

Improvements

One way to improve the data is to get more people involved in collecting and verifying the data. My recommendation is to create a mobile application that can interact and engage with people from their smart devices.

I would use react native to build this app. React Native allows you build apps in javascript that can compile into both Android and iOS applications. This ability is beneficial so that one person doesn't have to learn two distinct programming languages, or does have to hire extra people to build 2 separate apps. It also will cut down on time spent on maintenance and upgrades. React Native also has a geolocation feature that will allow us to know the users position which will be vital in tracking this information.

When the user is stationary for a while, the app should prompt the user to enter information about their current location. If it is a location that has been previously entered, it could prompt to verify the information. The should be asked for the name of the location, as well as details such as type of location and address. We can prompt for further information based on the type of location being entered.

To provide better and more information, we could also tie into the Google Maps API. We can use the latitude and longitude from our geolocation package to pull data from google. It would be possible that in many instances a user could just be prompted to confirm information instead of having to enter it. This would make for a much better experience and the ease of use should mean more interactions with users.

To increase user engagement, we will need to incentivize our users through gamification. I found a great resource (listed below) that listed the benefits of a bage based reward system in elearning. I also think about the Achievement system in a game such as World of Warcraft. These systems create a competitive environment for even trivial tasks. It can reward the users with recognition via leaderboards and also help give them goals to work for. Some ideas would be badges for entering 10, 25, 50, and 100 (to start) locations.

<https://facebook.github.io/react-native/>

<https://facebook.github.io/react-native/docs/geolocation.html><https://enterprise.google.com/maps/products/mapsapi.html>

<https://elearningindustry.com/notable-benefits-using-badge-based-elearning-reward-system><http://www.wowhead.com/achievement-guides>