Group 5

**Project proposal**

Our group proposes an application that help people to easily locate each other. The idea is very simple: a user join a group and they will get real time locations of the group members, displayed on a map. With this information, users can easily find each other and no longer have to worry about getting lost. This is a great advantage compared to traditional methods such as using a map or asking for directions because with these methods, you do not know the exact location of your friends and therefore cannot be sure that the direction you are going is the right direction.

Because of the general purpose and easy-to-use nature of our app, almost anyone can take advantage of our app. If you need to find someone then our app can likely help you with that. One word of caution is that because our app uses GPS to locate the users, it is best suited to be used outdoor.

Some example use cases of our app are:

* A group of friends hanging out can use the app to make sure that no one get lost when travelling from one location to another.
* A group of tourists at a crowded outdoor tourist destination can use the app to make sure that no one is separated from the group.
* Parents can use the app to keep track of their children.
* Following a disaster such as an earthquake or a tsunami, survivors can use the app to find each other and to be located by emergency services.

Because the main purpose of the app is to be used on the go by people who are finding each other, the target platform of our app will be mobile devices. Currently, we are focusing on building an Android app but we may expand to iOS or to the web.

The core feature of our app is that it allows users to know the real time location of each other, displayed on a map. Additional features serve to enhance the user experience while using our app. Some of these features are:

* Users are organized by groups. Each user can join or leave groups. The users in a group can see the location of each other.
* Users can message each other.
* The app have a basic pathfinding functionality.
* Users can choose to only show their locations to specific users in a group for privacy reasons.
* In addition to a normal 2D map, users can also choose to use a 3D map. This could help in areas where there are different elevation levels.