PROJECT 3: MAP ROUTING

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The first that I did after getting the assignment was to go over it thoroughly. Made sure I was aware of all the requirements and outputs. Then I went back to the lecture slides just to brush up on the topic. After that I decided on what sort of data structure of I would. To create the adjacency list I would need to define a typedef node that contains a data value and the address to the next node and also the weight of the edge. Then I would also need to define another typedef structure called graph, which would basically be an array of adjacent lists. Then I went on YouTube and watched a video on djikstra's algorithm, just to get a better grip on the topic. Then I started creating a rough draft of how many functions would I need. The first step was to create the adjacency list from the given edges and vertices. To do so an array of linked lists was used. Size of the array was equal to the number of vertices. An entry array[i] represents the linked list of vertices adjacent to the ith vertex. The weights of the edges were also stored in the nodes. After the graph has been created I would just need to start at the given first node and traverse the list until I find the target node. And if I reach NULL before getting to the target node then it would mean that it is impossible to reach the target node from the given node and I would print out an INF. This I basically the overall process that I try to implement to go about solving the project.