

Suggested presentation template:

- Introduce the team and the project name
- Give the product definition
- Demo
- Overview of the class and the project: architecture, work distribution, technologies used, challenges faced and lessons learned, any other topic the team wishes to share and is relevant to the class and other students.
- Questions about the project and demo
- Technical presentations
- Questions about the technical topics
- Conclusions and Thanks.

-Introductions

-Product Definition

## SUNNI AND MATHEW

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. **[Press screen]**
  - d. As we swipe through the tutorial progresses, the first slide goes over the mission statement of the app which explains what the app does and how it can help the user become a more involved citizen.
  - e. **[Swipe to lead to the tab descriptions parts of the app tutorial]**
  - f. Briefly overview the parts of the application
    - i. Home w/MapView: Provides quick information most relevant to the voter, and shows polling locations.
    - ii. Candidate Data: Provides information about candidates on the voter's ballot.

- iii. Registration Information: Provides quick information about how to register to vote.
- iv. Quick Settings: Change user name, and location.
- v. These items will be explained further in depth later.

**g. [Swipe to the permissions screen]**

- h. It'll quickly go over the permissions guide to inform the user of the data required by our app such as their current location, optionally, to access their regions voting information. They could also just as easily provide their address manually. Another permission the app will ask for is the ability to enable push notification for upcoming elections and voter registration information. For example, an alert reminding the user that they only have a few weeks left to register to vote, or when the next election is.

**i. [Swipe to name and registration status screen]**

- i. Ask for how the user would want their name to appear on the home screen.
- ii. Ask them about their voter registration status, if they aren't sure, lead to a link that guides them to check if they are.

**iii. [Click "not sure" button option]**

- iv. After done with the link the application will proceed with the question again. Assures the user this won't prevent them from using the app.

**v. [Click "no"]**

- vi. If the answer is no: suggest the user registers, but if not, they continue to use the app as normal.

**vii. [Click "later"]**

- viii. Display final welcome screen

**ix. [Tap to continue to Home]**

**3. Home:**

- a. Home w/MapView, small quick info about upcoming elections in the user's area.
- b. [tap on map point]
- c. Provides direction to polling site immediately within the maps app.
- d. 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 mayor of New York City \*click the mayor, then click back in the upper left\*, but there may be more than one, such as the senators of New York State. \*click the senator\* We can click on either of

the names listed here \*click Chuck Schumer\* 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 we have a series of back buttons so that the user can easily navigate back and forth among the titles, names, news articles, and web view pages.

e. Registration Information

- i. Here is a table with two items: "get registered" and "check registration". The user interface is definitely a little rough, and will be cleaned up going forward. 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.

## JAMES AND JASON

James:

First time users will have a modal asking if they are registered, and if they click the button, it'll redirect to the registration page, we'll show that later.

### CLOSE NOTIFICATION BOX

#### Home Page

Jason:

We wanted our app to have a simple and clean interface, so we added some visuals to our home page. We have several section (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

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.

### **Registration Details Page**

This is our registration details page, users can click on "register to vote" and a dropdown will appear and 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**

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 return an error because there is currently no election taking place around this address. Let's try a Georgia Address (5071 Cline Road, Resaca, GA, USA). Because there is a Georgia General Runoff election going on, we can get a poll site location for this address.

# TECHNOLOGIES USED

- Communication: Discord
- Mobile Development: Swift , Apple Mapkit
- Web Framework: Bootstrap 4, Flask
- SMTP: 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 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 for 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

Google Civics 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 information.

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

Search by Division

Users can query about an election for a specific place

Issues:

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

>Generally API data for elections will be available at least a few weeks(4-6) before the election  
(talk about our problem)

Testing it out:

Talk about (Testing API) on website

How Google Civics API get its data:

Unless it is a nationwide election (president), official data is collected from local and state governments through the **Voting Information Project**.

What is the Voting Information Project?

The Voting Information Project works to connect voters with election information.

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