## Lab 3 Task 4 Solution

## 4) Plan a Player class and 3 subclasses

1. Get out some paper and write down the four class names *Player*, *RandomPlayer*, *StrategicPlayer*, and *UserPlayer* with lots of space below each in which to describe their data and their methods.

Player	RandomPlayer	StrategicPlayer	UserPlayer

- 2. You are going to make a simple diagram like Figure 1.
- 3. You already identified which methods are needed based on your reading of the starter code.
- 4. Decide which methods belong in which class and add them to the appropriate spot in your diagram.
- 5. What information must be stored in order in order for these methods to provide their services?
- 6. Don't worry about attribute names or types yet, just describe the information in plain English.
- 7. Decide which pieces of information belong in which class and add them to the appropriate spot in your diagram

## Tweet User Data: Data: Who tweeted it User id When they tweeted it Bio What the tweet said Name Who they follow Tweets they have made Operations: Operations: Record that they made a tweet · Record likes that the tweet received Report hashtags used in the tweet · Record that they follow someone Report the average tweet length Report the number of tweets in a given year

Figure 1: Design for twitter example