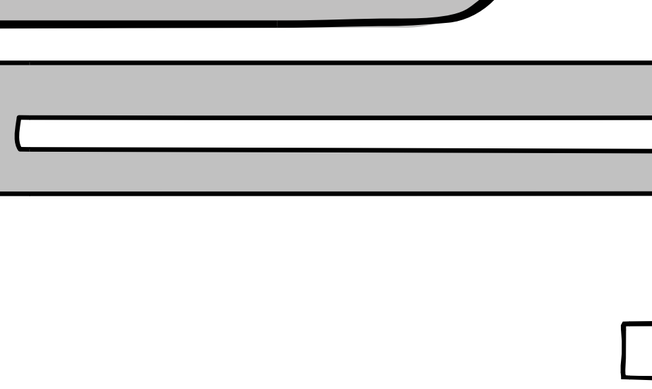
Ourglass

Welcome back, **user**! To log out, click here.

Home | My Events | Log Out | Contact Us

My Events

Sort By: Location



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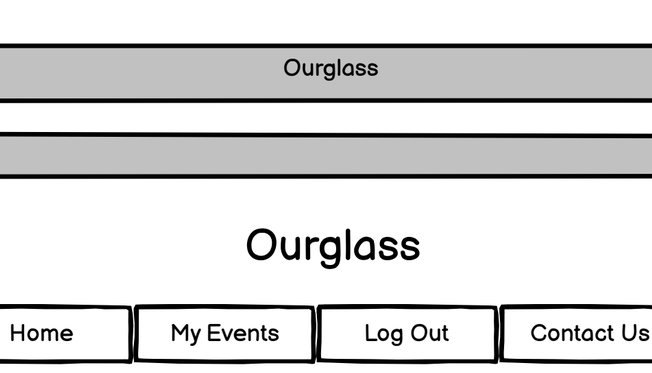
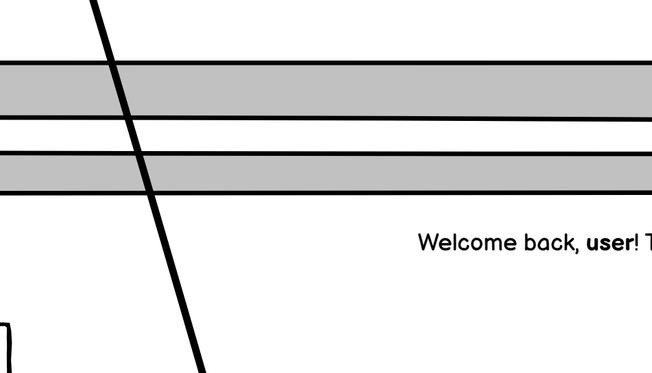
- 15/30 Places Left

View Event



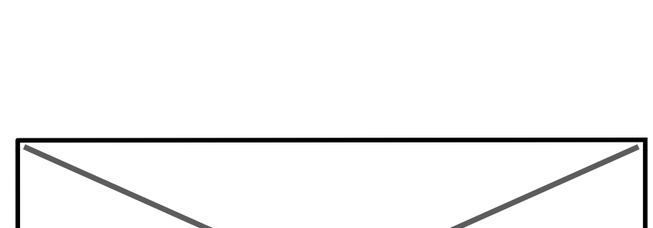
Event Title - Event Date and Time - Location
- Brief Information about the Event
- 15/30 Places Left

Edit Event | View Event



Event Title - Event Date and Time - Location
- Brief Information about the Event
- 15/30 Places Left

View Event



Event Title - Event Date and Time - Location
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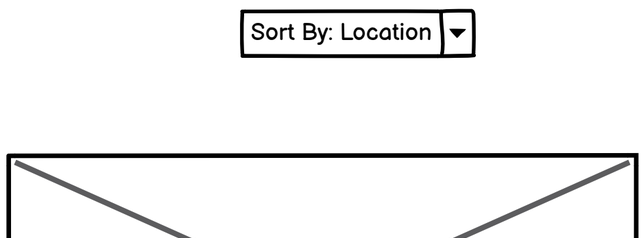

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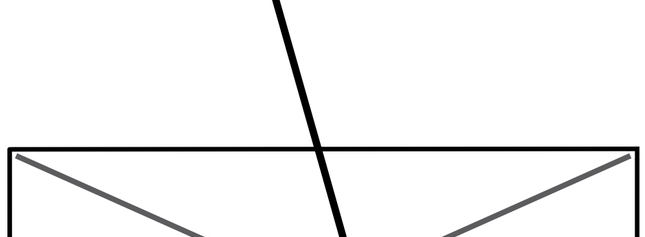

Event Title - Event Date and Time - Location
- Brief Information about the Event
- 15/30 Places Left

Edit Event | View Event

< 1 >

Footer with Copyright

Creating an Event

09:52 AM

Ourglass

Create New Event

Event Name

Event Date / /

Event Address

Maximum Attendees 3

Short Description

Event Image browse

Detailed Description Text area with summernote markup formatting

Create New Event

Footer with Copyright

Information about Creating Event

- Brief outline of how to create an event using the form.
- All fields required
- Pressing the Create New Event button adds the event to database and this now shows up in the user's events page

Ourglass

You are not logged in. To log in, click here.

Ourglass

Home | Register | Log In | Contact Us

Create New Event

Event Name

Event Date / /

Event Address

Maximum Attendees 3

Short Description

Event Image browse

Detailed Description Text area with summernote markup formatting

Create New Event

Footer with Copyright

Editing an Event

09:52 AM

Ourglass

Edit Event: Current Event Name

Event Name existing event name

Event Date date / of / event

Event Address current address

Maximum Attendees 3

Short Description current short desc.

Event Image browse

Detailed Description Text area with summernote markup formatting - contains existing info for easy editing

Edit Event | Delete Event

Footer with Copyright

Information about Editing Event

- Brief outline of how to edit an event using the form.
- All fields required
- Pressing the Edit Event button updates the event in the database and the user's events page
- Hitting delete event pops up with a confirmation modal for safety

Delete Event

Are you sure you want to delete **Event Name**?

☐ Delete Event

Confirm Deletion

Ourglass

You are not logged in. To log in, click here.

Ourglass

Home | Register | Log In | Contact Us

Edit Event: Current Event Name

Event Name existing event name

Event Date date / of / event

Event Address current address

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Event Image browse

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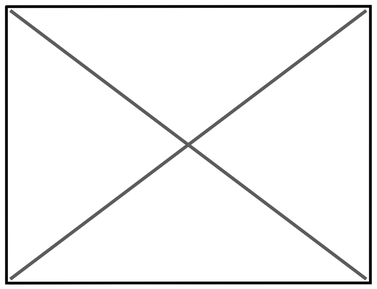
Edit Event | Delete Event

Footer with Copyright

Event Page

09:52 AM

Ourglass



Event Name

Event Date - Location

15/30

Places Left

Long Description of Event
- Further information about the event contents

Attend Event

Edit Event

Attendees (only for event organiser)

List of Event Attendees
- Name
- Name
- Name
- Name
- Name
- Name
- Name
- Name

Comments

Attendee Username - 2 hours ago
Hi! Can you confirm if XYZ?

Reply

Event Organiser - 1 hour ago
Hello! Yes, we will be discussing XYZ at this event.

Reply

Leave a Comment

Insert comment text here. If submitted, this will append the comment to the comments list - if reply is hit first, the text in this box will be appended to the comment it was a reply to.

Reviews

This Event has not taken place yet. Once the event has concluded, this section will open up for reviews.

Sample Review
Event Attendee
A really great event! The space was a little small but the organiser explained things well. Would attend again!

Leave a Review - only visible to event attendees AFTER event

Rating

Insert Review Text here.

Submit Review

Footer with Copyright

Event Image and Description Details at Top of Page
- Allows users to see event details at a glance right at the top of the page

Attend Event and Edit Event
- Gives users the options to attend the event after reading the description.
- Edit event button only available for event organiser
- List of Attendees only available for event organiser - ordinary attendees only see the places left near the description

Comments Section
- Users can leave comments here to ask any questions they might have about the event.
- Other users can reply to provide info, including the event organiser. Event Organiser responses are highlighted to ensure the users can see them easier.

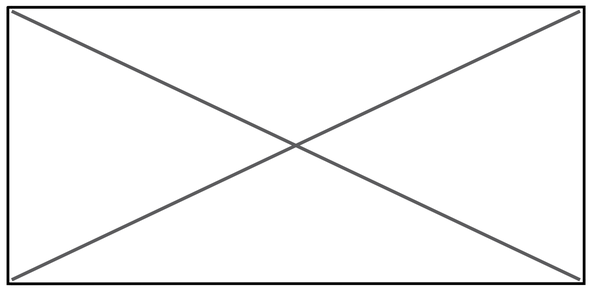
Reviews Section
- Reviews Section is beneath the event, but does not allow users to submit a review until after the event date and time.
- Users who are on the attendee list can leave a rating and feedback for the event organiser.
- All reviews need to be approved by a moderator to ensure they aren't inflammatory/are relevant to the event

Ourglass

Ourglass

You are not logged in. To log in, click here.

Home | Register | Log In | Contact Us



Event Name

Event Date - Location

15/30

Places Left

Long Description of Event
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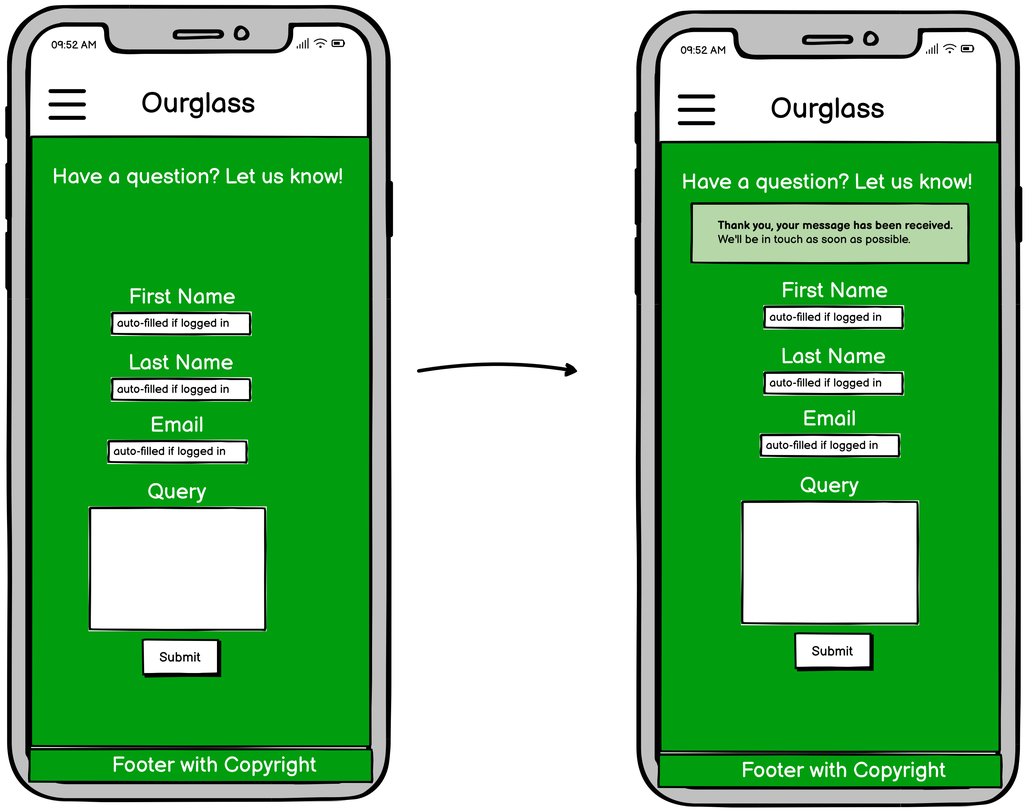
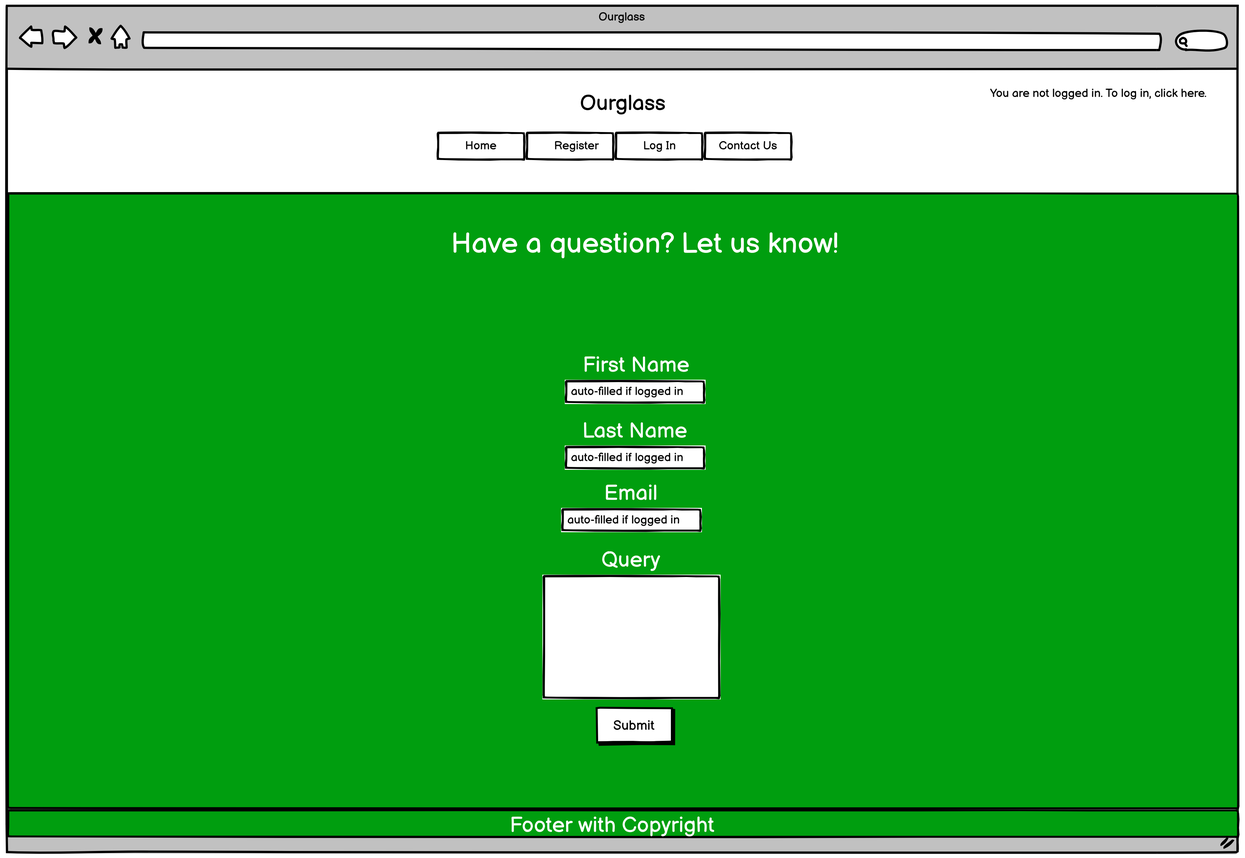
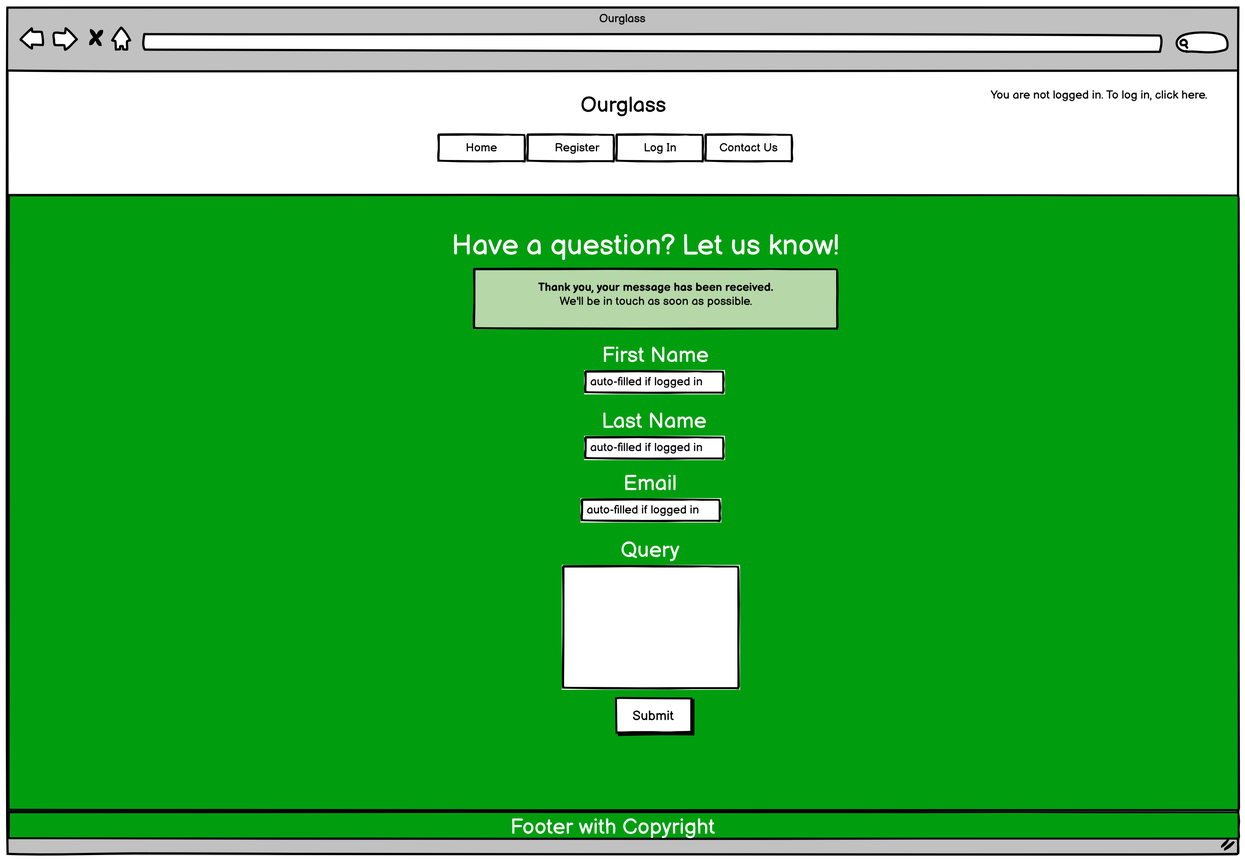
Submit Review

Footer with Copyright

Contact Us Page



Contact Us Form

- Basic Contact Form that uses the ContactMessage model to send messages to the administrators.
- Confirmation message when form has been received by database - admins can view these on the admin panel and then email the user to reply