



MOBILE VOTING



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UX DESIGN TEAM:

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EXECUTIVE SUMMARY

Team TOAST met the challenge of addressing the needs of remote voters in New Jersey by enacting a streamlined process of collaborative research & development towards a viable, accessible solution.

DISCOVER

This phase of the development process was key in identifying common habits, painpoints & opportunities in the voting processes available to constituents today. Analyzing data from user interviews, and task analyses from independent research lead to the following actionable findings:

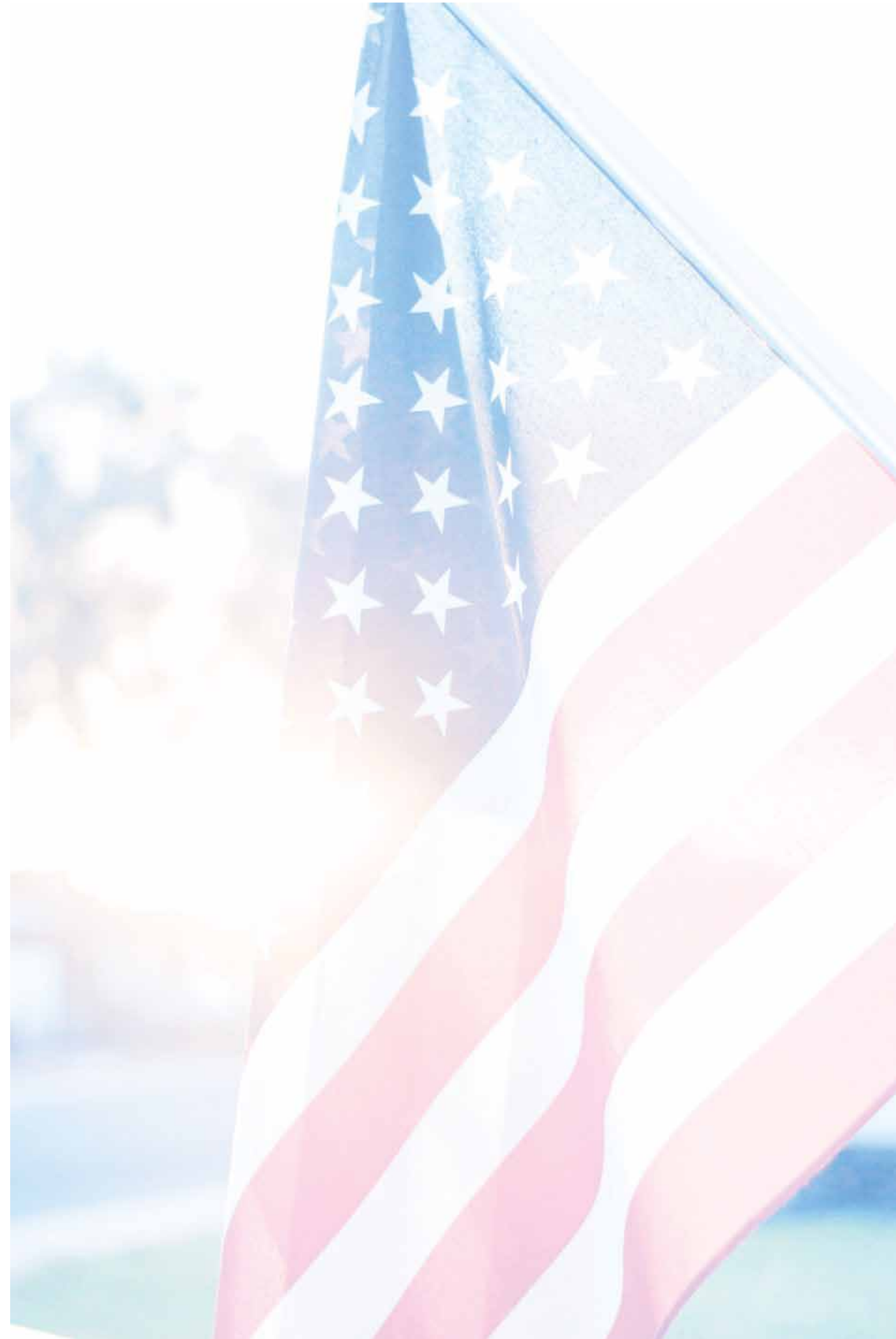
- Voting rights featured prominently in user priorities as did digital privacy/security, accessibility, convenience, and efficiency
- Government sites were often called out for being unreliable or poorly designed, but were vastly preferred over in-person interactions.
- Users are generally comfortable completing government related tasks with services available online.
- Users want alternative options for remote-voting

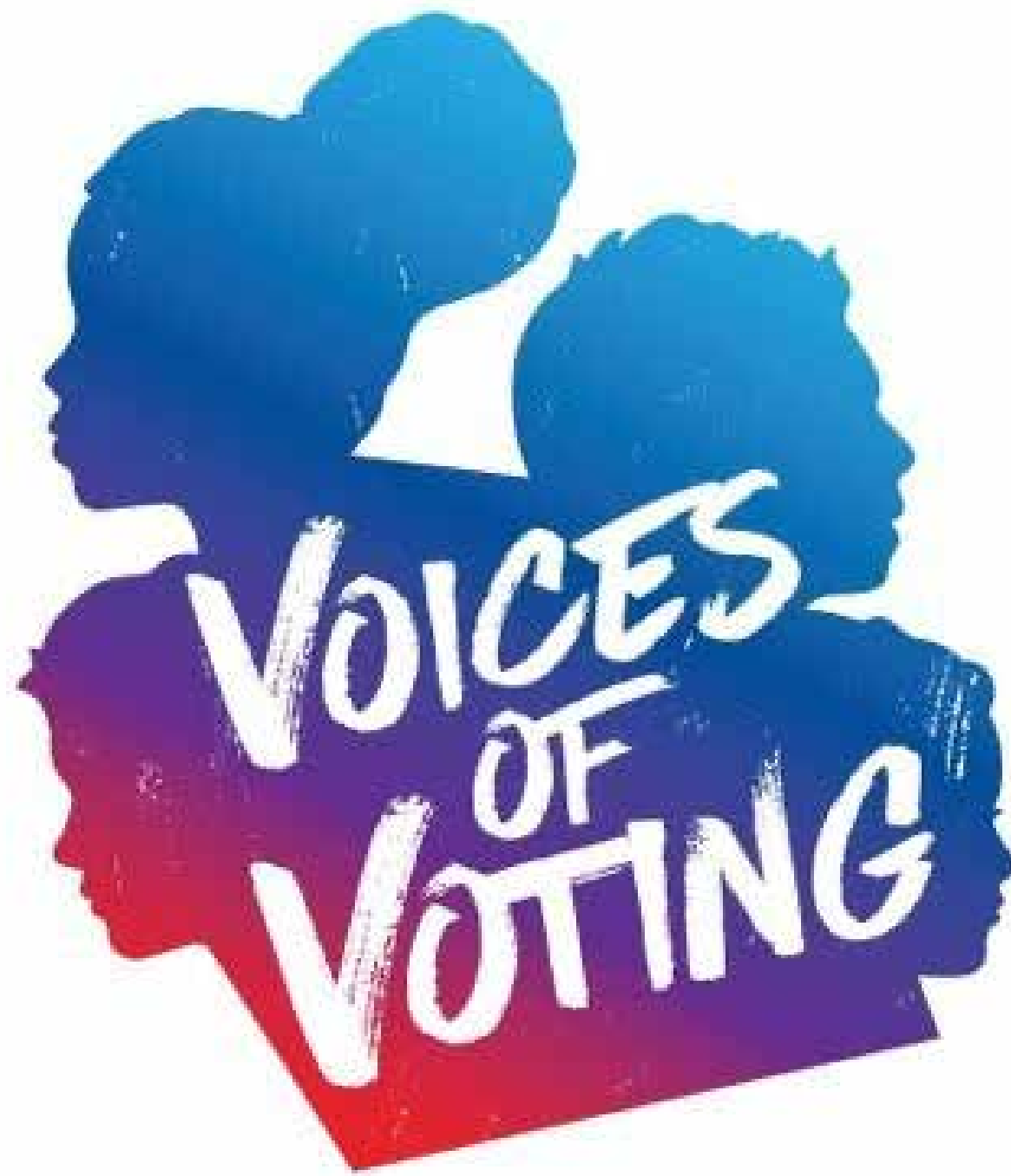
DEFINE

Synthesizing the data aggregated throughout the DISCOVER phase allowed us to generate a User Persona, Journey Map, Problem Statement & HMW. These elements were key in pinpointing the immediately actionable findings and opportunities for the prototyping phase.

DESIGN

Addressing definitive opportunities from data synthesis in the DISCOVER and DEFINE phases prioritized the key features needed in the low-fidelity prototype. Usability testing served to refine aspects of addressing user expectations and concerns brought up while interacting with the prototype. This iterative procedure was implemented in developing and refining the finalized high fidelity prototype and exploring possible next steps for the evolution and adaptation of the UChoose mobile app.





DIRECT COMPETITOR TASK ANALYSIS

OBJECTIVE

Compare voting services currently available to constituents to analyze & identify user needs, goals, and pain points throughout the voting process.

METHODOLOGY

An analyst from the team was tasked with exploring the steps required in registering for, and submitting a ballot through the following channels:

- DemocracyLive for West Virginia (one of the first states to implement mobile-voting as an option for constituents through the VOATZ app)
- NJ Department of Elections via Mail-In Ballot

FINDINGS

Constituents voting via Absentee Ballots for West Virginia through DemocracyLive were required to submit an absentee ballot application at the county clerk in person: making this untenable to those unable to physically travel to the county clerk. Once approved, they had the option to mail, fax, or digitally submit voter registration applications and ballots.

Constituents voting via mail-In ballots through the State of NJ required a physical copy of the ballot to be printed, signed, and mailed in, which brought up concerns regarding the accessibility of printing services available to constituents targeted by this challenge in addition to those regarding physical limitations addressed regarding the voting services available through DemocracyLive

Both services lacked user feedback indicating receipt and processing of voter registration applications & ballots submitted.



USER INTERVIEWS



OBJECTIVE

Identify common habits, painpoints & opportunities in the remote-voting process to constituents who were unable to vote in-person: namely, the disabled, elderly, & military personnel overseas.

OUTREACH & SCREENING

- Participants must have a Smartphone
- Participants must have voted in the past
- Participants must identify as:
disabled, elderly, or military (former/current)

METHODOLOGY:

Participants were interviewed either remotely via Zoom or in-person, separately by members of the team: each team member was assigned no less than 2 interviewees. Participants were asked to speak to the following questions to refine the User Persona.

USER INTERVIEW SCRIPT:

PRE INTERVIEW

- Tell me about yourself.
- Are you planning to vote this year? If so, how?

INTERVIEW

1. Tell me about the last time you used a mobile app/online service to complete a government related task.
2. Tell me about the last time you voted.
3. Have you ever required assistance in voting in the past?
4. Have you ever filed an absentee/mail-in ballot? Can you tell me more about that?

5. How do you feel about the security of your private information on digital platforms?

6. Why did you feel that way? (secure/not secure)

FINDINGS:

- 71% of participants expressed interest in alternative options for remote-voting
- 100% of participants were comfortable completing government related tasks online.
- Voting rights featured prominently in user priorities, as did digital privacy/security, accessibility, convenience, & efficiency
- Government sites were often called out for being unreliable or poorly designed, but were vastly preferred over in-person interactions.

IMMEDIATELY ACTIONABLE FINDINGS

- 508 & ADA Compliance for accessibility
- Streamlined services with simple, user-focused functions
- Clearly outlined policies & regarding user privacy & verification services
- Clear voter registration & confirmation processes

FUTURE RESEARCH & ITERATIONS

- Further research in addressing ADA compliance & regulations
- Further research into methods of maintaining digital privacy
- Extending mobile services to cover other government sites to further improve user experience.
- Making the User Agreement easier to view
- Streamlining ID Verification pages & refining microcopy
- Removing biometrics/face-scan feature from proto until further research can be done addressing security & privacy laws and practices
- Adding additional confirmation pages to the voting process addressing user comments from usability testing

PERSONA



Gayatri Martin

Occupational Therapist
Hoboken, New Jersey
57 year old
Disabled

Gayatri is a 57 year old, politically active occupational therapist who cares deeply about her community. Having been diagnosed with fibromyalgia, her voting habits have shifted in favor of mail-in ballots and online registration wherever possible. Standing in line for hours at her local polling booth is no longer an option, and accessibility aids have not been readily available. Gayatri needs a way to safely exercise her right to vote while feeling both confident and secure in the knowledge that she has served her community.

Needs & Goals:

- Wants to exercise her right to vote
- Wants to vote without compromising her health & safety
- wants to feel confident & secure in submitting her ballot
- wants to know her personal information is safe

Frustrations:

- Physical limitations have become barriers to voting
- Accessibility aid at polling places has not been available
- Remote-voting options are time consuming & unreliable

Habits:

- Is relatively comfortable navigating forms online
 - Uses TurboTax to file yearly taxes
 - Comfortable with banking online
- Politically Active:
 - Feels very strongly about voter's rights
 - Votes every chance she gets
 - Encourages her friends & family to do the same
 - Plans on voting by mail-in ballot this year

"The future deserves better than losing its disabled voices"

JOURNEY MAP



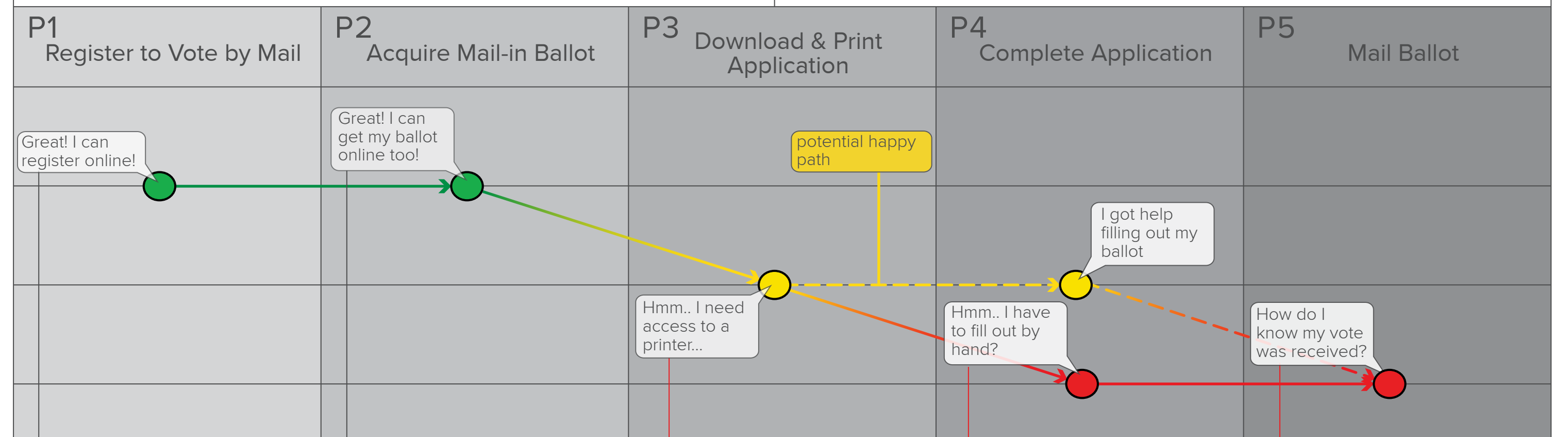
SCENARIO

Gayatri is voting in this year's local elections. Due to her physical limitations, she has chosen to vote via Mail-In Ballot in lieu of voting in-person. She is hoping she can register & submit her ballot in time to be counted in the upcoming elections, while also feeling confident that her ballot was actually received.

EXPECTATIONS:

Gayatri will:

- Register to vote
- Acquire her mail-in ballot
- Complete her application
- Submit her application
- Feel confident her vote was received & counted



Registration is Available Online

Mail-In Ballot is Available Online

PROBLEMS:

- Ballot must be Downloaded & Printed out
- Access to a printer can be limited to many, & may require travel to a secondary location to accommodate.

OPPORTUNITIES:

- Online Submission of ballots to eliminate need for physical document: Scan & send, Photo & send, direct input into online system?

PROBLEMS:

- Those with physical impairments may not be able to fill ballots out by hand without assistance

OPPORTUNITIES:

- Online Submission of ballots to eliminate need for physical document
- Option to input choices directly into systems online for submission

PROBLEMS::

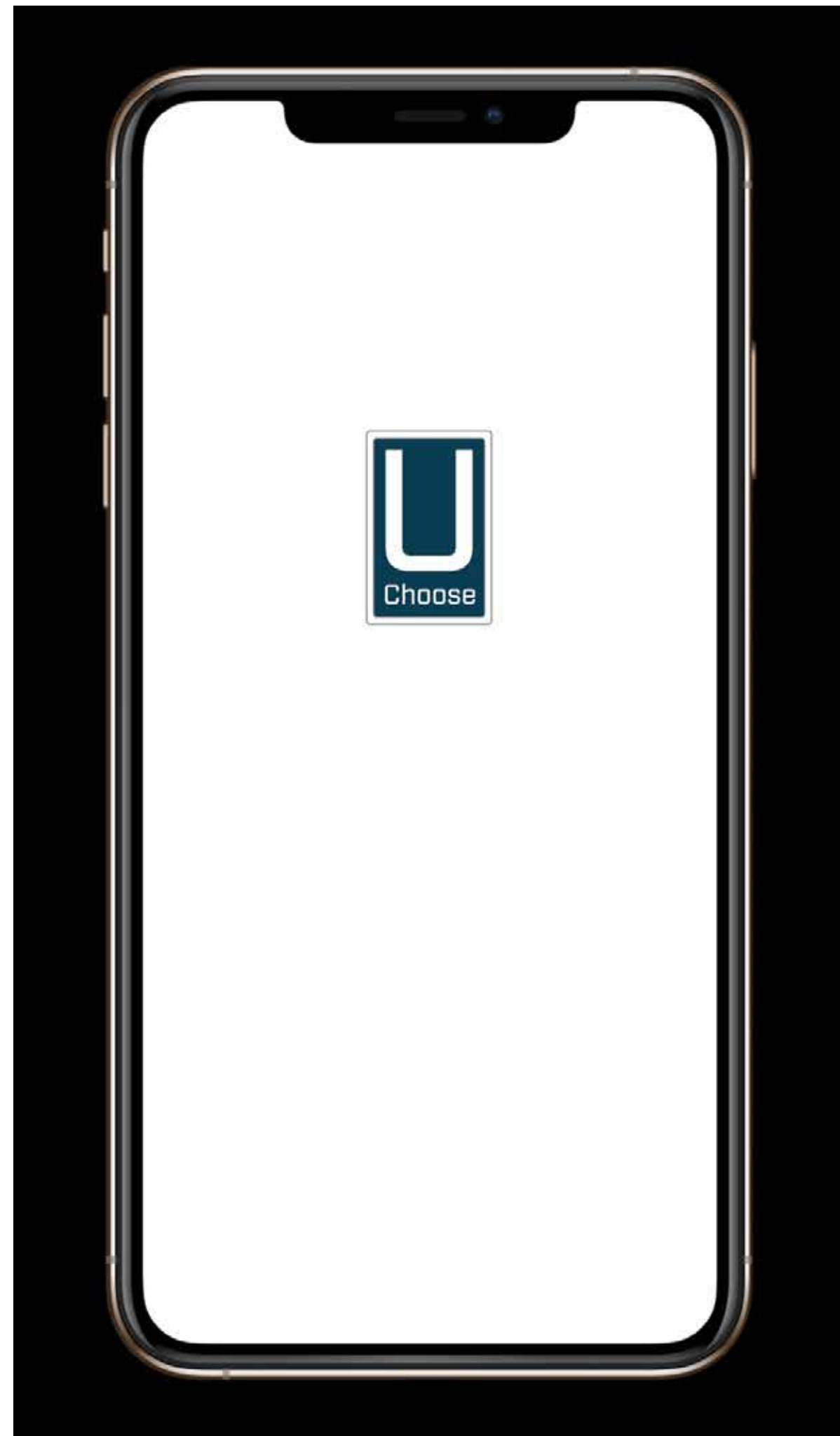
- No Confirmation of Receipt
- Postal Service is not always reliable or accessible:
- May require travel to a secondary location to accommodate & pose difficulties for those with mobility issues

OPPORTUNITIES:

- Online Confirmation of Ballots once submitted via email, in-service notifications, etc

USABILITY TEST

Low-Fidelity Prototype



OBJECTIVE

Address functions that are critical to a seamless voting experience through the lo-fi prototype of the UChoose Mobile Voting App. Failure to analyze & address these functions will increase risk of users submitting incorrect ballots and, as a result, choosing to forego using the app due to perceived lack of information security.

OUTREACH & SCREENING

- Participants must have a Smartphone
- Participants must have voted in the past
- Participants must have a desktop/laptop computer with Zoom & Zoom sharing capabilities

METHODOLOGY:

Participants were interviewed either remotely via Zoom or in-person, separately by members of the team: each team member was assigned no less than 2 interviewees. Participants were asked to speak to the following questions to refine the User Persona.

TASKS

1. Go through the steps of verifying your identity.
2. From there, see if you can find your way back to the home page
3. See what elections there are for you to participate in
4. Please select your candidates for the Presidential election
5. Submit your ballot when you're done.

DE-BRIEFING

1. How do you feel about the experience?
2. Did you have any additional thoughts you'd like to share?
3. If you could change anything about what you saw today, what would you change?
4. If you had a magic wand for this app, what would you want for it to do?

FINDINGS:

70% of participants responded positively to the Lo-Fi prototype of UChoose and found the processes to be simple, intuitive, and a vast improvement on the remote-voting methods currently available. Concerns that were brought up by 70% of participants referenced issues of user information privacy: key examples of which were being able to access and read the User Agreement in the on-boarding process, verifying one's identity with documents other than photo-ID's, and reliance on biometrics for verification. Concerns regarding the identity verification process were also addressed by 70% of participants: primarily regarding the verification popups preceding the "Scan Document" screen utilizing the camera function and the accompanying microcopy. 60% of participants also cited a desire for increased user feedback during the in-app voting process: expressing a need for additional confirmation before officially submitting ballots, and seeing a preview for available ballots before going into the voting process.

IMMEDIATELY ACTIONABLE FINDINGS

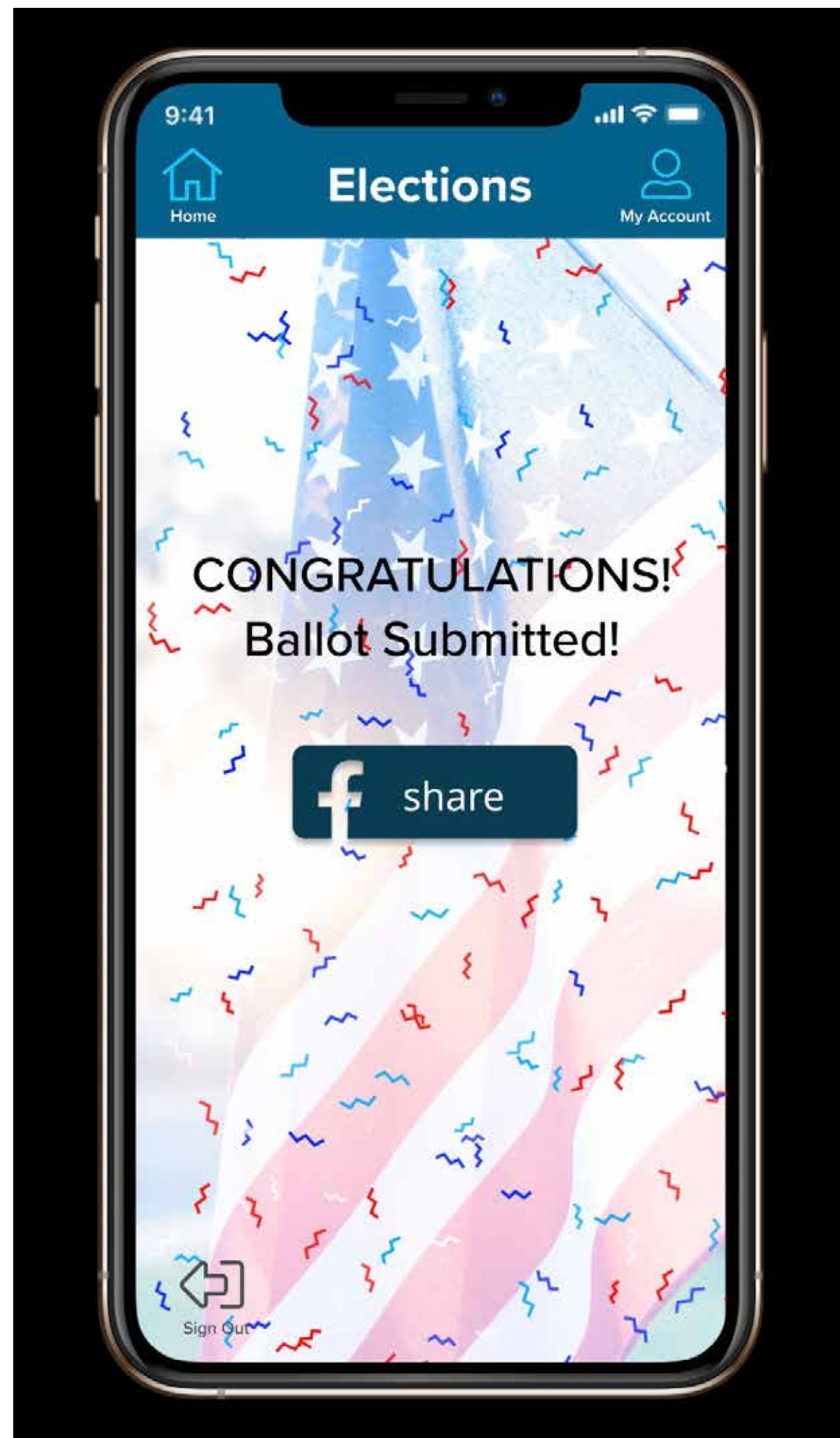
- Making the User Agreement easier to view
- Streamlining ID Verification pages & refining microcopy
- Removing biometrics/face-scan feature from proto until further research can be done addressing security & privacy laws and practices
- Adding additional confirmation pages to the voting process addressing user comments from usability testing

FUTURE RESEARCH & ITERATIONS

- Further research addressing security & privacy laws & practices in regards to verifying identity without biometrics: e.g.: through confirming docs already registered w/ the govt found through automated background checks, etc
- Increasing user-feedback after ballot submission with notifications regarding ballot progress
- Exploring the application of using UChoose for other voting events: Town Halls, Straw Polls, etc

USABILITY TEST

High-Fidelity Prototype



OBJECTIVE

Address functions that are critical to a seamless voting experience through the hi-fi prototype of the UChoose Mobile Voting App. Failure to analyze & address these functions will increase risk of users submitting incorrect ballots and, as a result, choosing to forego using the app due to perceived lack of information security.

OUTREACH & SCREENING

- Participants must have a Smartphone
- Participants must have voted in the past
- Participants must have a desktop/laptop computer with Zoom & Zoom sharing capabilities

METHODOLOGY:

Participants were interviewed either remotely via Zoom or in-person, separately by members of the team: each team member was assigned no less than 2 interviewees. Participants were asked to speak to the following questions to refine the User Persona.

TASKS

1. Go through the steps of verifying your identity.
2. From there, see if you can find your way back to the home page
3. See what elections there are for you to participate in
4. Please select your candidates for the General Election
5. Submit your ballot when you're done.

DE-BRIEFING

1. How do you feel about the experience?
2. Did you have any additional thoughts you'd like to share?
3. If you could change anything about what you saw today, what would you change?
4. If you had a magic wand for this app, what would you want for it to do?

FINDINGS:

Users responded positively to the adjustments implemented to address concerns aggregated from usability testing of the Lo-Fi prototype. Simplicity, ease of use, and intuitive processes inspired user confidence in completing tasks assigned.

Concerns addressed pertained to possible adaptations for future research and iteration regarding security, prevalence, and social media.

FUTURE RESEARCH & ITERATIONS

- Further research addressing the effect of social media presence on government-related online applications
- Research into security & privacy laws regarding IDverification without biometrics: e.g.: through confirming docs already registered w/ the govt found through automated background checks, etc
- Increasing user-feedback after ballot submission with notifications regarding ballot progress
- Exploring the application of using UChoose for other voting events: Town Halls, Straw Polls, etc



NEXT STEPS

ADAPTING TO ACCOMODATE ADDITIONAL ELECTION EVENTS:

- Town Halls, Straw Polls, Caucuses, University Events, etc

USER FEEDBACK AFTER BALLOTS HAVE BEEN SUBMITTED:

- In-app, Text, or email notifications on ballot progress: “Ballot Submitted! Ballot Received, Processing, etc)

EXPANDING ON SOCIAL MEDIA PLATFORMS:

- Users expressed wanting to share on multiple/alternate social media platforms:
 - Twitter, Instagram, Snapchat, etc

EXPLORING ALTERNATIVE ID VERIFICATION METHODS:

- Verifying ID through confirming docs already registered w/ the govt found through automated background checks, etc.

FURTHER RESEARCH INTO PROVIDING IN-APP CANDIDATE INFO

- Providing information on stances held by candidates on relevant issues was a “Magic Wand” feature many users mentioned, but the team encountered several legal obstacles regarding electioneering. Recruiting a legal team specializing in these areas to research ways in which to implement this feature would be paramount.