MICHIGAN STATE
UNIVERSITY

Project Plan Presentation
Sharing Advice on Academic Harassment

The Capstone Experience

Targets' Tip

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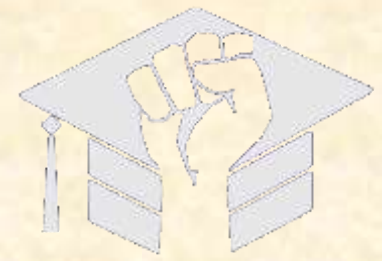
Department of Computer Science and Engineering
Michigan State University

Fall 2022

From Students…
        …to Professionals

Project Sponsor Overview

- Currently an Assistant Professor at the Department of Radiology and Precision Health Program

- Studied at several universities and saw the issue of academic harassment/experienced it firsthand

- Wanted to research the causes

- Co-founded a non-profit organization called Academic Parity Movement

- Over 10,000 emails saying survivors want to help

Project Functional Specifications

- No easily accessible and trustable resources available to targets of academic harassment

- Targets, survivors, and professional advisors can create accounts

- Subscribers are matched and able to chat

- Severe lack of data available for those working to make academia a safer space

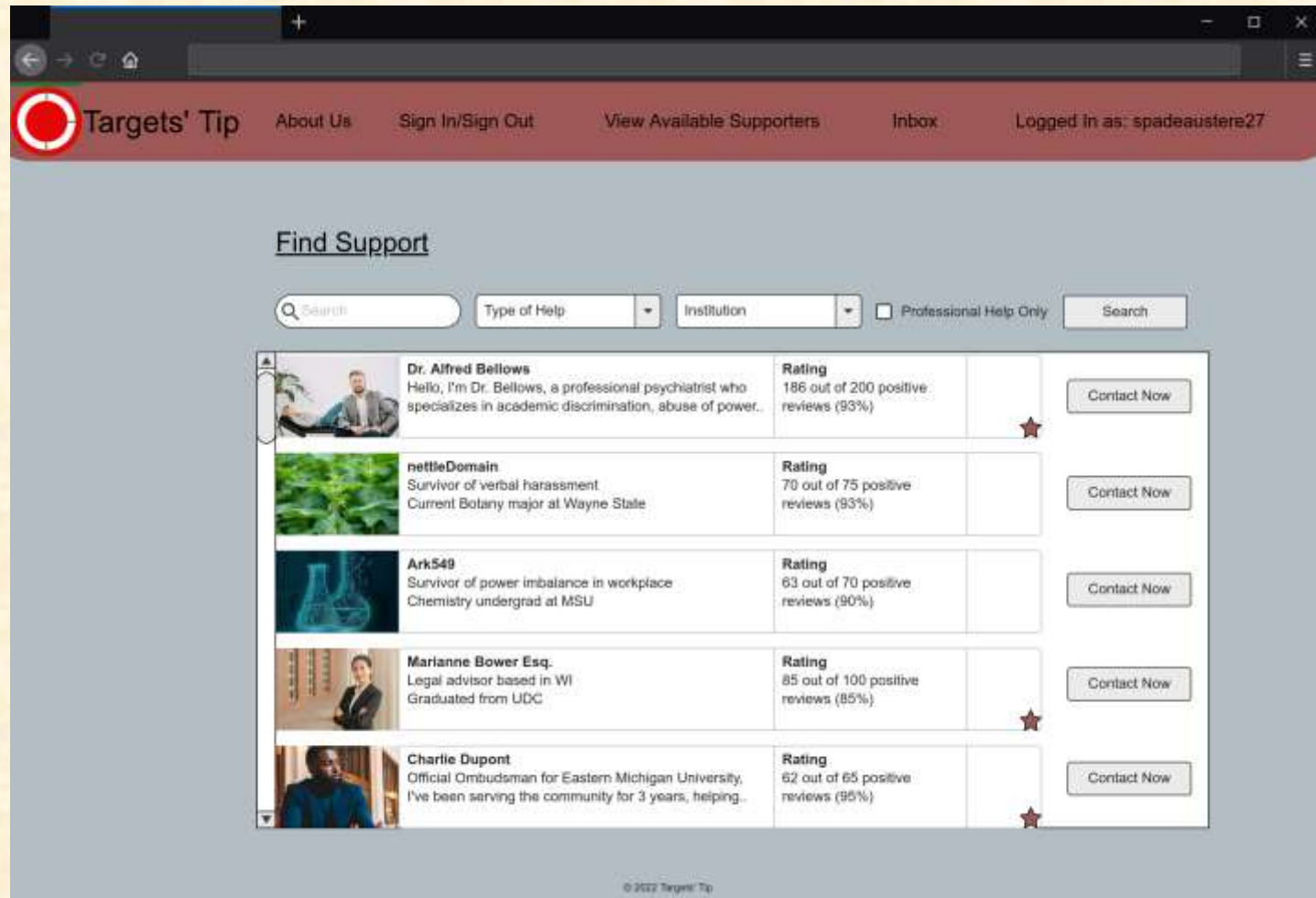- Collects instance data to create a meaningful report for administrators
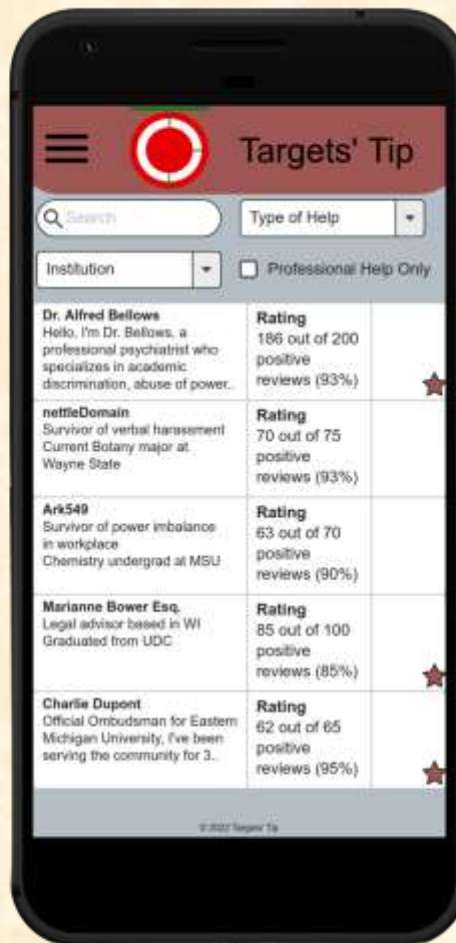
Project Design Specifications

- Uniform user interface across web, IOS, and Android applications

- Personalized matching of targets and supporters

- Chat feature between targets and supporters

- Ratings on supporters

- Customizable/filterable administrator dashboard for building reports
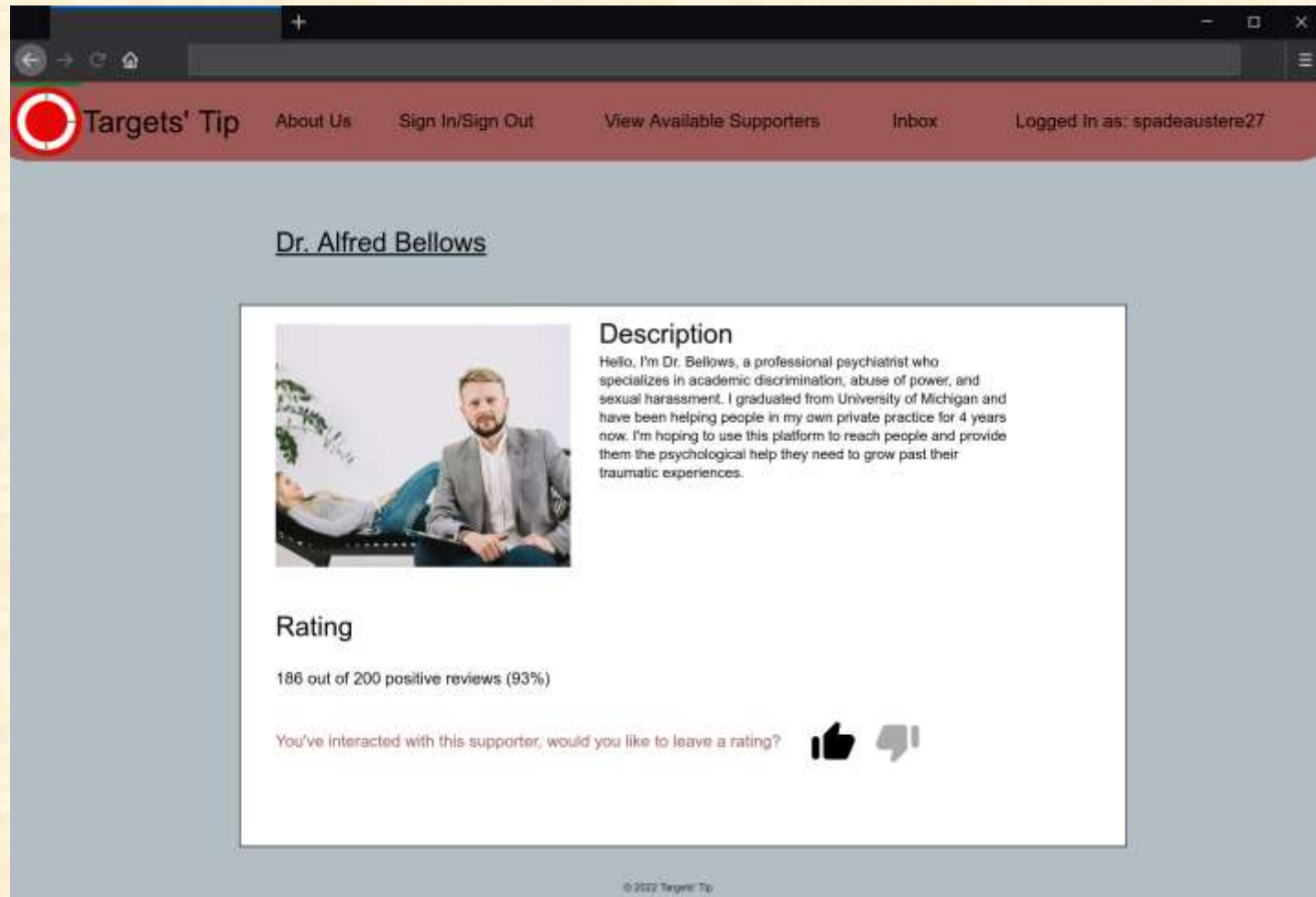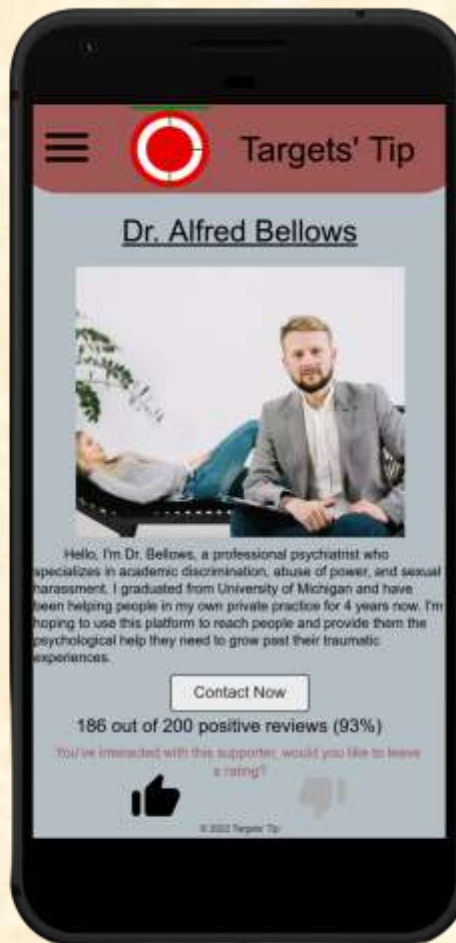
Screen Mockup: List of supporters page
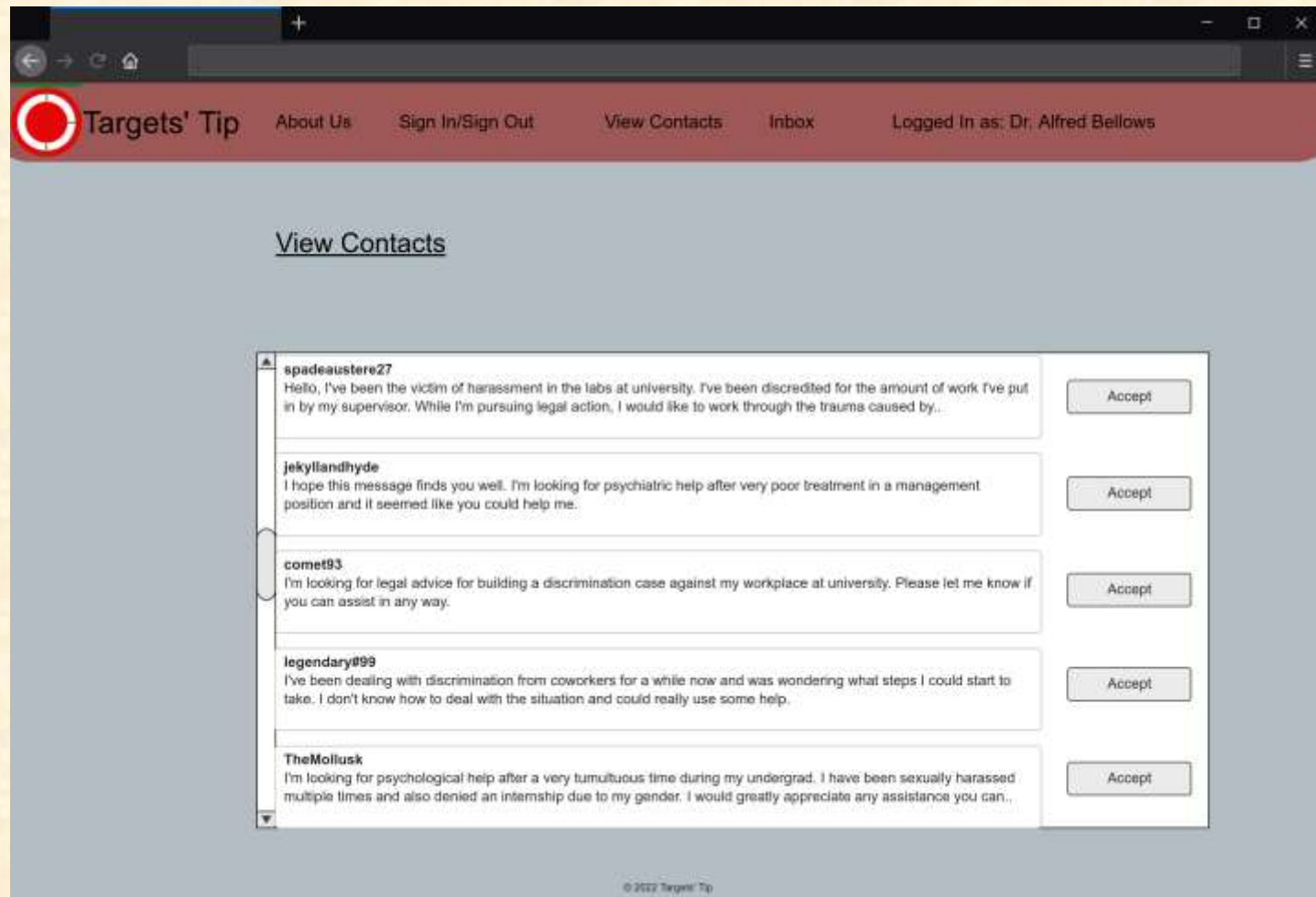
Screen Mockup: Mobile view of supporters

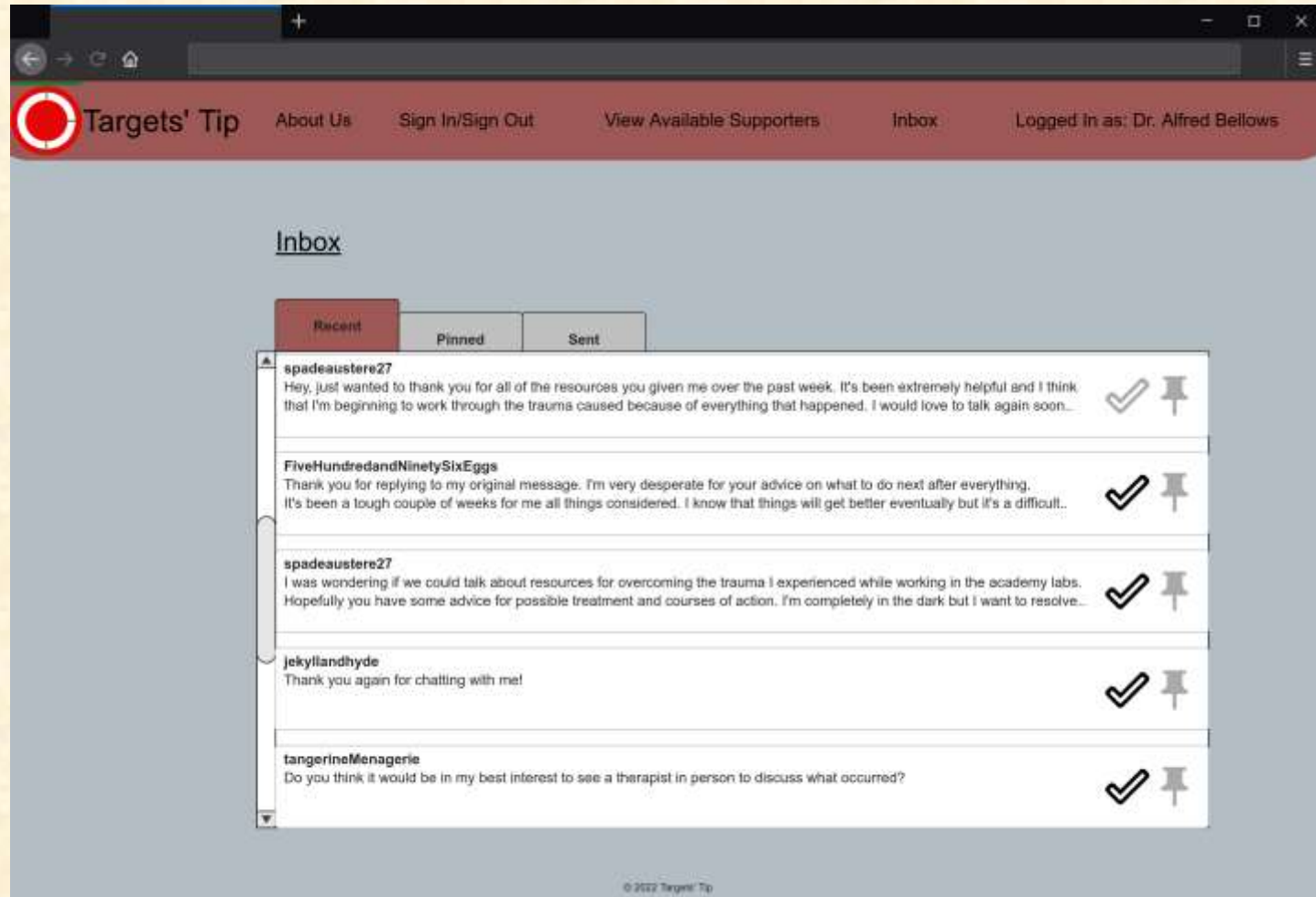# Screen Mockup: Supporter profile page

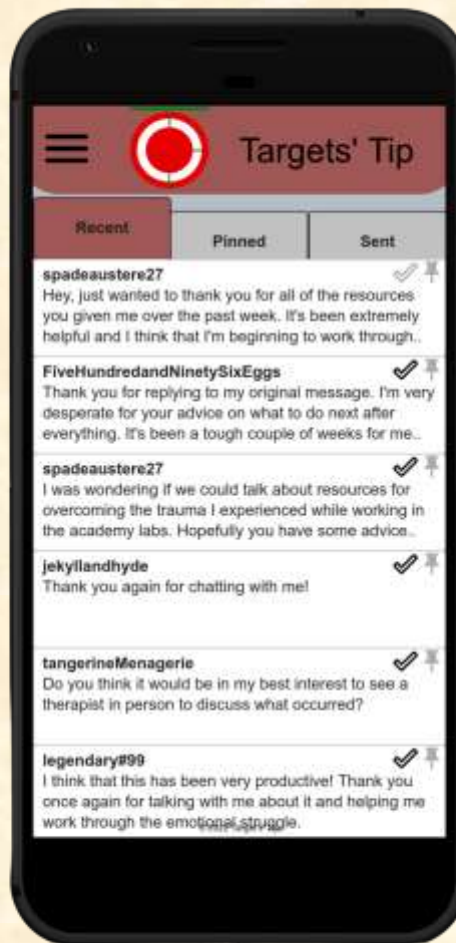# Screen Mockup: Mobile view of supporter profile
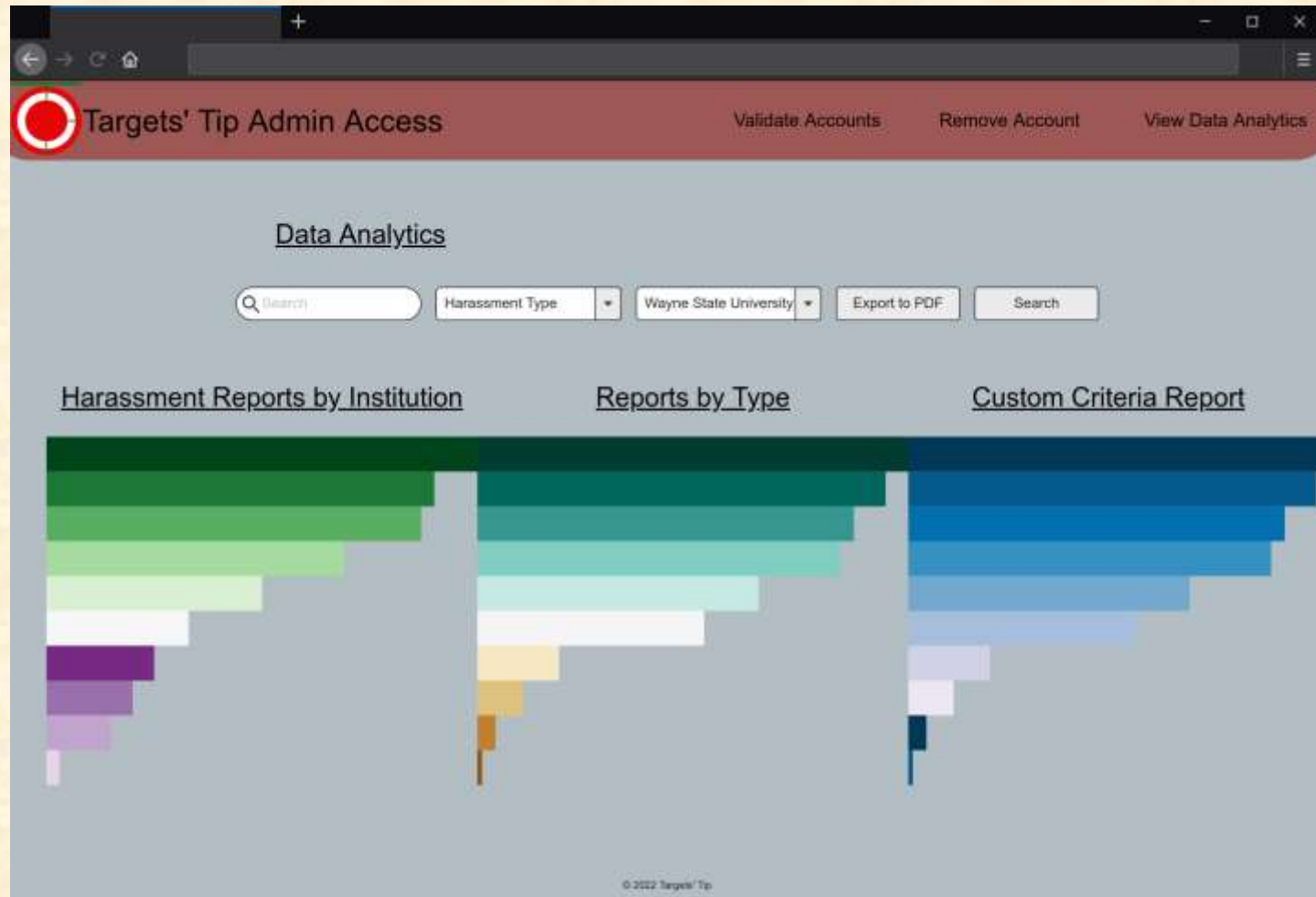
Screen Mockup: List of targets page

Screen Mockup: Inbox page

Screen Mockup: Inbox page mobile view
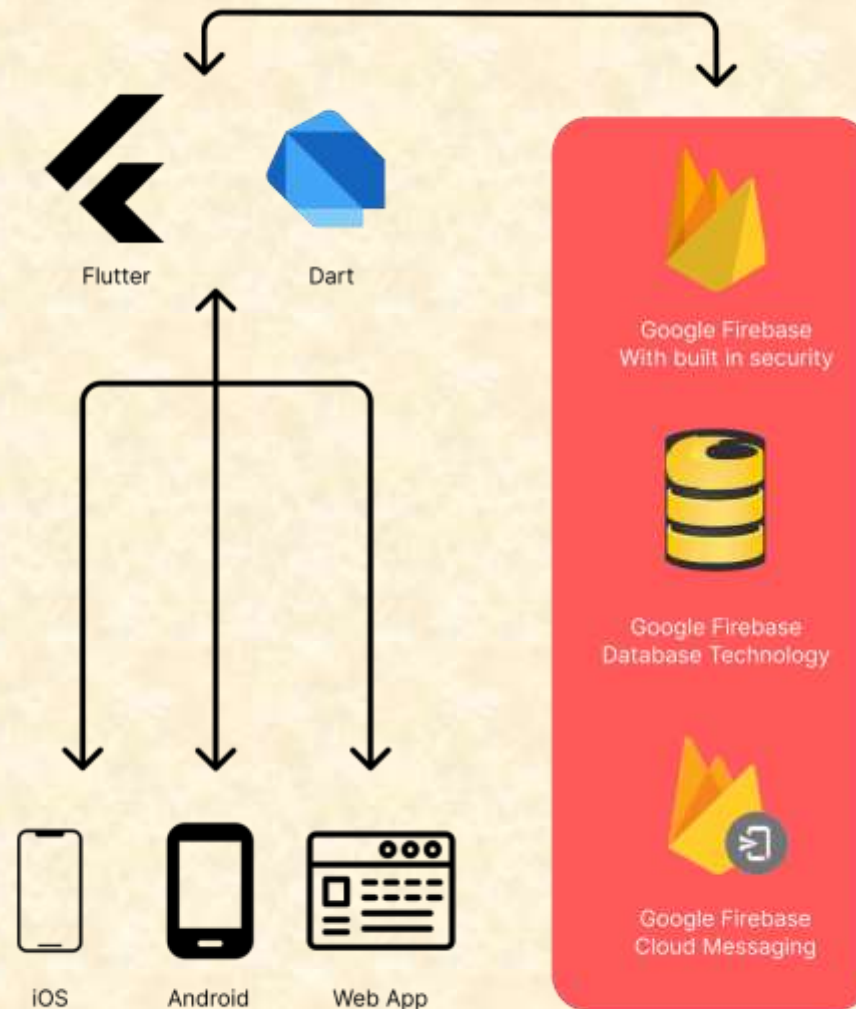
Screen Mockup: Administrator dashboard

Project Technical Specifications

- Utilizes an SDK called Flutter

- Uses a native language called Dart

- Utilizes Google Firebase for inter-device communication

Project System Architecture

Project System Components

- Hardware Platforms
  - Android
  - IOS
  - Web
- Software Platforms / Technologies
  - Xcode
  - Android Studio/Visual Studio
  - Flutter SDK
  - Google Firebase
  - Google Firebase Cloud Messaging

Project Risks

- Developing a user-friendly UI design
  - Needs to be easy and intuitive to use
  - Create prototypes and share them with the client
- Keeping user data safe and secure
  - Imperative that information from harassment reports is secure
  - Encrypt data when it is uploaded and decrypt when it is queried
- Managing development on three platforms
  - Must be available on IOS, Android, and web platform
  - Learn and work with Flutter to develop one UI
- Open-source software licensing
  - Use Flutter to keep UI consistent
  - Acquire proper licensing and acknowledgment in the README

Questions?