Ad Hoc

VA Mobile App Discovery Sprint

Week 1: Output + Outcomes

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March 5, 2020

Agenda

- ➔ Where are we in the process?
- ➔ Week 1: Output + Outcomes
  - ◆ Technical Feasibility
  - ◆ Veteran Desirability
- ➔ Week 2: Output + Outcomes

Where are we in the process?

Schedule

Week(s)	Guiding Question	Activities	Output	Outcome
0	What feature sets + frameworks should we evaluate from a technical feasibility and Veteran desirability perspective?	1. Discussions with CTO's office 2. Discussions with VA technical SMEs	List of mobile app development frameworks and features to evaluate	Consensus on feature set + frameworks to be researched in coming weeks
1	What feature set + framework should we prototype?	1. Evaluate feasibility of mobile frameworks using matrix 2. Begin to research Veteran desirability of features using matrix	- Research findings - Recommendation on what to prototype	Consensus on which technical framework and feature set to prototype
2 + 3	Is this prototype a viable option for the VA? Does it speak to Veteran needs?	1. Technical experimentation 2. User research and usability testing	Technical and user research findings	Feedback and input on how to iterate on prototype
4	What are the pros/cons to different technical approaches and the impact of implementing them to the VA?	1. Future proofing 2. Synthesis	Report and prioritized recommendations	Recommendation for which framework offers the best combination of technical feasibility and Veteran desirability

Technical Feasibility

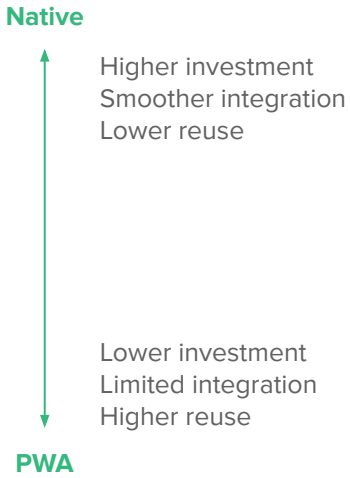
Schedule: Technical Feasibility

Planning		Week 1	Week 2	Week 3	Week 4
Frameworks	Guiding Questions	Activities		Output	Outcome
1. Fully native app (iOS + Android) 2. Cross-platform (React Native) 3. Cross-platform (Xamarin) 4. Cross-platform (NativeScript) 5. Hybrid (Ionic) 6. Hybrid (Ionic React) 7. Hybrid (Flutter) 8. PWA (Progressive Web App)	1. How much reuse is possible? 2. What would the investment be? 3. How does the UX change?	Technical analysis to develop initial hypothesis	Experimentation	Initial proof of concept	Recommendation for which framework is the most technically feasible

Technical Feasibility: Evaluation

These technical approaches can be grouped:

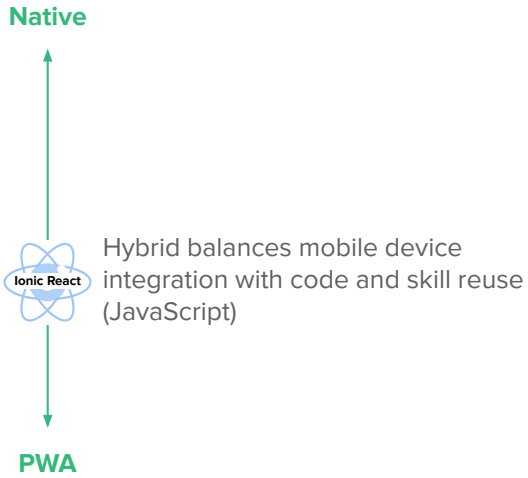
Fully native app (iOS + Android)	NATIVE
Cross-platform (React Native) Cross-platform (Xamarin) Cross-platform (NativeScript)	CROSS-PLATFORM
Hybrid (Ionic) Hybrid (Ionic React) Hybrid (Flutter)	HYBRID
PWA (Progressive Web App)	PWA



Technical Feasibility: Evaluation

A hybrid approach provides benefits for the VA that a native approach does not.

Next step: Testing our assumption that the VA would benefit the most by taking a hybrid approach to mobile development by experimenting with code reuse, logon flow and ability to leverage existing APIs.



Veteran Desirability

Schedule: Veteran Desirability

Planning		Week 1	Week 2	Week 3	Week 4
Feature Areas	Research questions	Phase One	Output	Phase Two	Outcome
VA Mobile login experience	What are Veterans preference when logging in to VA mobile?	Card sorting (unmoderated)	Prototyping	Finalizing prototype, perform usability testing with Veterans on prototype	Prototype and recommendations for VA mobile login experience
Initial VA mobile app screen (after logging in)	What initial screen do Veterans expect/need to see after they log on to VA mobile?				Prototype and recommendations for VA initial VA mobile screen
VA mobile interactions	What interactions do Veterans want to be able to perform on VA mobile?				Prototype and recommendations for VA mobile interactions

Our Veteran-centered approach

Phase One

The goal of this phase is to help us determine what feature set Veterans most desire in a VA mobile application. Here are some of the questions that we will answer during this initial phase:

1. Feature set: What feature set do Veterans need on a mobile application with VA?

2. How do they prioritize that feature set?

Phase Two

The goal of this phase of the research is to take our learning with Veterans to build a testable prototype of a proposed VA mobile application that best meets their needs when interacting at VA. Here are some of the questions that we will answer during this second phase:

1. What are Veterans expecting to see when they initially log on to a VA mobile application? Are the features that we included meeting their needs when interacting with VA? If not, what is missing? What can be improved?

2. What is the most important secondary action that a Veteran would do want to when leveraging VA mobile?

Phase One: Card sorting

Method

We will use remote card sorting to quickly understand from each Veteran how they would think about VA mobile features, prioritize and categorize them in a way that makes the most sense to them.

The team will use Optimal Workshop to perform these exercises remotely, collect the data from each participant and use that insight to inform Phase Two. The priorities we uncover here will help us shape the technical discovery and set the stage for usability style research to come.

Optimal Workshop Card Sorting
https://www.optimalworkshop.com/optimalsort

This is a study preview. No data will be saved.

OptimalSort

Leave a comment

Finished

Send secure messages to your healthcare team

Ability to request your military records (DD2214)

View prescriptions and request refills

Show a Veteran ID card

Change your address, phone number or email address

Find VA facilities

See lab or test results

Check your appeal status

Sign in for an appointment

Download all or some of your claims information

Add VA documents or cards (such as DD214) to your Apple Wallet or Android Pay

24 of 24 remaining

Instructions

Take a moment to read through the list of cards to the left of your screen. Once you have read through them, you can:

1. Move them into the groups that make the most sense to you for each card.
2. Pick the three things most important to you and put them in the ***Must have*** group.
3. In the ***Nice to have*** group, please put the cards that are most important to you at the top. Don't worry about order as much after the first 5–8 cards.
4. If there are cards that are not important to you, put them in the ***Not relevant*** group.
5. There is no right or wrong answer, please share which things are more important **to you**.
6. When you've sorted all the cards into groups, click **Finished** in the top right of the screen. We will ask you a few follow up questions, but it shouldn't take long.

OK

Phase Two: Usability testing

Method

With a clearer idea in mind of what features Veterans need from a VA mobile application and how they prioritize them, we will be better equipped to develop a clickable prototype for our team to test with. This study will help to inform an initial vision for VA mobile and the direction we take in creating a world class mobile experience for Veterans.

Week 2

Week 2: Output + Outcomes

What you can expect from us next week:

- Initial findings from technical feasibility experimentation
- Findings from Veteran desirability research

What we need from you:

- Input on how we can iterate on our initial findings
- Send email to contacts that we might meet with
- Share link to card-sorting activity

Appendix

Technical Feasibility: Assessment Matrix

	Front-End Skills	Mobile Skills	Skill Availability	Ability to reuse Authentication screens	Ability to reuse VA.gov front-end code (Javascript)	Ability to reuse client-side API code	Ability to reuse Infrastructure	Access to VA.gov "private" apis	Access to Lighthouse
Fully native app (iOS + Android)	n/a	iOS (Swift), Android (Java or Kotlin)	More Rare	No	No	No	Likely none - new deployment pipelines would need to be built for mobile	No	via OAuth
Cross-platform (React Native)	React JavaScript	iOS + Android familiarity	Popular	No	No	No	Possibly (reuse build and CI pipelines)	No	via OAuth
Cross-platform (Xamarin)	C# .NET framework	iOS + Android familiarity	Somewhat rare	No	No	No	No (fully new infrastructure required)	No	via OAuth
Cross-platform (NativeScript)	Angular JavaScript	iOS + Android familiarity	Popular	No	No	No	Possibly (reuse build and CI pipelines)	No	via OAuth
Hybrid (Ionic)	Angular JavaScript	iOS + Android familiarity	Popular	Possibly	Possibly	Possibly	Possibly (reuse build and CI pipelines)	via web, as VA.gov does	via web, as VA.gov does
Hybrid (Ionic React)	React JavaScript	iOS + Android familiarity	Popular	Possibly	Possibly	Possibly	Possibly (reuse build and CI pipelines)	via web, as VA.gov does	via web, as VA.gov does
Hybrid (Flutter)	Angular Dart	iOS + Android familiarity	Rare	Possibly	Possibly	No	Possibly	via web, as VA.gov does	via web, as VA.gov does
PWA (Progressive Web App)	JavaScript React available	n/a	Popular	Yes	Yes	Yes	Yes	via web, as VA.gov does	via web, as VA.gov does