

Software Requirements and Design Document

For

TripleR by WORM

Version 1.0

Authors:

Melissa Ma

Orlando Lewis

Rachael Scott

William Tsaur

1. Overview

A police misconduct reporting platform iOS application for users to share their experiences and encounters with police by recording important details and evidence of these encounters in a secure, encrypted database. The goal of this app is to provide users a “Report” function that requests information essential to accurate local officer misconduct reports such as officer name, description, badge number, witness information, and event description. There will also be a “Record” function that captures events like traffic stops on video. The record functionality is user dependent (user controls if and what the app is recording). There will also be a settings page that will allow users to customize some special features of the application or change the app's permissions. Finally, we aim to provide a “Rights” page that lists users’ rights when they are stopped or in tense situations with police. As the scope of law changes drastically in different states, the primary focus will be national laws upheld in Florida as well as state specific laws that may aid a person's speech when encountering an officer.

2. Functional Requirements

- High priority
 - A record button that asks the user's permission for access to their camera and microphone (if it has not been granted previously) and allows the user to take videos with the option to either retake the video or use the video after the recording has stopped. This video will be saved locally to the person's phone and can later be optionally attached to a report when filling out a report.
 - A report button that directs a user to a page of forms. These forms will contain a variety of information regarding the officer's description, a description of the incident, witness information, and victim information. The reports will be anonymous and will not ask for specific information regarding witnesses and victims besides contact information from witness or witness statements and the race and gender and other comments from the victim. The report will also allow the option to attach a video to the report. There will also be a send button that sends the report to a secure, encrypted database.
 - A settings button that redirects the user to a page of settings. These settings will include permissions for access to the user's camera, microphone, and photo library.
 - A rights button that redirects the user to a page containing information regarding important rights specific to the state of Florida as well as general rights (such as Miranda rights and the rights that police have for search and seizure), tips for dealing with police officers peacefully and to avoid aggravation, and additional resources that link to reputable organizations such as the ACLU or NAACP in Florida.
- Medium priority
 - Other Settings features
 - option to lock phone after recording
 - option to broadcast location to certain contacts when starting a recording
- Low Priority
 - Other Settings features
 - option to access Siri to pull up app in no-hands or driving mode

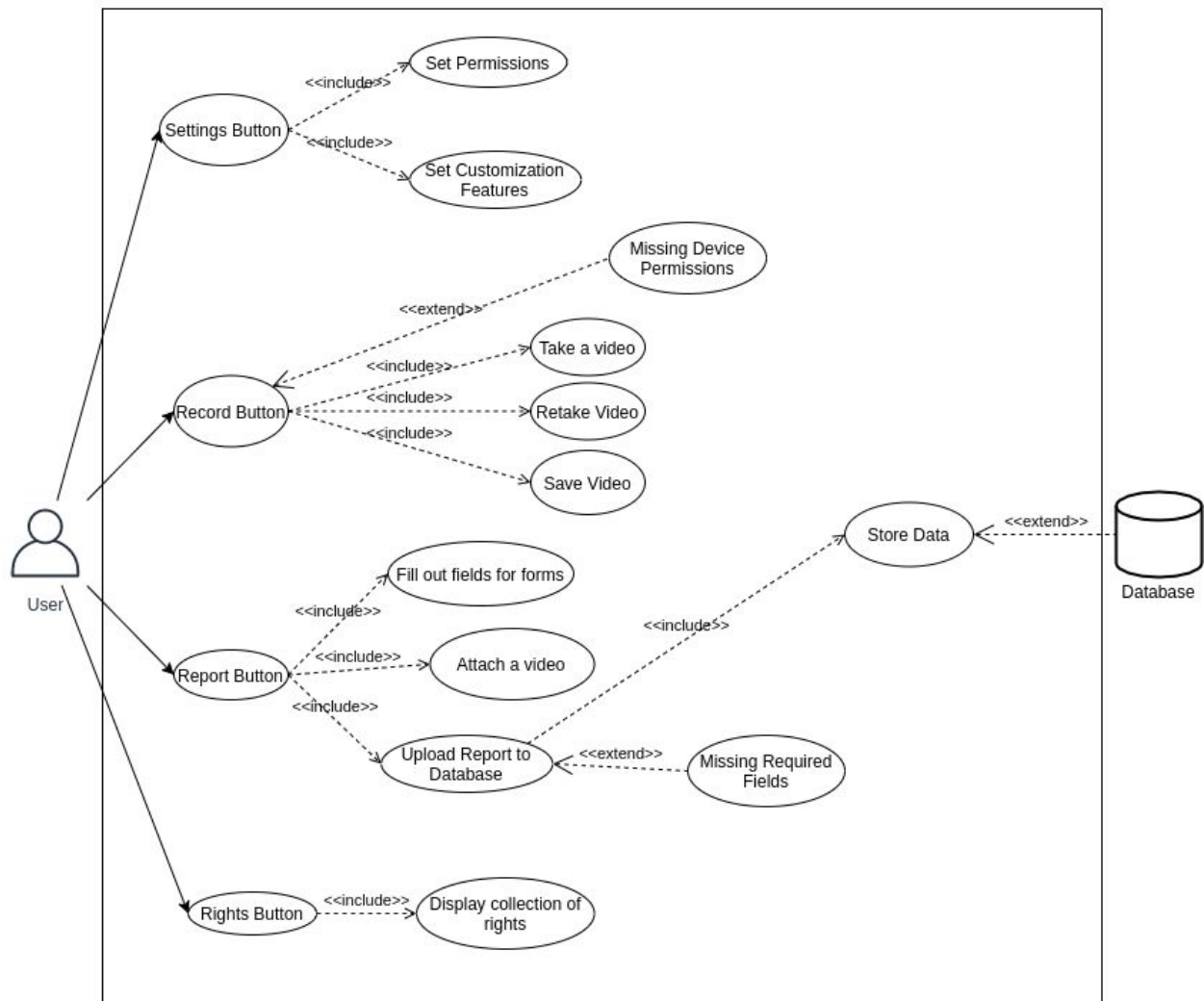
- A button to search for reports made in your area. Videos and victim and witness information will not be pulled with these searches, just officer description and description of incident.
- Deliver notifications to users.

3. Non-functional Requirements

- All pages should load in less than a second
- Autofill button should autofill in fields that can be filled in, in two seconds or less (grabbing a person's location may take some time)
- The accuracy of the locations grabs should be within a kilometer
- Security to maintain user's privacy within the app while maintaining past report data.
- Available offline.
- Does not consume too much of a device's CPU or battery life.
- Ability to make it accessible on the app store (scalability)
- Ability/resources to maintain the database if app is on the app store & being used

4. Use-Case Diagram

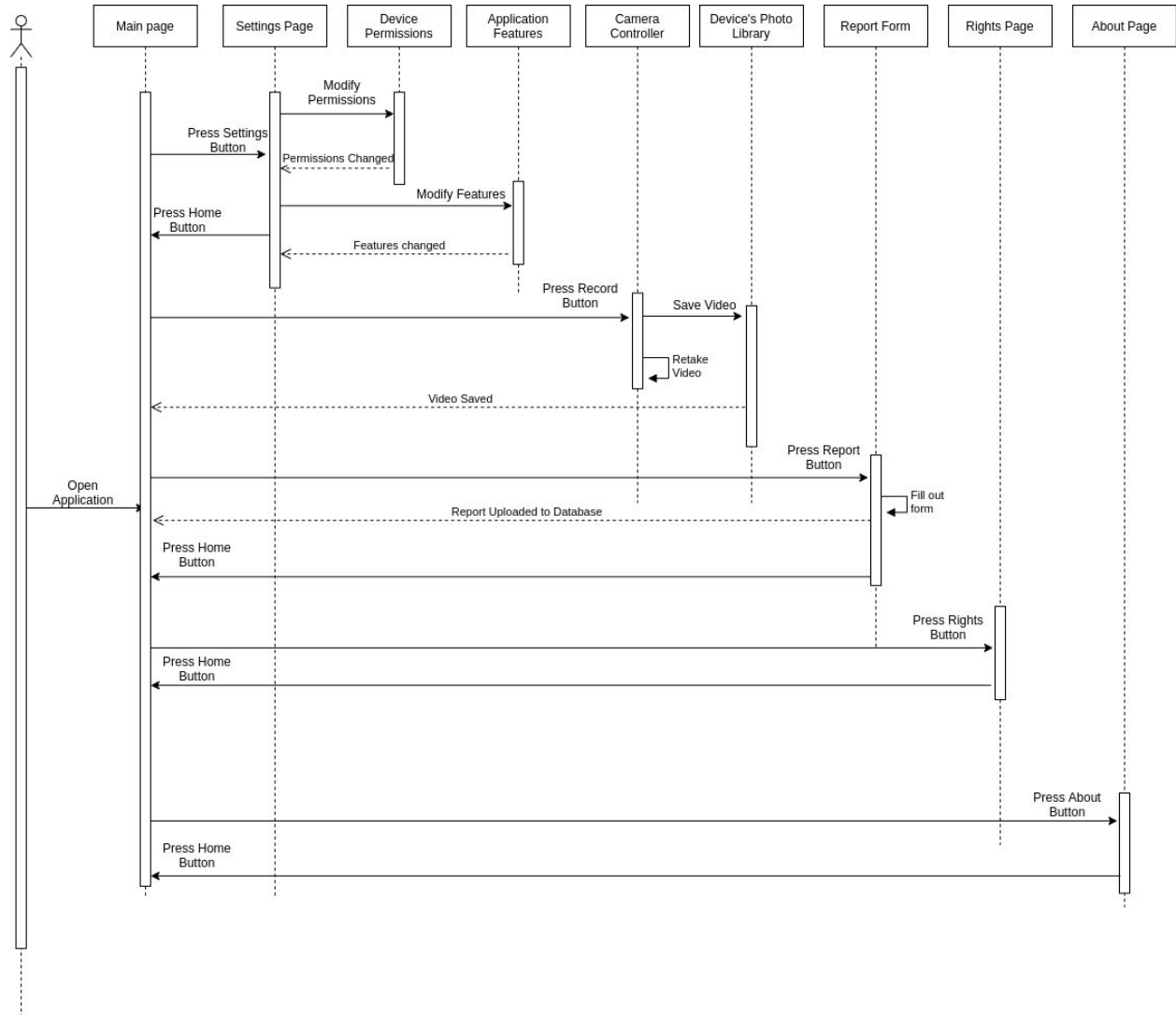
Triple R Application



- Settings Button
 - Set Permissions
 - directs users to iPhone settings so that the application can have the correct permissions for the user to have access to all basic features
 - Set Customization Features
 - controls special features that can be turned on by the user
- Record Button
 - Missing Device permissions
 - alerts the user that they have given the application insufficient permissions to record videos and save them to the user's photo library
 - Take a video
 - interface that allows user to record a video
 - Retake video
 - a button that allows the user to discard the video just taken and record a new one
 - Save Video
 - a button that saves the recorded video to the phone's photo library

- Report Button
 - Fill out field forms
 - there are multiple sections to the report form and the user can click on a section and fill out fields
 - also able to clear all forms
 - Attach a video
 - button allows the user to access their photo library and attach a video to the report form
 - Upload report to database
 - submit button that confirms that user wants to submit their report
 - Store Data
 - stores the report form data to the database
 - Missing Required Fields
 - checks that all required fields have been filled out, alerts user and does not let them submit the report if form has not been filled out
 - View Previously submitted reports
- Rights Button
 - Display collection of rights
 - displays several categories and each category has sub categories to direct the user to the information that they want to know/need

5. Class Diagram and/or Sequence Diagrams



6. Operating Environment

- iOS 14 and later
- iPhone/iPad with working camera and microphone and GPS
- Valid devices excludes iPhone/iPad with Apple M1 Silicon chips (arm64)

7. Assumptions and Dependencies

- Cocoapods:
 - EMTNeumorphicView (v1.0.4)
 - RealmSwift/Realm
 - CollapsibleTableSectionViewController