QualOpt

A Web App to Support Qualitative Research

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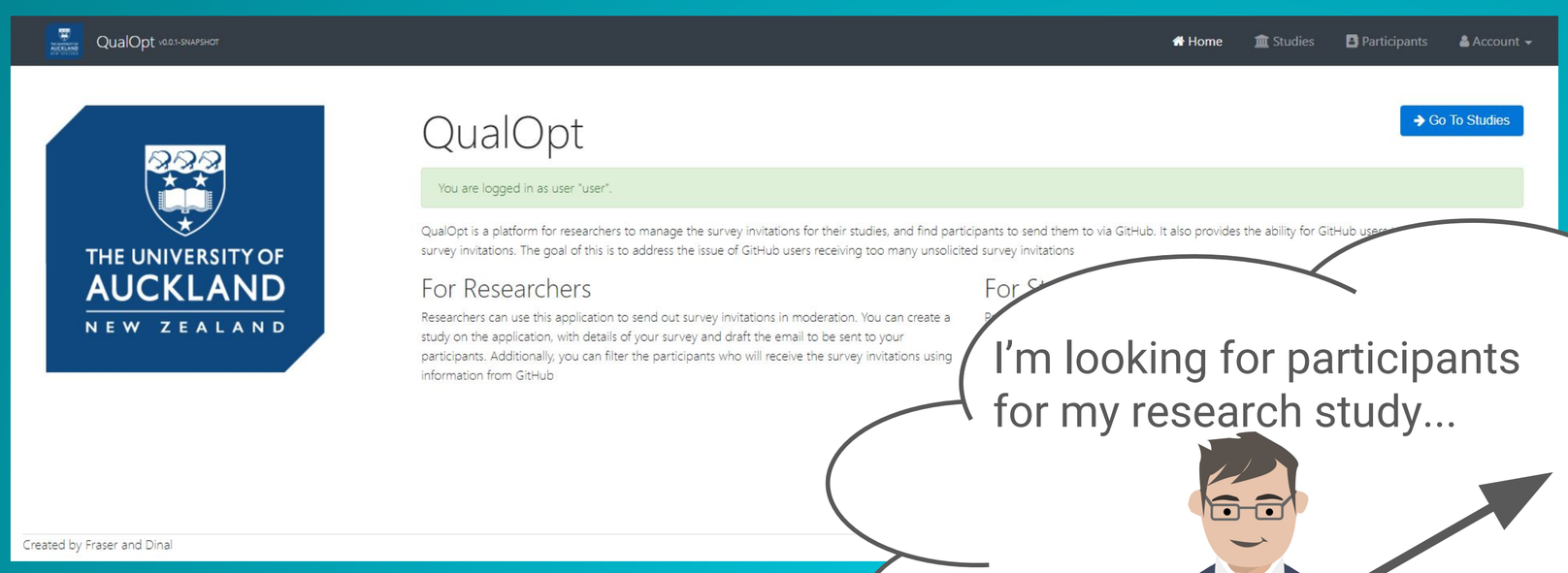
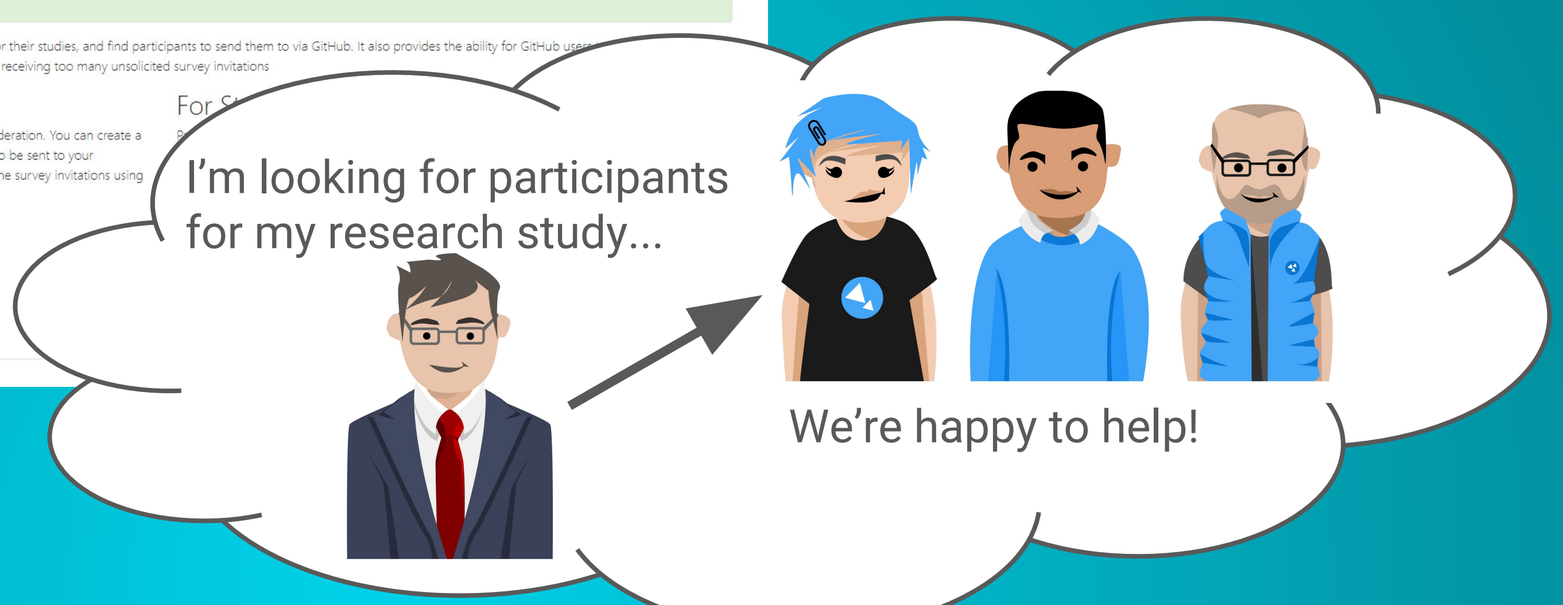
Problem Statement

- GitHub is a web platform that supports the Git version control system for software development
- Users were complaining about receiving an excessively large number of survey invitations from researchers via email
- Massive amounts of these emails were being sent out by using data dumps of GitHub user information from services like GHTorrent

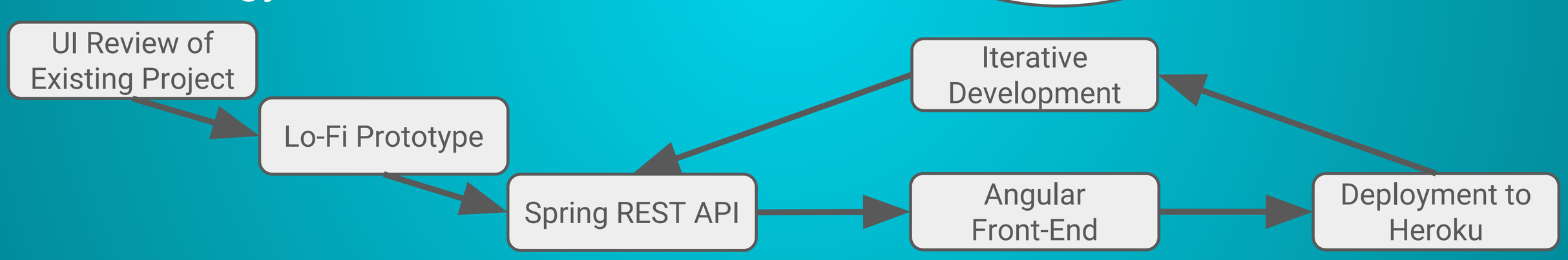
Project Background

- QualOpt is a web application that can minimise this email spam by providing a centralised platform for researchers to find GitHub participants
- Users are able to opt-out from receiving future emails from researchers
- An initial implementation of QualOpt was developed as a summer research project, however there were more features to be added





Methodology



Usability Study

- We proposed a usability study for the application, to assess the quality and gain feedback for improvements.
- Our participants for the study fulfil two separate roles; researchers and GitHub users.
  - Researchers are interested in finding participants for their studies
  - GitHub users opt-in or opt-out of receiving invitations for the studies.

Results

- Successful redesign of the client-side user interface
- Full-stack web application developed using cutting-edge technology and modern frameworks
  - Angular for client-side code - consuming the API and presenting the user interface
  - Spring for the server-side code - the REST API, data persistence and security
- Web application successfully hosted online through the Heroku cloud platform
- Potential for open-source collaboration in the future

Technology Stack

Client-Side

Server-Side

Images courtesy of: jay.rootinteractive.com; angular.io; getbootstrap.com; webpack.js.org; yarnpkg.com; jhipster.tech; spring.io; github.com; jawsdb.com; heroku.com