**Sprint 3 Standup - Hermod**

**Tuesday, October 28**

* **An**
  + **What to do:** Integrating the submitting forms with the backend
  + **What’s been done:** Talking with Jonathan about what APIs to call
  + **What’s been hard:** Figuring out the format of the request when sending it to the API
* **Jonathan**
  + **What to do:** Begin fixing deployment issues related to purging the old database.
  + **What’s been done:** Finished wrapping up Sprint 2 commits, refinements.
  + **What’s been hard:** Dealing with Digital Ocean deployment.
* **Russ**
  + **What to do:** research alternatives to Digital Ocean Apps as a deployment strategy
  + **What’s been done:** Sprint 3 planning
  + **What’s been hard:** Digital Oceans Apps deployments (which are a new product) breaks when our application grows to a certain point. Runs out of memory while copying Docker Image from build process to deployment service.
* **Simon**
  + **What to do:** Integrate submitting forms with the backend
  + **What’s been done:** Touching up on minor fixes on the forms
  + **What’s been hard:** understanding the integration between frontend and backend

**Wednesday, November 2**

* **An**
  + **What to do:** Format the form data and send it to the API
  + **What’s been done:** Add API calls to the submit form page component to get the questions from the API
  + **What’s been hard:** Rendering the questions from the data from the request
* **Jonathan**
  + **What to do:** Researching into how QR codes work, what kind of information they encode, and some of the industry standard ways that scanning a QR code redirect works.
  + **What’s been done:** Helping Russell with the Digital Ocean deploy debacle.
  + **What’s been hard:** I don’t know how to Digital Ocean.
* **Russ**
  + **What to do:** Investigate Kubernetes as a viable alternative to DO Apps
  + **What’s been done:** Explore a number of alternatives to DO Apps (Qovery, kuberentes, AWS VM’s)
  + **What’s been hard:** N/A
* **Simon**
  + **What to do:** Figure out qr code listing format and query to call the needed information
  + **What’s been done:** N/A
  + **What’s been hard:** Implementing the integration of backend and frontend

**Thursday, November 3**

* **An**
  + **What to do:** Figure out what data is sent back when sending a GET request for viewing responses and how to process it.
  + **What’s been done:** Correctly format the data and send a POST request to the API when submitting forms.
  + **What’s been hard:** Getting the correct format for sending the POST request and using the JWT authentication token.
* **Jonathan**
  + **What to do:** Re-evaluate amount of stories for this sprint compared to business and time remaining.
  + **What’s been done:** Research into QR codes and industry practices for them.
  + **What’s been hard:** Nothing.
* **Russ**
  + **What to do:** Learn how to convert Docker image to Kuberenetes (k8s) Pod object
  + **What’s been done:** Learn the basics of k8s
  + **What’s been hard:** Production Engineering is a new field for me, having a hard time learning about it while also busy with other classes
* **Simon**
  + **What to do:** working with the APIs from backend
  + **What’s been done:** touching up on forms editing
  + **What’s been hard:** using JWT authentication token

**Tuesday, November 4**

* **An**
  + **What to do:** Experimenting with how to render the questions and responses from the API
  + **What’s been done:** Getting the necessary data to render the forms and responses.
  + **What’s been hard:** Figuring out how to render the data gotten from the API.
* **Jonathan**
  + **What to do:** Begin working on refactoring for the scan route implementations down the line.
  + **What’s been done:** Nothing; didn’t actively work on much.
  + **What’s been hard:** Nothing.
* **Russ**
  + **What to do:** Create Replica Set out of k8s Pod Object
  + **What’s been done:** Create k8s pod object for server application backend
  + **What’s been hard:** Kubernetes configuration is not intuitive at all to me
* **Simon**
  + **What to do:** Understand JWT authentication token usage
  + **What’s been done:** Still in process of using APIs and JWT auth
  + **What’s been hard:** figuring out how deal with data with API

**Wednesday, November 9**

* **An**
  + **What to do:** Research how to add retry attempts when sending requests to the API in case it receives a 502 error.
  + **What’s been done:** Rendering the questions and responses in a presentable manner
  + **What’s been hard:** Figuring out an acceptable layout for viewing responses.
* **Jonathan**
  + **What to do:** Add some small changes to the current routes for forms and stuff, to make the UX a little better.
  + **What’s been done:** Nothing.
  + **What’s been hard:** Nothing.
* **Russ**
  + **What to do:** Install Helm on k8s cluster for later use with Postgres db
  + **What’s been done:** Create replica set that contains server API
  + **What’s been hard:** N/A
* **Simon**
  + **What to do:** Work with An to send requests to the API in case it receives a 502 error
  + **What’s been done:** render questions and responses
  + **What’s been hard:** figure out layout

**Thursday, November 10**

* **An**
  + **What to do:** Implement retry attempts when sending requests
  + **What’s been done:** Reading up on some libraries and tutorials on how to implement retry attempts for Axios
  + **What’s been hard:** Understanding HTTP interceptors.
* **Jonathan**
  + **What to do:** Re-design QR code schema and the actual routes related to QR code generation and management in the hopes that flow for generating, managing, and scanning QR codes will be more intuitive.
  + **What’s been done:** Modified some of the routes related to generating and managing forms contain more data, so that the front-end will have sufficient information ready to render an intuitive interface.
  + **What’s been hard:** Organizing the API.
* **Russ**
  + **What to do:** Install Postgres on k8s cluster using Helm
  + **What’s been done:** Set up Helm on k8s cluster
  + **What’s been hard:** N/A
* **Simon**
  + **What to do:** Implement retry attempts when sending requests
  + **What’s been done:** understanding how to implement retry attempts for Axios
  + **What’s been hard:** understanding HTTP interceptors

**Tuesday, November 11**

* **An**
  + **What to do:** Figure out what format of data is needed for when sending a request for creating a new form
  + **What’s been done:** Implement retry attempts using axios-retry library throughout different components
  + **What’s been hard:** Figuring out how to correctly use axios-retry library.
* **Jonathan**
  + **What to do:** Re-implement QR code generation and storage.
  + **What’s been done:** Re-designed QR code generation and storage.
  + **What’s been hard:** Thinking about future problems based on present data design. So, not being clairvoyant.
* **Russ**
  + **What to do:** Set up k8s ingress
  + **What’s been done:** Set up postgres on k8s cluster
  + **What’s been hard:** configuring k8s secrets for db login
* **Simon**
  + **What to do:** implementing qr listing page
  + **What’s been done:** N/A
  + **What’s been hard:** implementing retry attempts

**Wednesday, November 16**

* **An**
  + **What to do:** Add send request function in createForm page that sends the correct format of data to the API
  + **What’s been done:** Figured out what format of data is needed after discussing with Jonathan
  + **What’s been hard:** The API was down for a few days which makes it hard to test
* **Jonathan**
  + **What to do:** Collaborate with Simon/An on designing front-end design for the QR code scanning stuff; implement a Postman workspace for our backend so that front-end work will be easy-peasy.
  + **What’s been done:** Re-implemented QR code generation and storage.
  + **What’s been hard:** Nothing.
* **Russ**
  + **What to do:** Set up k8s ingress for Google Cloud - specifically using Globally Available network configuration
  + **What’s been done:** Unsuccessfully attempt to set up a k8s ingress
  + **What’s been hard:** Kuberentes ingresses are very difficult to set up on Google Cloud, and it looks like AWS as well. There is very poor documentation and many, many configuration settings with extremely unhelpful debugging tools and opaque processes that run the configuration.
* **Simon**
  + **What to do:** implement qr listing/accessing
  + **What’s been done:** figuring out what we want and how to layout qr listing page
  + **What’s been hard:** figuring out the APIs needed to implement qr list and redirecting pages upon scan

**Thursday, November 17**

* **An**
  + **What to do:** Implement QR Listing page with Simon
  + **What’s been done:** Finished adding the sending request function in CreateForm page and integrated with the API successfully. Also discussed with the team about how we want to do our QR generation and listing
  + **What’s been hard:** Figuring out how to implement QR codes flow.
* **Jonathan**
  + **What to do:** Work on Postmark client configurations, requesting approval for our Postmark account so we can send emails to arbitrary domains, etc.
  + **What’s been done:** Wrote out instructions for scan route so that Simon/An will have a good idea of what the front end flow will look like. Implemented a Postmark workspace for our API.
  + **What’s been hard:** Nothing so far.
* **Russ**
  + **What to do:** Create Docker Swarm deployment on Digital Ocean VM
  + **What’s been done:** Give up on kuberbetes; configuring an ingress was too involved and while reading about it I realized Docker Swarm was a much better choice for our project.
  + **What’s been hard:** Docker Swarm is under-represented in blog articles about deploying backend API’s. Wasted weeks of effort on a much more complicated solution. Spent about a week attempting to get DNS and ingress to work.
* **Simon**
  + **What to do:** implement qr listing page
  + **What’s been done:** understand how we want to achieve our qr implementation
  + **What’s been hard:** defining a set idea of the final parts what we want to project our app functionality

**Tuesday, November 18**

* **An**
  + **What to do:** QR Listing Page
  + **What’s been done:** Getting the correct format of data when sending GET requests and figuring out how to use that data to render correctly.
  + **What’s been hard:** Figuring out the process from generating QR codes to listing them
* **Jonathan**
  + **What to do:** Debug QR code scan redirect not sending client to right website, nor right route.
  + **What’s been done:** Finishing up the Postmark configurations, DNS configurations for hermodapp.com with Russell.
  + **What’s been hard:** Debugging production is hard because the output sucks, and the wait-times for building the Docker image are frustratingly long.
* **Russ**
  + **What to do:** Install Traefik proxy on Docker Swarm.
  + **What’s been done:** Install Docker swarm on DO VM.
  + **What’s been hard:** Traefik configuration isn’t the most intuitive. Still much easier than k8s ingresses though!
* **Simon**
  + **What to do:** qr listing page
  + **What’s been done:** understanding the query structure for qr and implementation
  + **What’s been hard:** structuring qr generator to qr listing process

**Tuesday, November 23**

* **An**
  + **What to do:** Finishing up the QR listing page and print it out
  + **What’s been done:** Designing the layout for QR listing with Simon
  + **What’s been hard:** Figuring out how to use the data from the API to render correctly since there are multiple objects with multiple properties.
* **Jonathan**
  + **What to do:** Add simple metrics, like most popular QR codes scanned.
  + **What’s been done:** Shot the video demo.
  + **What’s been hard:** N/A
* **Russ**
  + **What to do:** Install Postgres DB, reroute DNS to Docker Swarm
  + **What’s been done:** Configure Proxy for HTTPS redirection and Let’s Encrypt as an HTTPS certificate provider
  + **What’s been hard:** Manually configuring HTTPS is harder than I thought
* **Simon**
  + **What to do:** complete listing qrs and print the qr
  + **What’s been don**e: layout for qr listing
  + **What’s been hard:** pulling data from backend to frontend in regards to qr