

# Project Charter

Project title: ReportIt

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## 1. Problem Statement

Public concerns appear in all around the world and should be seriously taken care of. However, properly managing and resolving those concerns can be a difficult task. Public service agencies need a convenient and well-managed platform to receive and respond to people's need, and the public needs an integrated platform to express their concern to different agencies.

## 2. Objectives

- Implement a registration system for both "Reporter" and "Agency".
- Develop an interactive interface that allows "Reporter" to report concerns
- Develop an interactive interface that allows "Reporter" to upvote concerns
- Develop an interactive interface that allows "Reporter" to edit/remove any submitted concerns
- Develop an interface that allows "Reporter" to find similar concern reports using machine learning algorithm.
- Develop an interactive interface that allows "Agency" to view all incoming concerns
- Develop an interactive interface that allows "Agency" to respond to incoming concerns
- Develop an interactive interface that allows both "Reporter" and "Agency" to search concerns
- Display a prioritized list of concerns based on upvote and comments.
- Develop an upload system that allows adding or removing attachments within concerns.
- Develop an email system that can notify the complains about reporters via email
- Develop an owner change feature that allows "Agency" to re-assign concerns that have been sent to the wrong agency
- (If time permits, develop an online chat room for "Reporter" to communicate in real time with the "Agency")

### 3. Stakeholders

Users	<ol style="list-style-type: none"><li>1. General Public: those who have questions and concerns to submit and be addressed</li><li>2. Public service agencies: those who are able to view and resolves public's concern</li></ol>
Developers	Juncheng Tang, Yingtong Chen, Liang Zhang, Yuting Guo, Yaoxi Liang
Project Manager	Juncheng Tang
Project Owner	Juncheng Tang, Yingtong Chen, Liang Zhang, Yuting Guo, Yaoxi Liang

### 4. Deliverables

- A web application that achieves the following:
  - It could support reporters to report concerns and enable agency to receive concerns
  - It also supports other additional features such as upvoting, editing, searching and etc.
  - It allows login and sharing through the third party
  - It uses Google map location service to display the location that related to the report.
  - It uses machine learning algorithm to optimize the search of users to find most similar reported cases.
- Platform: Major browsers(Chrome, Firefox, Opera, IE, Edge, etc.) on major operating systems(Windows, macOS, Linux, iOS, Android, etc.)
- Our frontend is built with javascript, css, and html. We will be using external libraries such as Bootstrap, jQuery to optimize our UI.
- Our backend will be built with python Django which is an easy and efficient web framework for developers to build.
- Our choice of database is Postgresql from heroku which will store all the reporter and agency information and the concern reports data.
- We will choose Amazon AWS S3 as our image database which is used to store the image attachment of the concern reports.
- (If time permits, we will choose socket.io as our real time communication platform to enable the chat room function)