

The Big Picture

There are millions of people in the United States that are currently having difficulties due to disabilities. The advancement of technology can either help alleviate these disabilities or assist people with them.

- Over 65 million Americans age 60+ (~20%)
- 23 million (35%) of these have at least one disability
- 1000's of AT (Assistive Technologies) devices available

Sponsors

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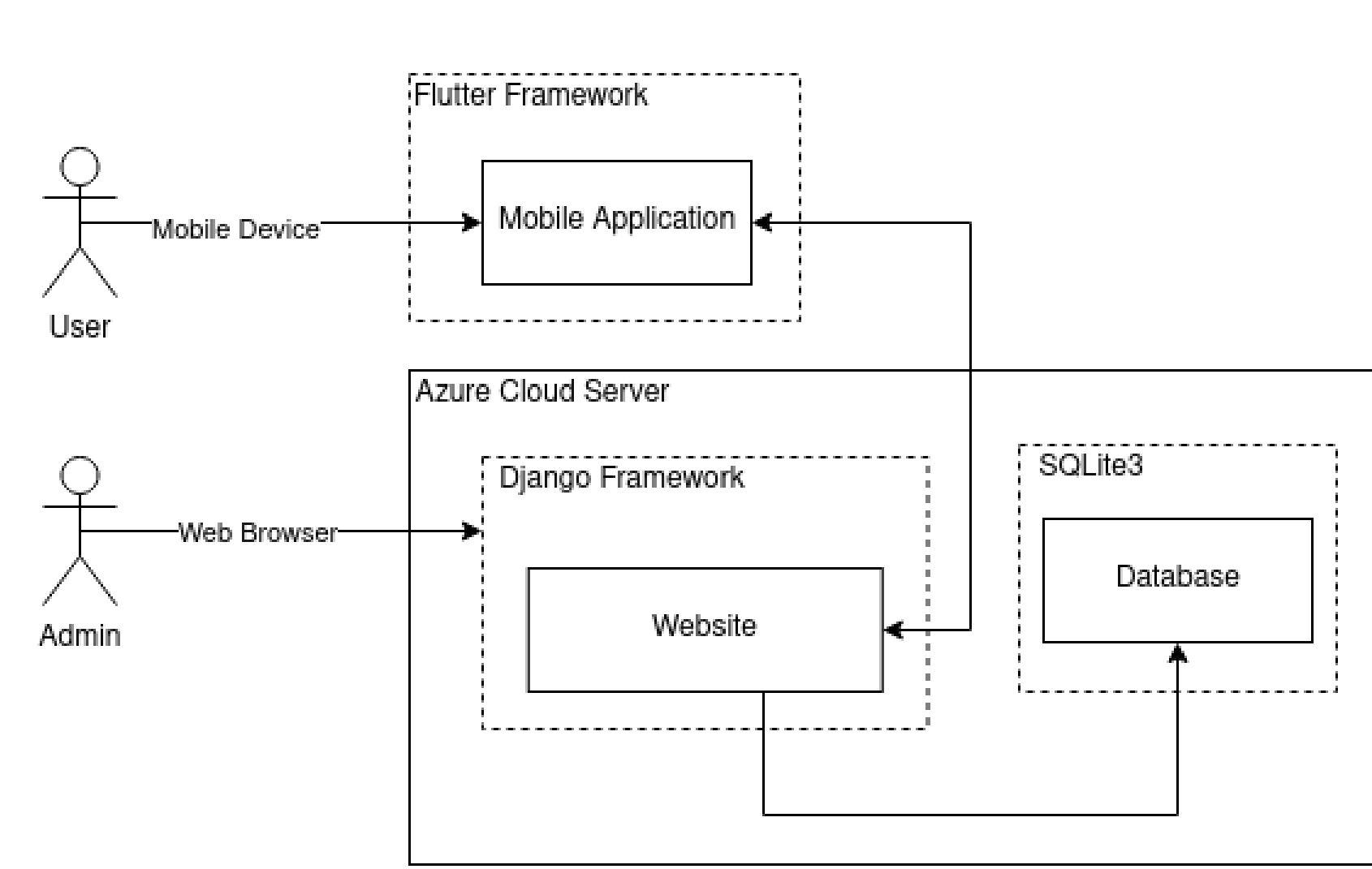
Our Clients seek to enhance lives and enable people with disabilities by helping connect them with products that will help them age safely in their homes.

Solution Overview

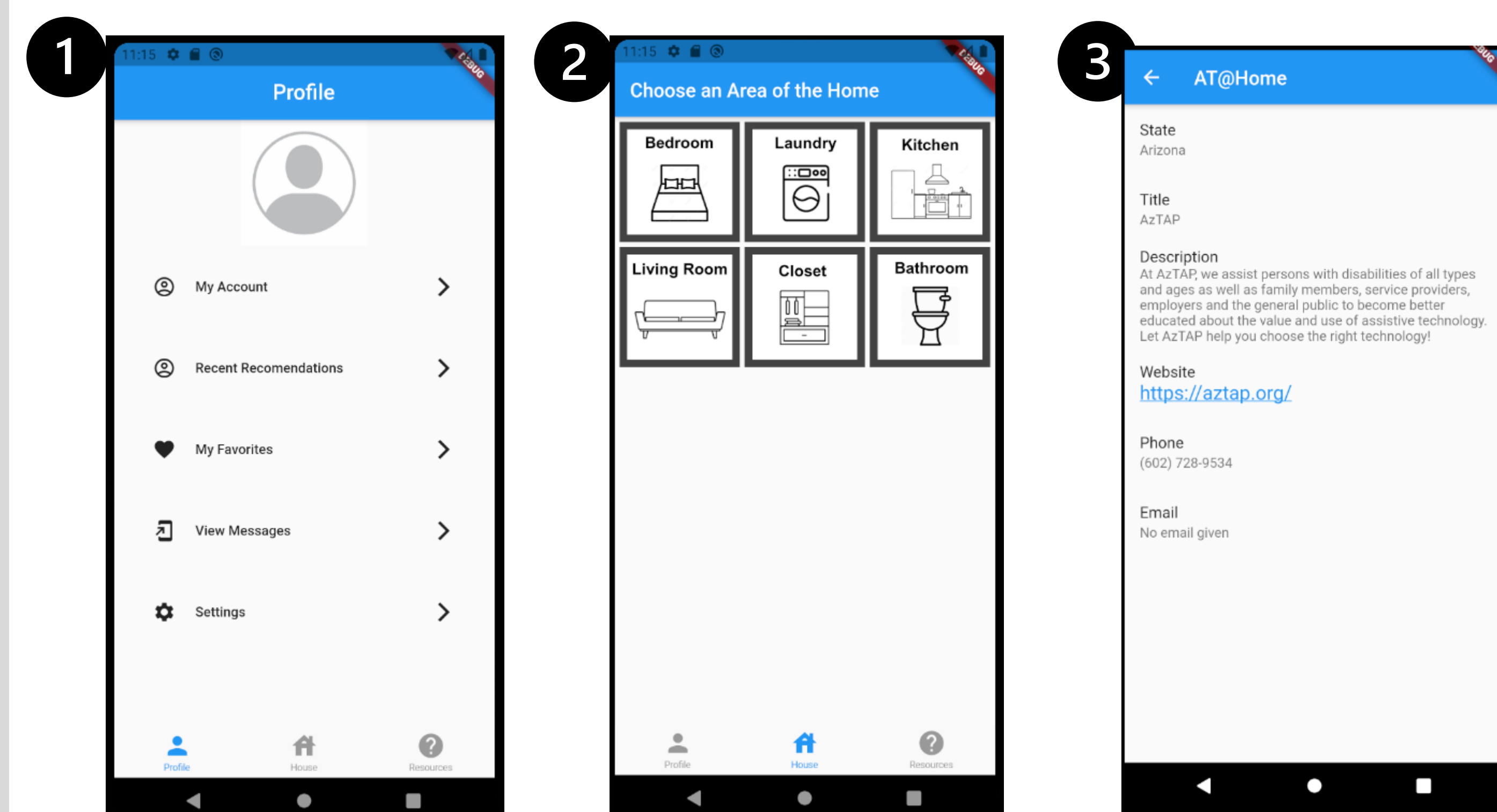
We have built a cross-platform mobile application that will help guide users to find assistive technologies and helpful information and to pair them with the devices that they need. This application will be a means for helping walk people through the process of determining various solutions for in the home and recommend assistive technologies that are catered to their specific needs. Our solution also includes a website that will allow admins to edit the inventory of devices and make other administrative changes as they see fit.

Architecture

- Hosted on a cloud server, database contains AT inventory and user profile information
- Mobile app access' information from the database
- Website for inventory management in database



App Overview



1: Shows our Profile screen where the user can see their account, AT recommendations, favorites, messages and settings

2: Shows our house layout where a user can enter a room of the house and then a specific area of a room to find specific trouble areas in the home

3: Shows the resources page where the user can select their state and be redirected to the proper resource information for that state

Key Features

- Storing data
 - Users can access AT data
 - Admin can manage stored data
- Providing Advice
 - Application will offer tips when AT is not needed
 - Application will navigate users to their local resources for more information
- A method for determining the best fit assistive technology

Technologies



- Flutter – App development framework; utilizes dart programming language



- SQLite – Database system



- Django – Website framework



- Microsoft Azure – Cloud-based server

Future Work

As much as we wanted to implement more features with this project, time constraints held us back, but moving forward we hope to see the following be implemented.

- Web app in addition to mobile app
- Web forum for users
- App user can define their own house layout
- Virtual assistant to help with using the app