

Palette5

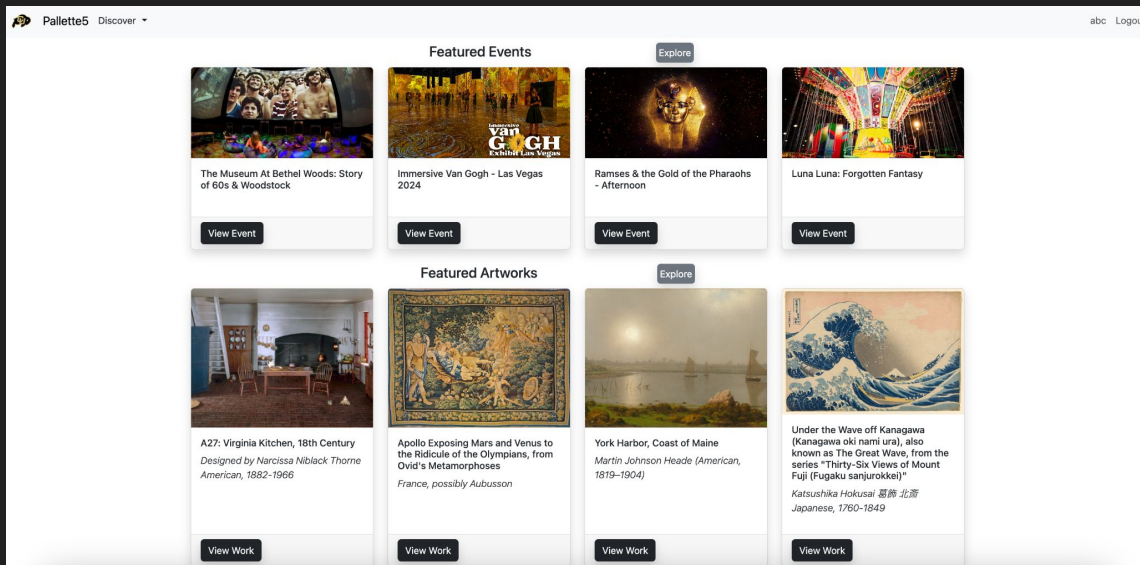
Amy Bowers, Nathaniel Covington, Ethan Epperson, Austin McCutcheon, Khizar Pasha, Catherine Xie.

Languages










Description of Project










We created a user-interactable artworks page. We allow the user to browse artists, artwork, and local events. The user is then free to follow artists and add a comment to artwork. The user is also able to add events to the event calendar and upload their own artworks, of which show up on the user profile page. The goal of the website is to allow artists to interact with other artists at a more local and personal level.



Tools and their respective ratings

Tool	Tool Used		Rating	Notes
Project Tracker	GitHub		4/5	Helpful for stating responsibilities and story points
VCS	GitHub		5/5	Provided helpful snapshots of project state
Database	PostgreSQL		5/5	Easy implementation of database; to include posting queries / getting information
IDE	VSCode		5/5	Least problematic in entire project
User Interface	Handlebars		4.5/5	Easy to work with for the most part
Application Server	NodeJS		4/5	Javascript, async, npm; Some errors occurred without explicit reasoning, not being typed was annoying.
Testing	Mocha/Chai		3.5/5	Had to go through loopholes to get them to work, for this specific project they weren't much more helpful or time saving then just manually trying to break the application and using print debugging.

Tools and their respective ratings (2)

Tool	Tool Used	Rating	Notes
Deployment Environment	LocalHost -Docker 	4/5	Worked as expected
API	Google Maps 	4/5	It was a bit tricky to use, but Google has a ton of documentation so it was fine.
API	Ticketmaster 	3/5	Ticketmaster was very finicky about its parameters. Its responses were also cluttered and had to be manually parsed in the back end
API	Art Institute of Chicago 	4/5	Solid artwork calls; did not generate artist's image.
Deployment Environment	Azure 	4/5	Had trouble with making an account, otherwise worked fine.
Middleware	Multer 	5/5	Very easy to set up, solid middleware.
Cloud Storage	Cloudinary 	5/5	Extremely easy to use, more so than Azure. Free.
API	Artsy  	1/5	Was very poorly made, often times newer data couldn't be searched, and not much variety in search parameters. Little accurate documentation.

Project Tracking in GitHub

Ice Box 0

Ice box contains the set of stories that are not picked up in the current sprint. These are potential stories for the project to work on in the future sprints

+ Add item

Todo 2

This item hasn't been started

- csci3308-Gallery5 #14
Display User Profile
eth4n-e/csci3308-Gallery5 5
- csci3308-Gallery5 #16
Create "Your Artwork" for User Profile
eth4n-e/csci3308-Gallery5 5

+ Add item

In Progress 0

This is actively being worked on

+ Add item

Done 28

This has been completed

- csci3308-Gallery5 #6 ...
Logout Page Browsing
eth4n-e/csci3308-Gallery5 3
- csci3308-Gallery5 #11
Successful Logout and Option to Log Back In
eth4n-e/csci3308-Gallery5 3
- csci3308-Gallery5 #13
Registration Display
eth4n-e/csci3308-Gallery5 2
- csci3308-Gallery5 #15
Display POI

+ Add item

Palette5-Team5

Add status update

View 1

+ New view

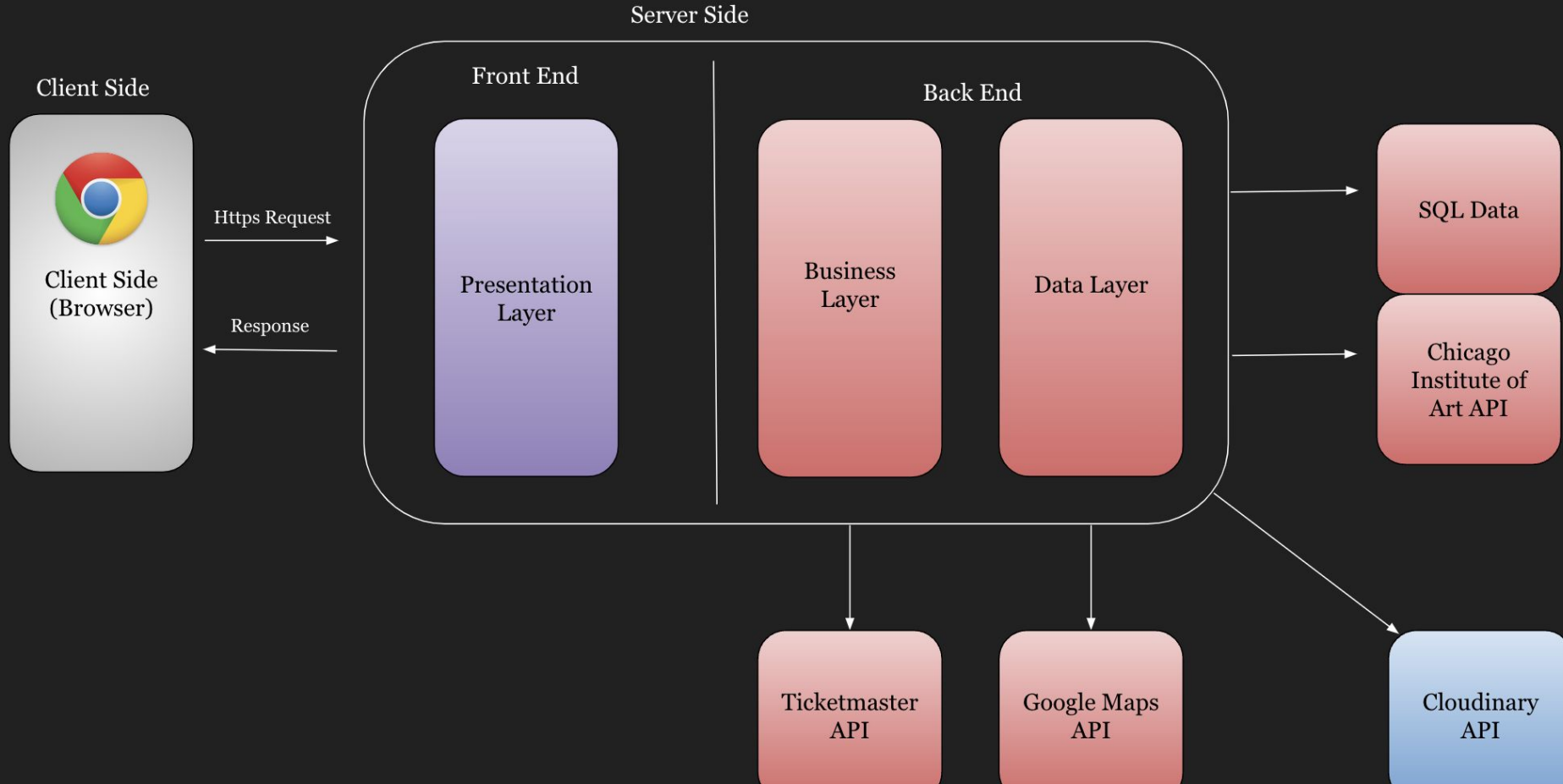
Filter by keyword or by field

Discard

Save

Title	Assignees	Status	Labels	Repository
1 <div><div></div></div> Logout Page Browsing #6	<div><div></div></div> nate-covs	<div>Done</div>		<div><div></div></div> eth4n-e/csci3
2 <div><div></div></div> Successful Logout and Option to Log Back In #11	<div><div></div></div> nate-covs	<div>Done</div>		<div><div></div></div> eth4n-e/csci3
3 <div><div></div></div> Registration Display #13	<div><div></div></div> amyjbowers	<div>Done</div>		<div><div></div></div> eth4n-e/csci3
4 <div><div></div></div> Display User Profile #14	<div><div></div></div> caxi8656	<div>Todo</div>		<div><div></div></div> eth4n-e/csci3
5 <div><div></div></div> Create "Your Artwork" for User Profile #16	<div><div></div></div> caxi8656	<div>Todo</div>		<div><div></div></div> eth4n-e/csci3
6 <div><div></div></div> Display POI #15	<div><div></div></div> KhizarPa	<div>Done</div>		<div><div></div></div> eth4n-e/csci3
7 <div><div></div></div> Artwork related tables #56	<div><div></div></div> eth4n-e	<div>Done</div>		<div><div></div></div> eth4n-e/csci3
8 <div><div></div></div> Find Local Events #17	<div><div></div></div> KhizarPa	<div>Done</div>		<div><div></div></div> eth4n-e/csci3
9 <div><div></div></div> Login Routing #3	<div><div></div></div> amyjbowers	<div>Done</div>		<div><div></div></div> eth4n-e/csci3
10 <div><div></div></div> Collection- Frontend display of different collections #10	<div><div></div></div> austnmcc1908 an...	<div>Done</div>		<div><div></div></div> eth4n-e/csci3
11 <div><div></div></div> Collection Page- Creating new collections #5	<div><div></div></div> austnmcc1908 an...	<div>Done</div>		<div><div></div></div> eth4n-e/csci3

Architecture Diagram



Challenges

- Figuring out a way for users to upload
- Setting up Multer and the Docker
- Actually saving with Multer

```
741 const multer = require('multer')
742 // const upload = multer({ dest: 'uploads/' })
743 var port = 3000;
744
745 var storage = multer.diskStorage({ //tell multer where we want to save file
746   destination: function (req, file, cb) {
747     cb(null, './uploads') // destination to save set to uploads
748   },
749   filename: function (req, file, cb){
750     cb(null, file.originalname)
751   }
752 })
753 var upload = multer({ storage: storage })
754
755 app.use(express.static(__dirname + '/profile'));
756 app.use('./uploads', express.static('uploads'));
757
758 // app.post('/profile-upload-single', upload.single('upload-file', function(req, res, next){
759 //   console.log(req.file.path))
760 //   // var response = '<a href = "/">uploads<a/><br>'
761 //   // response += "Files uploaded successfully!<br>"
762 //   // response += "img src = "${req.file.path}" /><br> `
763 //   // return res.send(response)
764 //   res.render('pages/profile', {img_src:req.file.path})
765 // })
766
767 app.post('/profile-upload-single', upload.single('profile-file'), function (req, res, next) {
768   // req.file is the 'profile-file' file
769   // req.body will hold the text fields, if there were any
770   console.log(req.file.path)
771   // var response = '<a href="/">Home<a/><br>'
772   // response += "Files uploaded successfully.<br>"
773   // response += "<img src='${req.file.path}' /><br>"
774   // return res.send(response)
775   res.render('pages/profile', {img_src})
776 })
777
```

Challenges With Axios

Generally easy to use, but:

- Lots of issues with types, had to typecast a lot
- Didn't realize Axios automatically encrypted queries to HTML escape
- How to handle multiple axios requests

Challenges with Implementing Follow / Collections

- Implementing a following feature
- Artists Table in SQL
- Ajax vs Axios
 - AJAX: Allowed us to make request from the server without refreshing the browser in order to preserve state
- Updating a follow list
- Similar complications with adding an artwork to a collection

```
<script>
document.addEventListener('DOMContentLoaded', () => {
  const followButtons = document.querySelectorAll('.follow-button');
  //console.log('Dom loaded!!!');
  followButtons.forEach(button => {
    button.addEventListener('click', function(event) {
      event.preventDefault();
      const artistId = this.getAttribute('data-artist-id');
      const artistName= document.querySelector('#artistInfo').getAttribute('data-artist');
      console.log('Artist name: ' + artistName);
      console.log('ArtistID: ' + artistId);
      // Make the AJAX request here, similar to before.
      $.ajax({
        url: `/follow`,
        type: 'POST',
        data: { artistId, artistName },
        success: function(response) {
          button.disabled = true;
          button.textContent = 'Following!';
        }
      });
    });
  });
});

-- Create user_artists table
CREATE TABLE IF NOT EXISTS user_artists (
  follow_id SERIAL PRIMARY KEY,
  user_id INT REFERENCES users(user_id),
  artist_id VARCHAR(255) REFERENCES artists(artist_id),
  UNIQUE(user_id, artist_id)
);
```

Challenges With APIs

- Artsy and Art Institute of Chicago
 - Usable offset values were not reflective of the total number of results
 - Artsy: artworks did not list the artist
 - Art Institute of Chicago: artists did not have an associated image
- Documentation
 - Inconsistent and unclear
 - Ex: Artsy request for artworks refers to the token in different manners:

- ```
curl -v "https://api.artsy.net/api/artworks" -H "X-XAPP-Token: XAPP_TOKEN"
```

- ```
curl -X GET "https://api.artsy.net/api/artworks?size=5&page=1" -H "accept: application/json" -H "X-Access-Token:
```

Challenges With Handlebars

- Wanted to be able to compare two strings
- Making a custom if didn't work, only literals for second param
- Had to process in back end

Future Scope and Enhancements

- Infinite scrolling
- Unfollowing users + artists
- Username shown on comments
- User profile pictures
- Social aspect
- Admin editing
- Add user photos to collection

Demo!

Thank you for listening to our presentation.

Thank you!

-Team 5