Bronson Arucan A11291138

Triet Bach A11860217

Joshua Escobar A11606542

Janet Hoh A11441575

ECE 140B - Assignment 5

Accessibility Issues

Our MotoGuardian landing page is centered around interaction with a website application that was designed to be used on mobile devices, particularly a cell phone. Several accessibility immediately arise with fact that our website is intended to be used on mobile devices. Because our product is designed for motorcycle riders, we can assume that many of customers will have the vision that legally required with or without corrective lens and are tactically able to operate a motorcycle legally and safely.

However, the issue of viewing the website and user dashboard is especially important when users are at home, in the office, or anywhere where they are not operating their vehicle. We must make the arming and disarming symbols are color neutral (avoiding green and red) and has descriptions to ensure that anyone who is colorblind will be able to understanding the notification. Moreover, we need our fonts to be large enough for people who have weaker vision to be able to read and understand the various points on our website. Lastly, in terms of actual security product, the device is designed such that the user will be able to setup and install it on the motorcycle with little to no hassle. However, this comes with an accessibility issue because a user may

not be familiar enough with modifying his or her motorcycle or may be a user who may be a first-time user of a motorcycle. Thus, we will need to be aware of how complex our solution may be and limit it in a way such that all users will easily be able to install it on their motorcycles.

User Interface Design

Two of the design principles of our landing page are minimizing cognitive load and form follows function. Our home page utilizes white space to reduce clutter and make it easier for users to find what they're looking for on our website. We mainly used a minimal color theme of black, white, and shades of blue to decrease visual weight and cognitive load for our users. Moreover, we order our information in several "blocks" on the web page, which allows the user to learn and become familiar with our product offering and the core features of our product as they interact with our website. For our feature descriptions, we utilized the principle of balance over symmetry by using a checkered pattern for our feature descriptions, and an image depicting the described feature. Together, our website sufficiently and efficiently summarizes the job-to-done of our product.

Interaction Design

We primarily focused on usability-driven design, primarily efficiency and memorability. At the top of our home page, we utilized a visual image of a motorcycle, to emphasize the theme of our product - motorcycles. Additionally, we utilized visuals to emphasize the most important features of our product.

For our customer login button on the home page, we have single login button, and implemented the sign up feature on the login page. However, this may be an issue for some users, who may get confused, as they are unable to find the sign up button.

For our hardware, the user will interact with our product mainly through installation and two buttons, one for resetting the hardware, and another for cancelling emergency calls when there is no cellular data available to cancel through the app.

Website Changes

To improve accessibility, UI, and ID of our landing page, we implemented the following changes to our website:

1. **Sign Up Button** - we decided to create a register/sign up button that is separate from the login/sign in button because users may be confused as to where they can sign up for our service. This is better than our previous implementation of being able to register after clicking on the login button and accessing it from below those fields.
2. **Font Size** - we decided to increase the size of the “Thank You!” and the Rick quote because users who have difficulty reading small print may find it difficult to read the confirmation or user testimony, especially on a mobile device.
3. **Armed/Disarmed Slider** - we decided to use a lock that would be open for disarmed and closed for armed because a slider would leave users potentially confused as to the status of the alarm. The symbol of a lock is generally understood to be secure, so the opening and closing of a lock would make it easier for the user to understand and know that his or her alarm is armed or disarmed.