

Project Goals

Our team have decided to use the ego-Facebook from Stanford Large Network Dataset Collection to find an individual whom you might know based on your social circles in Facebook. We will load the data files from our selected data sets as a graph, in which nodes represent users, and connected graphs mean users' social circles. Connected nodes show two users are friends to each other.

We will implement BFS traversal which contributes to finding the shortest path between the user and his/her potential friends. And one of the algorithms we will use is the Dijkstra's Algorithm, to calculate the minimum path between point A and B, and therefore we could know who the closest potential friend is. The second option we will use is, Iterative deepening depth-first search, as we chose to implement BFS, this algorithm will help us create a more effective function.

Test is also an important part in our final project, as we will need to know if our graph works properly or not. This will include if our code complies and several test case to see if the function is working correctly, this step also makes sure that our code also runs on EWS.

Our back up dataset is Open Flights. Therefore, our goal is to find the shortest path from an individual's nearest airport to the destination's closest airport. Landmark Path (shortest path from a to b through c)

Signature: Ethan Huang, Shuning Zhang, Shuo Wang