**Instant Alert Documentation**

Instant alert is a web-app that notifies its users of the incidents that occur around them in Seattle. It is like a total upgrade of UW Alert, but with a better representation of the location of the incident on the map and relative to the user’s location. It is also faster and more convenient in communication of the incidents in how everyone with an account can post the incidents based on what they see. There is no time lag lost since the reporter doesn’t have to contact to the police or representative to deliver the information to the public.

The main page of the web-app will be like google maps: there will be a dot tracking the user’s location on the map as he/she move. When the user sees an incident occur, he/she can easily click the location on the map where she sees the incident, describe the incident, rank the severity of the incident (high, medium, low) and create the incident. This incident will then appear as a colored dot (red for high severity, orange for medium severity, and yellow for low severity) on the map. Other users can then see the incident dot on the map as they are walking near the site. If they care about the incident, they can click the dot to see the message with the description of the incident and give an up or down vote (which will update in the description message) to give the general public a sense of the accuracy of this incident.

Instant Alert is so much more user-friendly that UW Alert in how the delivery of the incident is visual, not in text. The users don’t have to search up the location in the text message to find out where the incident occurred and whether it is relevant to them. They can easily pull up Instant Alert as their map as they are travelling and see all the incident dots that are within relative distance of their location. The importance of the incidents is also clearly indicated by the color of the circles. If there is a high severity incident in the area (fire, murder, suicide), it will be a red dot and the users can clearly see it and react to the incident. Instant Alert can also have a humor aspect in the web-app for the yellow dots (lower severity). People can report spider webs by the bus station that can be missed and crashed in. There can be a dog not on lease randomly jumping on people. It covers incidents of all severities, of the incidents that individuals might care for but are not so severe to be reported. It can be both fun and serious to keep the public interested in the app for both security and entertainment.

There are many future improvements and considerations that we would love to add or discuss for Instant Alert. The date and time of the incident according to when the reported first saw the incident should be added as an additional component of the description message. The period of time the incident dots can stay on the map before it disappears (so the map doesn’t crowd up and so the dot doesn’t occupy space when the incident is too old) should also be discussed. In addition, there can also be a setting preference for Instant Alert so that it can inform the users of the severe incidents in text message (fastest way if the user happen to not be on the app when a sever incident happened), so it doesn’t lose one of the positives of the UW Alert.

One of our main concerns for Instant Alert is how we regulate our users if they post false data as an incident. Due to time constraint, we were not able to get to incorporate user accounts into the web-app yet. However, we did consider the problem through. We are going to focus on regulating the accuracy of the red incident dots (high severity) and tell the accuracy of the incident by looking at the ratio of up votes in relation to down votes. We might give a warning if there is false reporting the first time and block the user from reporting incidents the second this occurs. The incident dots will not include the information of the reporter for safety and privacy reasons, but the account regulators will have that information on the inside of the system for regulation.

Even though there are still a couple of confusing parts to Instant Alert in the accuracy of the incident and how the users are going to trust in the web-app, it has been a satisfying 26 hours of hackathon, exploring technologies we haven’t learnt before. Even though some group members having more experience in other programming languages, the only consistent programming language that all of our group members know is Java. So, one of our members tried to learn JavaScript within this limited period of time, as the front-end and back-end of our program includes both Java and Javascipt. We explored using the Google maps API, and overcame the difficulties of tracking location, marking location, and transferring data between front-end and back-end. No doubt, Instant Alert still has some incident accuracy issues to be solved and additional information to be added, but it is a web-app that incorporates a huge population. It has the power to be both an information app and a social app. It gathers the everyone to participate, provide information, and audit information in today’s evolution where trust in information is so thin and where information delivery is always “too slow”.