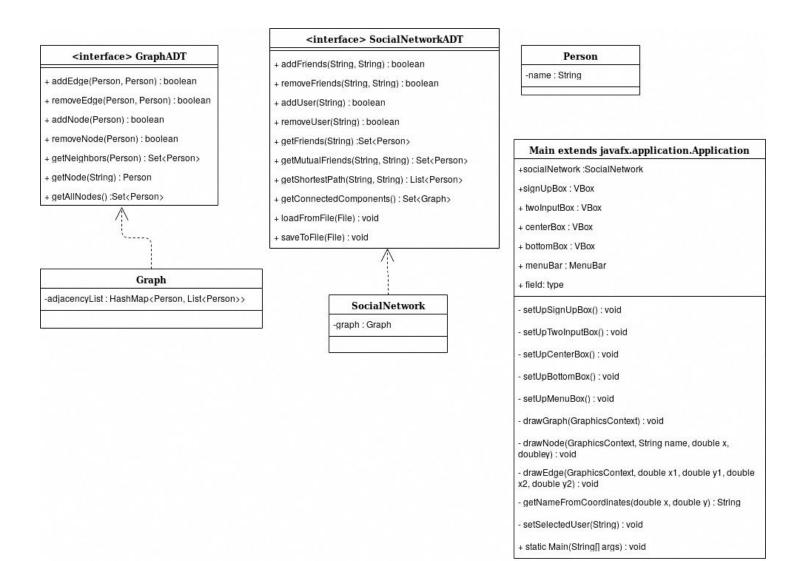
### TA Design

# Social Network Visualizer

# Class Summary

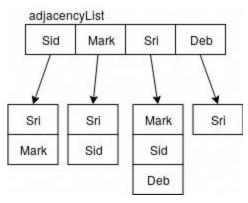
interface	GraphADT	Defines methods required for an undirected graph
class	Graph implements GraphADT	Implementation of GraphADT
interface	SocialNetworkADT	Defines methods required for social network visualization
class	SocialNetwork implements SocialNetworkADT	Implementation of SocialNetworkADT
class	Person	Defines data and methods for each user
class	Main	Defines the GUI of this program and the interaction with the model



#### **UML** Diagram

- GUI sections are broken down into boxes, each with a method to set them up. This
  avoids having one large block of GUI setup statements all in one method.
- To draw the canvas for the interactive friend visualizer, each drawing step is broken down into methods, such as drawing the entire graph, drawing each node, and drawing each edge. The method getNameFromCoordinates is used to find which user was selected from a mouse click.
  - There are constant fields set in Main for various pixel dimensions (not shown in diagram), rather than just writing out the numbers in the code. This will make it easier to read and modify your GUI.

## **Object Diagram**



This diagram shows how the graph object is being stored in memory. Each vertex (which is a Person), is mapped to a list of their friends. Since this graph is undirected, if Person A's adjacency list contains Person B, Person B's adjacency list contains Person A.

## **GUI Layout Sketch**

Not shown here.