



# DRONEY

## An app to connect the drone community

### What is a "Drone Community"?

A Drone Community is a community of drone enthusiasts, which includes hobbyists, photographers, videographers, racers, and people who use drones for their projects (academic or professional) people who are just amazed by the drones

### UX Process

Semi-Structured Interviews

Infinity Diagram

and Map

Low Fidelity Prototype

Usability Testing - 3 Iterations

High Fidelity Prototype

"Being in a community helps especially when you are up with people to fly together"

"I was very paranoid Didn't want any trouble because of the drone as I live within 5 miles of the airport"

"I picked a spot by flying around and use google to avoid airports"

"I went to a shop and bought the drone I wish they had told me about the signal and the type of antennas"

### UI Cards



Used UI Pattern cards for deciding the Prototype Design

### Findings

#### Community Interactions

Pilots get more inclined to go out and fly drone and create images and footage to share with the community

The drone pilot interact with the community mostly using social media like Facebook, Discord and Instagram

People meet other drone pilots in the community events and help each other in solving problems

Some drone pilots work with small teams on projects related to drones for various startups or as academic projects

#### Pain points

Checked a lot of websites and youtube videos before buying a drone for recommendations.

Recently a lot of laws regarding drones changed

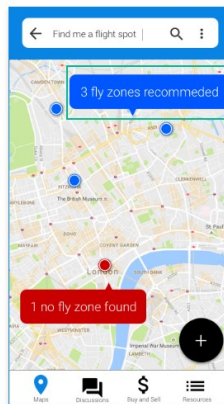
Broke one of the rotors of the drone and cannot afford to replace it.

### Design Solution

The app contains 4 major components, Maps, Discussions, Resources, and Marketplace. We designed it to serve as a mediator between an individual and the drone community. We aim to connect information seekers, experienced and novice pilots, educators, entrepreneurs, and general drone enthusiasts in order to build a seamless community that is dedicated to the drone sector.

## Prototype

### Maps



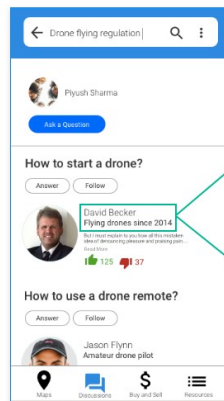
**Issue**  
Existing maps only show no-fly zones and pilots don't know about the drone events happening around them.

These locations will be marked by drone pilots using the application. This will provide others a recommendation of spots which are available to fly a drone.

The event finder will notify users of events nearby and to help keep track of it.

The "report function" will allow pilots to send a notification to the community such as found a new spot and lost and found.

### Discussions

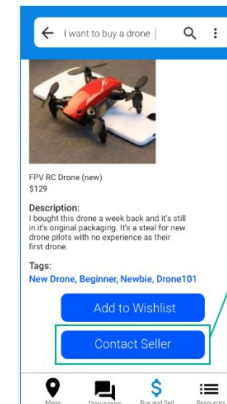


**Issue**  
Most of the participants self-learned their experiences with the drones. The process was time-consuming and frustrating.

This feature will provide individuals a platform to get their questions answered on a global level.

The discussion board will also provide links to profiles of the people who answer the questions. Individuals can directly communicate with others via personal messages.

### Marketplace

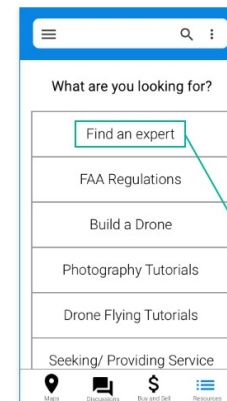


**Issue**  
The drones or drone parts are very costly. Pilots have broken drones which still have some working parts on it.

People can put drones or drone parts on sale and the people who are interested in buying it can directly contact the seller through our application.

If a drone is broken and the pilot cannot use it anymore, its parts can be put up on sale using Marketplace.

### Resources



**Issue**  
Participants used various sources to find rules and regulations to be followed when flying drones. Some of the sources are verified while some are not.

To provide consistency in the knowledge and reliability of the sources to be used, Droney will provide external links to FAA website and to educational media.

It will also provide the link to an Expert who will guide the user and will give advice as required.

## Usability Evaluation

We conducted three iterations of Usability Testing to make our application better and after evaluating the results we did immediate changes in our design before starting to work on the High Fidelity prototype

1. Maps -> Find me a spot -> "Red is the area where the drone cannot fly, blue is the area where the drone can fly, what about the rest of the area which doesn't have any color?"  
-> The blue area is recommended spot for flying by other pilots, so we mentioned that in our design.
2. Didn't notice the Hamburger menu on the Maps.  
-> Changed the Hamburger menu to Floating Action Button.
3. Had issue understanding the functions of an "Ambassador": "Is it like customer care?"  
-> Changed the term "Ambassador" to "Expert" to avoid the confusion.
4. The first page was Maps and the person wasn't sure what to do with it.  
-> Added a home screen with a link to the four main functions of the app.
5. "Ask the user to register their drone while signing in and track the drone GPS and then give warnings if they are breaking FAA rules".  
-> This was a really good suggestion by the participant and we added it in our design.