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.

Player	RandomPlayer	StrategicPlayer	UserPlayer
Data:	Data:	Data:	Data:
Operations: - *move*	Operations: - *move*	Operations: - *move*	Operations: - *move*

5. What information must be stored in order in order for these methods to provide their services?

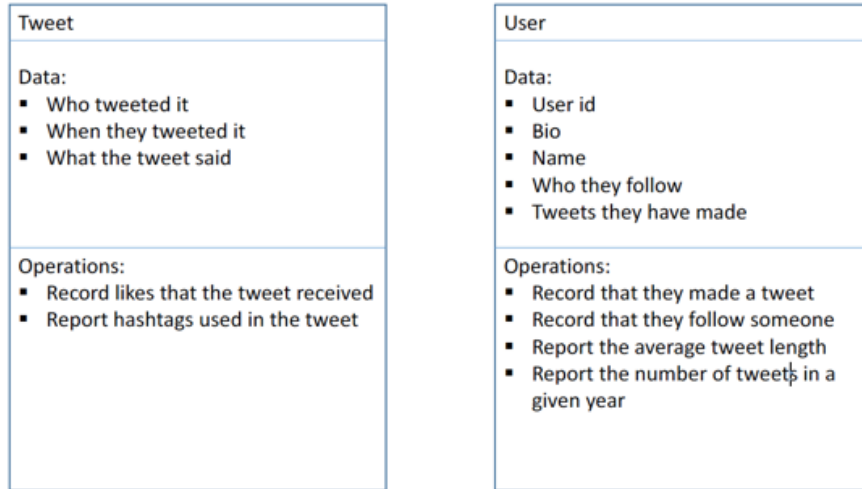| Tweet	User
Data: • Who tweeted it • When they tweeted it • What the tweet said	**Data:** • User id • Bio • Name • Who they follow • Tweets they have made
Operations: • Record likes that the tweet received • Report hashtags used in the tweet	**Operations:** • Record that they made a tweet • Record that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

Figure 1: Design for twitter example

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