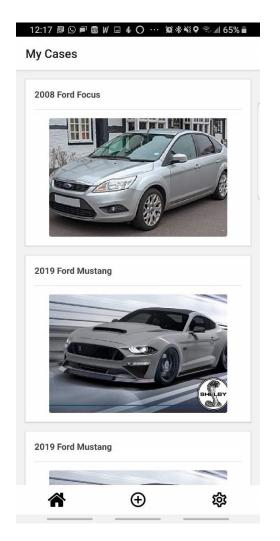
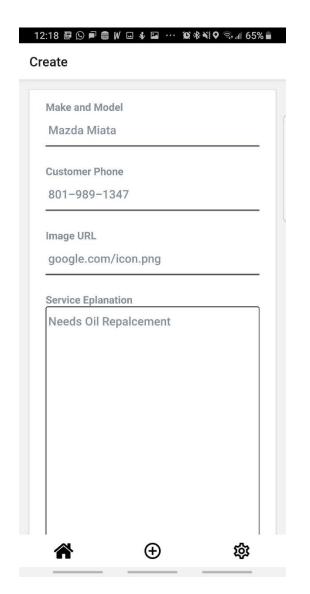
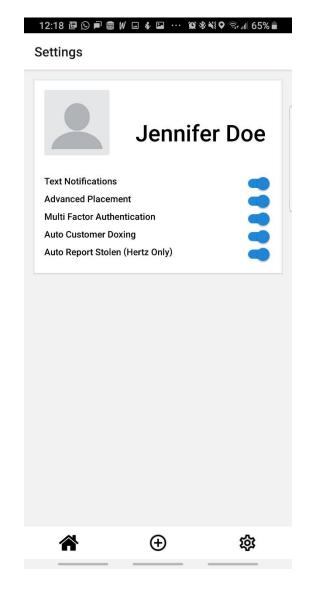
## First Prototype Usability Report

My app is called "MyMechanic", it seeks to simplify and improve mechanic to customer communication by improving transparency and decreasing stress. The core functionality of the application is to allow mechanics to upload images/videos of a customers car along with an explanation of what service needs to be done. This 'report' can be sent to the customer and shows them why their car needs the service it does. From my initial research, I found that everyone really likes this solution. Customers like it because they said it put them more at ease about purchasing service. Mechanics like it because they felt their customers would buy more if they properly understood the purpose behind the service. With that brief synopsis out of the way, here are some screenshots of my app running on reactnative on my mobile device









For my useability study, I was able to gather feedback from 2 primary persona people and 4 secondary persona people. While I would have liked to have 4 of the primary and 2 of the secondary, I do not have direct access to many mechanics to interview. If I was going to turn this into a real product, I would collect more input from mechanics before moving forward with a design. My 2 mechanic interviewees were my cousin Joseph and my former high school auto shop teacher Mr. Winkler. My 4 consumer interviewees were Beth, Griffin, Megan, and Porter.

# **Evaluator Profiles:**

### Joseph

Joseph is a young man, aged 22, who has just entered the automotive service industry. He is very tech savvy and is used to consistently using his smart phone to solve problems. His work does not use any software similar to MyMechanic. While he has a long way to go before becoming a master tech, he is starting to understand how to best provide value to his shop's customers.

#### Mr. Winkler

Mr. Winkler worked as a mechanic for 'many years' before deciding to switch careers and start teaching about cars. He has significant experience in the industry and has learned how to deal with confused students/customers. He is generally suspicious of big tech and values privacy over convenience in some cases.

#### Beth

Beth is a young female without much understanding of how cars work. She knows they need service sometimes but is also weary of businesses ripping her off. She uses her phone as a source of truth and will frequently lookup information on her phone when she is curious. About a month ago, she took the test to get her driving permit, so she is now starting to deal with maintenance directly.

#### Griffin

Griffin is a college student studying physics. When presented with a service bill, he isn't afraid to investigate the allegations himself to determine if they are correct. He has recently come into possession of a 2020 Mazda cx5 which he plans to maintain for many years to come.

### Megan

Megan is currently a student at BYU finishing her degree in biochemistry. In the past, she's had negative experiences with dishonest mechanics. As a direct result of this, she tries to diagnose and perform all her car's service herself. She is very untrusting of mechanics and needs assurance of a correct diagnosis.

### Porter

Porter is a young college student attending University of Utah working on a degree in opera. He is younger and is very trusting of technology. To him, a car is just a means of getting from point A to point B. He has never had to pay for his own maintenance and isn't quite as concerned about mechanics taking advantage.

#### **General Observations**

- 1) Winkler believed this application was much more likely to be run on a shop tablet as opposed to a technician's phone. From this, he believed I should update my prototype to presume a shorter and fatter aspect radio.
- 2) Griffin wanted the app to automatically generate hyperlinks explaining the service depending on what the technician put in the description box. He explained that if a service recommendation used the words 'thermostat replacement', the user might reasonably want to see an independent explanation of the dangers.
- 3) Beth and Megan each brought up the lack of a color palette in the prototype. Beth thought the app looked 'bland' while Megan mentioned the white on grey contrast just looked bad.
- 4) Porter, Joseph, and Winkler thought the app would be much more useful when the ability to add multiple images was added. Porter said he might want multiple angles, while Joseph brought up the fact that there may be multiple parts of the car that need repairing and therefore documenting.

## Addressing

I believe all the feedback I received was very useful and ideally, I would be able to address all of it. While I will be addressing most of the feedback, I will not be modifying the design to work specifically on a tablet. This change will not be made because I do not own a tablet to test on and this product will not ever actually be used. Additionally, the project specifications do not encourage us to implement responsive layouts and I don't want to deal with them.

I will find a way to search through the text to detect key words and display relevant links explaining the issues. I think this is a great feature because it improves the user experience without taking up more of the tech's time. I also believe linking to independent explanations will greatly improve the legitimacy of the shop's service recommendations. Finding this feature alone made the entire use test worth it, I believe this is an exceptionally valuable feature and I'm glad somebody suggested it.

I was originally planning on multi-image and direct upload support, and the feedback from Porter, Joseph, and Winkler reaffirmed that plan. They said having to go to a third-party website to upload an image, then fetch the URL, then set that URL in the app was way more work than a tech should have to be doing. Their other suggestion of multi-image is completely reasonable, and I do agree on its importance. I will be adding these.

Finally, Beth and Megan's suggestion of adding colors will of course be done for the second prototype. I didn't want to focus on aesthetics too much for the starting point because I was afraid I would have to fundamentally restructure my app. Now that my basic design has been validated, I will work to improve the aesthetics.

For everybody except Mr. Winkler, I was able to use an actual mobile device for the demo. Due to long distances, I was not able to meet with Winkler physically, so I instead opted to screen share my emulator over zoom and have him complete the tasks that way. The virtual interview process wasn't as good as the in-person, but I was very glad to be able to get feedback from him.

# **Performance Summary**

Everybody was able to do all the tasks, so my rating will focus on their subjective experience of how easy the tasks were to complete. The key is as follows: 0) hated doing it, thought it was very tedious, 1) was a bit annoying, but wasn't horrible, 2) thought the task was reasonable for an app they would use 3) highly satisfied with the app's performance.

	Winkler	Joseph	Griffin	Beth	Megan	Porter
Find case	2	3	2	3	3	2
View details	2	2	1	2	2	1
Create case	1	2	0	2	2	1