

# Cheetah Sign

Iteration 2

Levi Shelley, Riley Jamison,  
Hunter Johns, Tia Self



# Client Information

**Accutech Systems**

**Project Owner:** Josh Rittenhouse

**Mentor:** Gabe Chandler

...

# Mentor Feedback



**“Big strides since last iteration.”**

- Overall happy with the progress & features.
- No changes suggested.

...



# Client Feedback

**"you guys have exceeded where we were expecting you to be"**

- Liked the updates to the UI, but would still like to see some features polished up before the final iteration.
  - Big fan of the modal for uploading documents
- Happy with the use of coordinates to place text fields. This is something that other document softwares use, but Josh believes what we have can definitely be expanded upon to make it a drag and drop feature similar to DocuSign.
- Encouraged us to start thinking about standard text fields for client info (name, email, ssn, etc) that will apply to every document.

...





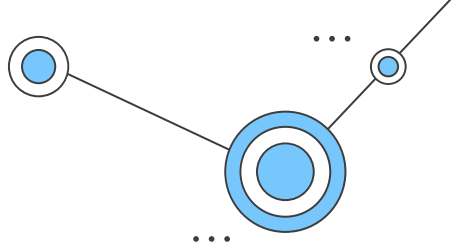
# Software Demo



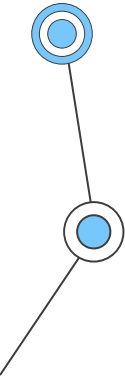


# Second Iteration Features

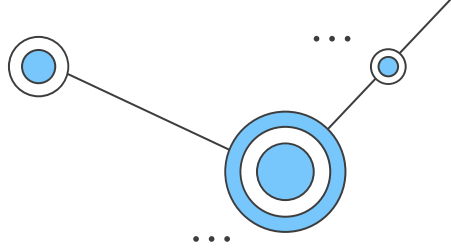
# Mapping IDs to Documents



- In the previous iteration we were fetching documents by their name, which of course is not ideal
- This was changed so that all documents that are displayed in the UI have their correct, unique database ID mapped to them
- This makes everything a lot cleaner and more reliable for our CRUD operations and document sending



# Deletion of Stored Documents



- This feature was designed to allow greater user interaction, as there is now no need to go directly into the DB to delete
- This feature does not just delete from the UI, but rather all records of the document on the database
  - Very important when PII (Personal identifiable information) is potentially stored
- To further improve user intractability, there is also a confirmation box to avoid accidental presses

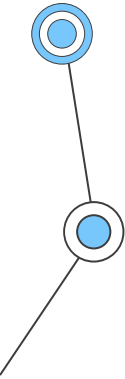
test.pdf

Delete

Are you sure you want to delete this file?

OK

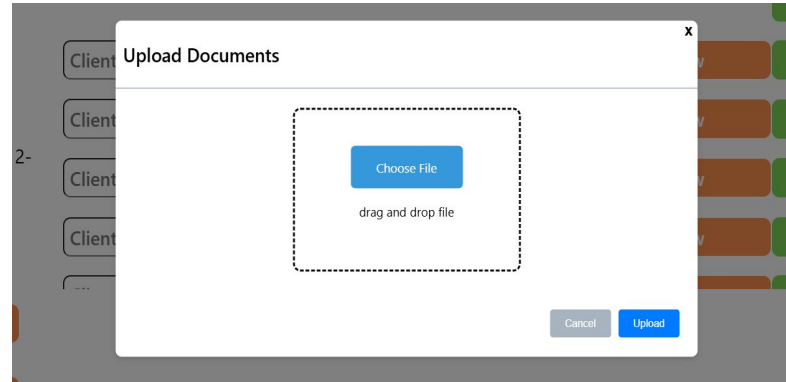
Cancel





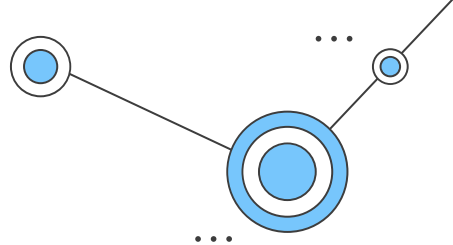
# Separation of Features Between Pages

- Implemented Vue router to give our application navigation
- Created a client page on a separate port so documents aren't being signed on the administrator page
- Made a modal pop-up to contain our document uploading feature and clean up the home page

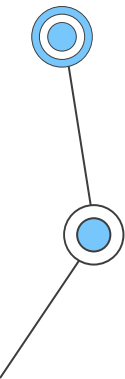


# Document Rendering

- Fetch a document's binary data from the database and returning it as a base 64 string
- The frontend takes that binary data and converts it to a blob (Binary Large Object)
- This blob is able to be used to create an object URL and then that URL can be added to an iframe element by using DOM manipulation in Vue.js

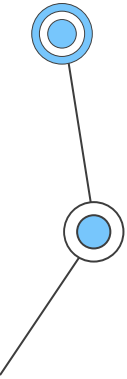
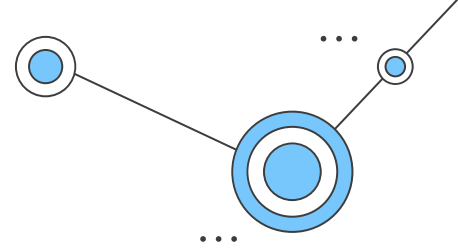


```
blob:http://localhost:8080/8e9e0152-7496-45a2-8687-10fde21d6eef
```

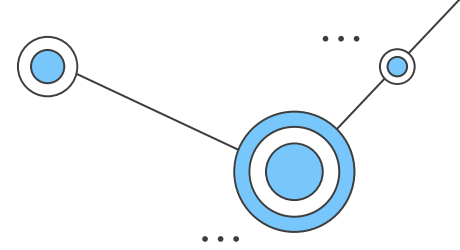


# Document Editing

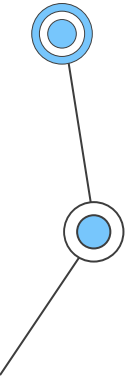
- The library we decided to use for PDF manipulation is iText Core for .NET.
- The user chooses what document they want to edit, and this renders it on the page
- The user then specifies x and y coordinates to where they want to place their text box
- After submitting the coordinates, it is sent to the backend
- The text box is added with iText Core and the edited document is saved to the database



# Document Signing



- The client section is now separated to its own page on port 8081
- By hitting the sign button, clients are able to sign the document
- They can type in their information using the boxes created in iText
- This is a contained procedure and allows separation of the client and admin tasks



# Sending Links to Documents via Email

- By using the library MailKit for .NET, you can create an smtpClient that can send email addresses.
- The email contains a short blurb and a link to the client page
- When accessing the link, there is a property that tells the server what document should be pulled up
- The document is pulled up and the client can choose to sign the document, updating the server





# Third Iteration Features



01

## Audit Trail

Timestamps for statuses:  
Created  
Sent  
Returned

02

## Improved Doc Editing

Drag and drop functionality,  
preview of text box location, etc

03

## Custom text fields

Label and accept:  
Mailing address  
Phone #  
SSN

04

## Verbose responses

Signed documents return to  
the admin through a response  
to the original email



# Retrospection


**What does each team member think about this iteration?** (i.e., lessons learnt)

- Levi: I enjoyed learning how to work with emails in this project! It's very cool and proper functionality that felt interesting.
- Riley: I really enjoyed working with iText Core, a library I had never used before. They offer a lot of really interesting features that could be helpful for us in the future.
- Hunter: Cross-Origin Resource Sharing
- Tia: Vue Router and (Riley implemented this, but) creating modals

**What do you think about making your software more quality by adding the other properties** (modularity, testing, clean code etc.)?

- Making our code cleaner and adding tests has definitely made creation go smoother and feel more organized. It's especially helpful when making sure that one of our teammates didn't mess up a different feature implemented by a different member in the past.

**How do you plan to approach iteration 3?**

- We want to start with better additions to the tests, so we can keep using those throughout the iteration, then focus on the features next.
- 

# The REAL Mentor Feedback



**Tia Self** 4:03 PM

so what are we thinkin for our something fun slide



**Levi Shelley** 4:04 PM

that's a good question



**Gabriel Chandler** 4:04 PM

Here is my vote. Beeg yoshi

image.png ▼



2



cyranek 🍌