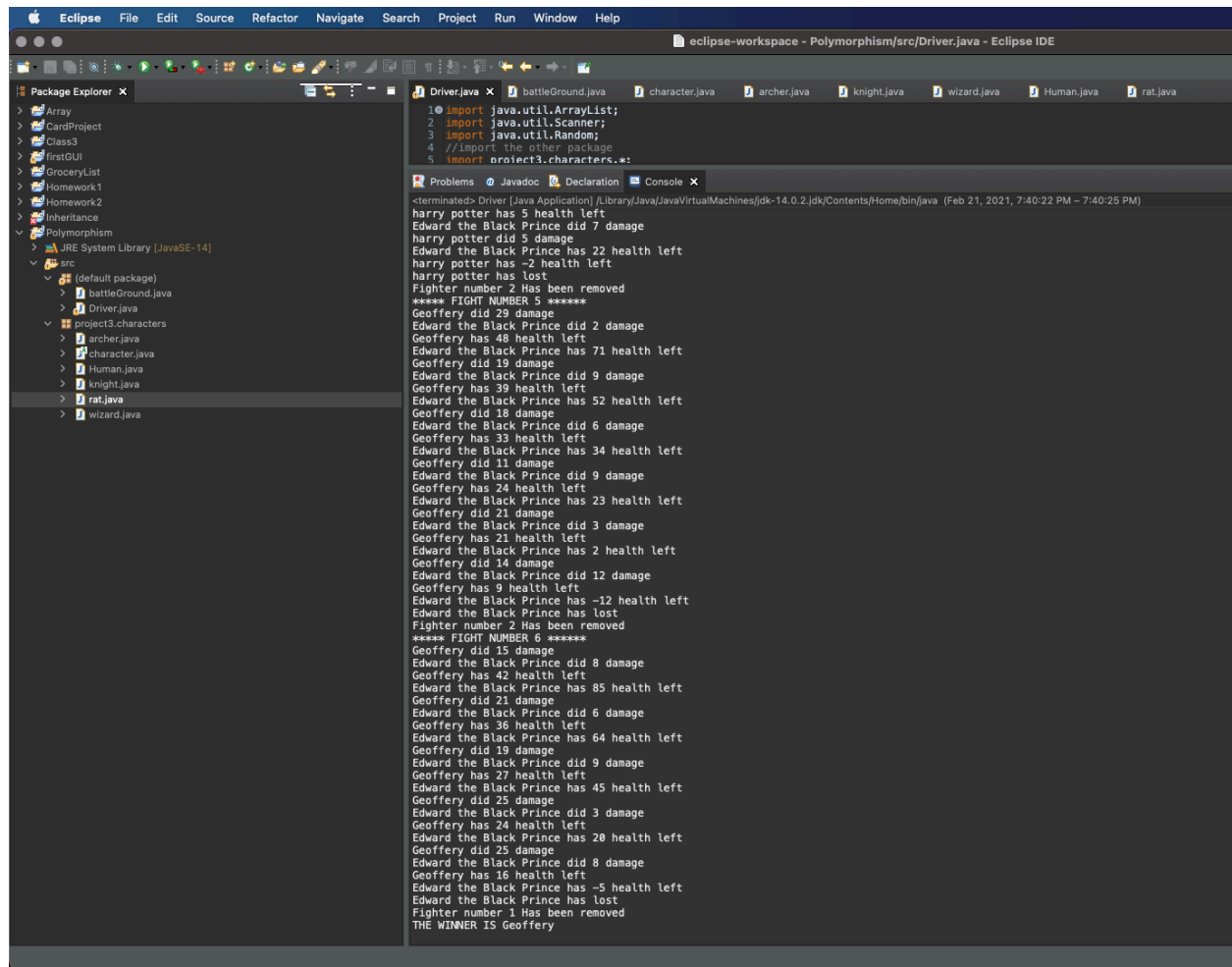From last week's code, I made the necessary changes to fix what didn't follow the directions and cost me points. I added the character classes to their own package and added an abstract method along with an individual toString() method in each individual type of character. After that I changed my fight simulation code to work on any two given indexes in an arrayList so that I could randomly select tow fighters in the Arena ArrayList and it would still operate. I let the user select how many fighters they would like in the Arena and then simulate fights between two randomly chosen fighters from the arena. After the winner is determined I created a heal method to bring them back to full health in order to let them continue fighting without an unfair advantage for the new challenger. When a fighter loses they are removed from the Arena so I must regenerate the random selection using new indexes because some or possibly even all fighters have new indexes in the list (if the first fighter, at index 0, in the list is the one that lost all of the fighters will be moved up, or down depending on how you look at it, by one index). **My code will work with as many fighters as can be stored in an int datatype meeting the 4 fighter requirement.** This is due to the user's input for number of fighters being stored as an int and the number of fights being stored as an int. There will always be one less fight than the number of fighters because all but one must be eliminated to find a winner.

Package Explorer ✕

> Array
> CardProject
> Class3
> firstGUI
> GroceryList
> Homework1
> Homework2
> Inheritance
∨ Polymorphism
  > JRE System Library [JavaSE-14]
  ∨ src
    ∨ (default package)
      > battleGround.java
      > Driver.java
    ∨ project3.characters
      > archer.java
      > character.java
      > Human.java
      > knight.java
        rat.java
      > wizard.java

Driver.java ✕   battleGround.java   character.java   archer.java   knight.java   wizard.java   Human.java   rat.java

```
1  import java.util.ArrayList;
2  import java.util.Scanner;
3  import java.util.Random;
4  //import the other package
5  import project3.characters.*;
```

Problems @ Javadoc Declaration Console ✕

<terminated> Driver [Java Application] /Library/Java/JavaVirtualMachines/jdk-14.0.2.jdk/Contents/Home/bin/java (Feb 21, 2021, 7:40:22 PM – 7:40:25 PM)

```
harry potter has 5 health left
Edward the Black Prince did 7 damage
harry potter did 5 damage
Edward the Black Prince has 22 health left
harry potter has -2 health left
harry potter has lost
Fighter number 2 Has been removed
***** FIGHT NUMBER 5 ******
Geoffery did 29 damage
Edward the Black Prince did 2 damage
Geoffery has 48 health left
Edward the Black Prince has 71 health left
Geoffery did 19 damage
Edward the Black Prince did 9 damage
Geoffery has 39 health left
Edward the Black Prince has 52 health left
Geoffery did 18 damage
Edward the Black Prince did 6 damage
Geoffery has 33 health left
Edward the Black Prince has 34 health left
Geoffery did 11 damage
Edward the Black Prince did 9 damage
Geoffery has 24 health left
Edward the Black Prince has 23 health left
Geoffery did 21 damage
Edward the Black Prince did 3 damage
Geoffery has 21 health left
Edward the Black Prince has 2 health left
Geoffery did 14 damage
Edward the Black Prince did 12 damage
Geoffery has 9 health left
Edward the Black Prince has -12 health left
Edward the Black Prince has lost
Fighter number 2 Has been removed
***** FIGHT NUMBER 6 ******
Geoffery did 15 damage
Edward the Black Prince did 8 damage
Geoffery has 42 health left
Edward the Black Prince has 85 health left
Geoffery did 21 damage
Edward the Black Prince did 6 damage
Geoffery has 36 health left
Edward the Black Prince has 64 health left
Geoffery did 19 damage
Edward the Black Prince did 9 damage
Geoffery has 27 health left
Edward the Black Prince has 45 health left
Geoffery did 25 damage
Edward the Black Prince did 3 damage
Geoffery has 24 health left
Edward the Black Prince has 20 health left
Geoffery did 25 damage
Edward the Black Prince did 8 damage
Geoffery has 16 health left
Edward the Black Prince has -5 health left
Edward the Black Prince has lost
Fighter number 1 Has been removed
THE WINNER IS Geoffery
```

<terminated> Driver [Java Application] /Library/Java/JavaVirtualMachines/jdk-14.0.2.jdk/Contents/Home/bin/java (Feb 21, 20

```
harry potter did 12 damage
Legolas has 25 health left
harry potter has -2 health left
harry potter has lost
Fighter number 0 Has been removed
***** FIGHT NUMBER 4 ******
Legolas did 1 damage
Edward the Black Prince did 10 damage
Legolas has 70 health left
Edward the Black Prince has 99 health left
Legolas did 3 damage
Edward the Black Prince did 11 damage
Legolas has 59 health left
Edward the Black Prince has 96 health left
Legolas did 13 damage
Edward the Black Prince did 7 damage
Legolas has 52 health left
Edward the Black Prince has 83 health left
Legolas did 14 damage
Edward the Black Prince did 6 damage
Legolas has 46 health left
Edward the Black Prince has 69 health left
Legolas did 6 damage
Edward the Black Prince did 5 damage
Legolas has 41 health left
Edward the Black Prince has 63 health left
Legolas did 8 damage
Edward the Black Prince did 2 damage
Legolas has 39 health left
Edward the Black Prince has 55 health left
Legolas did 9 damage
Edward the Black Prince did 4 damage
Legolas has 35 health left
Edward the Black Prince has 46 health left
Legolas did 9 damage
Edward the Black Prince did 2 damage
Legolas has 33 health left
Edward the Black Prince has 37 health left
Legolas did 13 damage
Edward the Black Prince did 11 damage
Legolas has 22 health left
Edward the Black Prince has 24 health left
Legolas did 4 damage
Edward the Black Prince did 8 damage
Legolas has 14 health left
Edward the Black Prince has 20 health left
Legolas did 9 damage
Edward the Black Prince did 3 damage
Legolas has 11 health left
Edward the Black Prince has 11 health left
Legolas did 13 damage
Edward the Black Prince did 11 damage
Legolas has 0 health left
Edward the Black Prince has -2 health left
Legolas has lost
Edward the Black Prince has lost
Fighter number 0 Has been removed
THE WINNER IS Edward the Black Prince
```