# MEAM620 Programming Assignment - II

Due: March 16, 2007

## Programming Assignment - II

Implement the Dijkstra's algorithm on an undirected 2D graph

### Inputs:

- An undirected graph (might involve loops and be disconnected) in a 2D plane. Each vertex of the graph is a 2D point.
- The cost of each edge in the graph will be the length of the line segment connecting the two end states.
- A vertex of the graph as the initial state

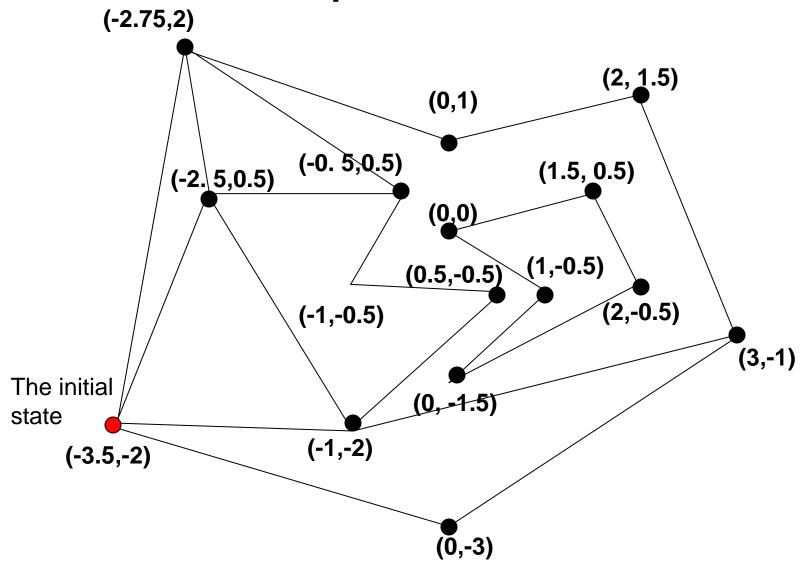
#### Outputs:

 Show the optimal cost moving from the given initial state to each vertex in the graph

#### Note:

- Undirected graph means that each edge corresponds to two actions that can change between two end states of the edge
- No existing Dijkstra's algorithm should be used.

### An Example of the Problem



### The Expected Result

