

*Mathew

Our app is called Vote Power.

Our team consists of me, Sunni, James, and Jason.

*next slide

Vote Power is an all-in-one voter information app, on both web and iOS, that aims to make voting easier. It provides users with information about their representatives, and upcoming local, state and federal elections. We package all of this information in a seamless user interface.

We'll start off by presenting the mobile app, so I'll hand it off to Sunni. *sunni should share screen at this point

SUNNI AND MATHEW

*Sunni

1. Splashscreen:

- a. **Press on app icon to start app**
- b. Shows the user a short glimpse of our app icon logo
- c. Explain the logo was inspired by the common usage of the fist in protests.

2. Getting Started:

- a. **[Started up app, shows the Getting Started screen]**
- b. After starting up the Vote-Power app for the first time, the user will be greeted with a short start guide on how to use our app.
- c. **[Swipe to lead to the tab descriptions parts of the app tutorial]**
- d. Briefly overview the parts of the application
 - i. Registration Information: Provides quick information about how to register to vote.
 - ii. Upcoming Elections: Provides information of upcoming local and federal elections
 - iii. Representative information: Provides information about all representatives for a user's location
 - iv. Pollsite locations: Shows the user a map of all pollsites for the election
 - v. Prompts the user to enter their name, or any way the app can greet the user
 - vi. Prompts the user to enter their address, so we can find their elections and provide nearest poll sites

3. Home:

- a. Home w/MapView, contains pins of all of the voting sites for the upcoming election.

*Mathew

b. Candidate Data

- i. Here is a table with all of the titles of representatives which have power over the address the user entered. The user can scroll down to see the rest of the titles if there are too many to be displayed on the screen. Clicking any one of these titles takes us to a table containing all the names of people currently holding that title. In most cases this is just one person, such as the president of the United States, *click the president, then click back in the upper left* the GA Secretary of State *click the GA secretary of state, then click back in the upper left*, but there may be more than one, such as the US senators of Georgia. *click the senator* We can click on either of the names listed here *click David Perdue* and see a list of news articles about that person. We can then click on any of the news articles listed here *click one* and the user can read the article on a web view in the app *scroll down a little bit just to demonstrate that the user can actually read the whole article, then click back*. (One issue here is that for lesser known representatives, some of the news articles that pop up in our app don't actually talk about that representative. I'm not sure how to completely rectify this issue if it's even possible to do so. Some people just don't have articles written about them. This doesn't happen too often with representatives for addresses in NYC, but does occur more frequently in less populated areas.) Notice that the user can navigate back and forth by dragging down their current screen to reveal the previous.

c. Registration Information

- i. Here we present the user with two options: "get registered" and "check registration". If the user clicks "get registered", *click get registered* it takes them to a web view inside the app containing instructions for how to register to vote in their state. *click back* If the user clicks "check registration" *click check registration* it takes them to a web view inside the app where the user can enter their information and check if they're registered.

d. Settings

- i. The settings tab contains two options, change name and change address. If you click change name *click change name* it takes you to the screen where they were initially instructed to put their name, and if you click change address *click change address*, it will do the same. *enter 850 Eatonton Street*.

JAMES AND JASON

James:

First time users will have a modal asking if they are registered, and if they click the link below, it'll redirect to the registration page, which we'll show in a little bit.

CLOSE NOTIFICATION BOX

Home Page

Jason:

We wanted our app to have a simple interface, so we added some visuals to our home page. We have several sections (scroll down slowly for each section) - registration details page, an upcoming election page, representative information page, and several cards to show our other functionalities. Poll site location, sign up for email notifications, and a link to our mobile app(still pending from apple's app store, so that will be available in a day or so)

James:

Here's our subscription form, where users can subscribe to our email notifications by entering their name, their email, and their address to get voting information. Jason will now show how the email looks like. Right now you can just enter any address. We wanted to use our database to store the user's address to get poll site location and upcoming election information, but there were some complications, so we couldn't get that to work.

(DEMO FOR SUBSCRIPTION)

Registration Details Page

This is our registration details page, users can click on "register to vote" and a dropdown will appear, if you click on a state it will redirect you to that state's registration page.

(Click on Georgia page)

We're going to click on Georgia.

Here we can see Georgia's official website for registering to vote.

And on the right side we can check registration.

(Click on Georgia page)

And this is Georgia's page for checking your registration.

Upcoming Elections Page

Jason:

Here's our upcoming elections page. We have a table that shows all upcoming elections, their region, their name, and their date. Users can add these elections to a calendar through google, outlook or yahoo.

(DEMO ADDING GEORGIA ELECTION TO CALENDAR)

Rep Info Page

James:

Next, we have our rep info page, where users can see who their current representatives are. Users enter an address (695 Park Ave) and a list of elected officials will appear along with their contact information.

CLICK POLL SITE

Poll Site Page

Jason:

And finally, our last page: "find your poll site", users enter their address and it should return a poll site location with directions from google maps. Right now, if I enter "695 Park Ave" it will not return a poll site location because there is no current election taking place around this address. Let's try a Georgia Address (850 Eatonton St, Monticello, Georgia 31064, USA). Because there is a Georgia General Runoff election going on, we can get a poll site location for this address.

And this concludes our demo for the WebApp

TECHNOLOGIES USED

- Communication: Discord
- Mobile Development: Swift , Apple Mapkit
- Web Framework: Bootstrap 4, Flask
- Email Subscription: Twilio's Sendgrid
- Programming Language: Python
- Web Hosting Service: Heroku
- Database: Postgres

TECHNICAL TOPICS

Sendgrid

Mathew:

Sendgrid is a cloud-based SMTP (Simple Mail Transfer Protocol) service that assists businesses with email delivery. On the web app, we needed to send emails to alert users when there are upcoming elections and to let them know where the nearest poll sites are. Since we would be fairly regularly sending emails to our users, we needed to make sure that our emails would reach our users and not go straight into their spam folder. Sendgrid helps with this. While they can't completely guarantee that your emails won't be sent to the users' spam folders—especially if you don't have an “unsubscribe” button, fail to disclose your business's location, or use clickbait subject lines—Sendgrid is a great tool for easily and reliably sending emails to your users. So if you're building an app and you want to send account creation emails, password resets, purchase receipts, account notifications, or social media updates like friend and follower notifications, Sendgrid can help you.

James:

Creating an email template is easy with SendGrid. SendGrid allows users to drag and drop edit things for people with no experience with HTML or provides a feature-rich HTML editor that allows complete control over the creation of the dynamic templates. You can view how the templates look like in desktop, mobile or just plain text. SendGrid also allows users to use test data to see how the email would look like.

Mathew:

Some pros for sendgrid:

- Signing up is free and no credit card is required
- Simple UI that's easy to navigate through
- Creating email templates is easy and simple

Some cons for sendgrid:

- Limited options in creating email templates
- Expensive for higher tier services

James:

Some alternatives to sendgrid:

- AWS SES(Simple Email Service)
 - Requires credit card for trial
 - Cheaper than sendgrid overall
- SendInBlue
 - More expensive for lower tier services
 - but cheaper higher tiers.
 - Start with free 9000 emails / month

Google Civics API

Sunni:

Google Civics API:

This API allows developers to display civic information to their users. Whether it is the federal, state or local level of government, for each U.S. residential address, it allows you to look up who is representing that address.

For U.S elections, you can see polling addresses, candidate data and other election related information.

Jason:

How Google Civics API get its data:

The Google Civics API was integral for our project as we sourced a lot of information through it. This API gets its data through the voting information project.

But what is the voting information project?

The backstory is that in the past, there were no standardized or reliable sources to obtain basic voter information during Election Day. So, many voters did not have easy or general access to these basic information.

The Voting Information Project was created in an effort by local and state officials and other companies such as Google to bring free voting information to voters through the internet.

The Voting Information Project connects voters with election information, supporting voters through the election and voting process.

(One example is that,

If anyone went on facebook during the presidential election, there were reminders to register to vote and how to vote. And that came through the Voting Information Project)

So now, a lot of this information is freely available through the Google Civics Information API

And available for developers like us to use.

Google Civics API Functions:

Quota per day: 25,000

The 3 main search points are:

Search by Election

Users can query for available elections or voting information by address

Search by Representative

Users can query for elected officials and their contact information

Search by Division

However one of the issue is that--

Issues:

Election data may not be available if it is not close enough to election date

>Generally API data for elections should be available 4-6 weeks before the election

(talk about our problem)

During our MVP demo, we could not show the elections because the presidential election just passed and there were no upcoming elections close enough at that time.

In short, this API is good for most general elections information except for maybe "local" elections where data is not uploaded. (The Data needs to be verified by state/local officials)