

## 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.

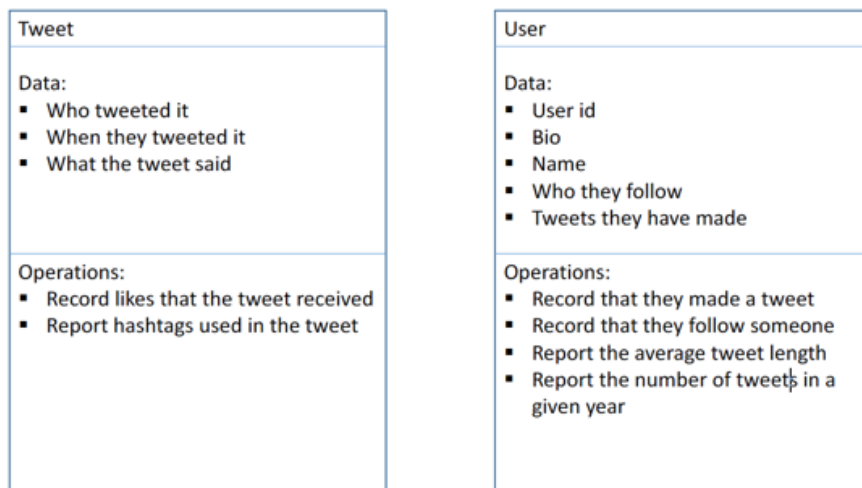


Figure 1: Design for twitter example

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.

<b>Player</b>	<b>RandomPlayer</b>	<b>StrategicPlayer</b>	<b>UserPlayer</b>
Data:	Data:	Data:	Data:
Operations: - <i>move</i>	Operations: - <i>move</i>	Operations: - <i>move</i>	Operations: - <i>move</i>

5. What information must be stored 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

<b>Player</b>	<b>RandomPlayer</b>	<b>StrategicPlayer</b>	<b>UserPlayer</b>
Data: - Name	Data: - Name	Data: - Name	Data: - Name
Operations: - <i>move</i>	Operations: - <i>move</i>	Operations: - <i>move</i>	Operations: - <i>move</i>