Phillip Ball

CST-239-O500

Prof. Couch

4/14/2022

CST-239 Activity 1

Part 1: Tools Installation and Validation

```java
package app;

public class HelloWorld {

    private void SayHello(String name)
    {
        System.out.println("Hello, my name is " + name);
    }
    public static void main(String args[])
    {
        HelloWorld helloWorld = new HelloWorld();
        helloWorld.SayHello("Phillip");
    }
}
```

Problems @ Javadoc Declaration Console ×

<terminated> HelloWorld [Java Application] C:\Program Files\Java\jdk-18\bin\javaw.exe (Apr 14, 2022, 9
Hello, my name is Phillip

Part 2: Designing, Coding, and Documenting a Person Class

```java
61        *
62        * @return
63        */
64      public static String GetRandomName()
65      {
66          Random random = new Random();
67          int num = random.nextInt(6);
68          switch (num)
69          {
70          case 0:  return "Phillip";
71          case 1:  return "Ryan";
72          case 2:  return "Joey";
73          case 3:  return "Pete";
74          case 4:  return "Bob";
75          case 5:  return "John";
76          case 6:  return "Smith";
77          }
78          return null;
79      }
80      /**
81        *
82        * @param args
83        */
84      public static void main(String args[])
85      {
86          Random random = new Random();
87          float sleepTime = random.nextFloat();
88          float sleepFinal = Math.round(sleepTime * 1000);
89          Person person = new Person(random.nextInt(80), GetRandomName() , (float)6.3, 160);
90          person.Sleep(person.name, sleepFinal);
91          person.Wakeup(person.name, sleepFinal);
92      }
93 }
94
```

Problems @ Javadoc Declaration Console X

<terminated> Person [Java Application] C:\Program Files\Java\jdk-18\bin\javaw.exe (Apr 14, 2022, 10:19:13 PM – 10:19:13 PM) [pid: 17312]

```
Pete is going to bed for 297.0 minutes.

...

Pete woke up after 297.0 minutes of sleep!
```
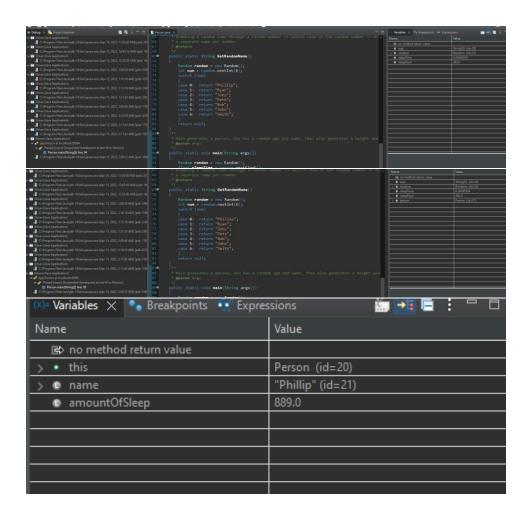
This output was displayed from firstly, being inside of the main function, allowing any of the code inside to run on play. Then from the Person constructor I was able to set variables and apply them to a "Person". With that I was able to do what I wanted with the variables, so I added a little bit of randomness to it. Finally printed out a Sleep and Wakeup function that basically just mimics' someone going to bed and waking up.

Part 3: Designing, Coding, and Documenting a Race Car Class

```
Driver [Java Application] C:\Program Files\Java\jdk-18\bin\javaw.exe (Apr 15, 2022, 2:1
  5: Get rid of the rest of the point and start game: 3
  3
  RaceCars are ready! It is Round 1

  Opponents Stats:
   Speed: 51
   Tires: 6
   Engine(s): 2
   PSI: 43

  Your Stats:
   Speed: 50
   Tires: 4
   Engine(s): 3
   PSI: 36

  Distance to race: 236
  Type anything to start lap 1
  1

  Player Psi is 36
   Opponent Psi is 43


  Player's Distance is currently 142 miles!

  Opponent's Distance is currently 90 miles!


  Player is ahead! With only 94 miles left!

  Type anything to start lap 2
  1

  Player Psi is 36
   Opponent Psi is 38


  Player's Distance is currently 280 miles!

  Opponent's Distance is currently 160 miles!


  Player Won the Race by 120 miles!!!
  Reward for this race is 2 upgrade points!


  Enter '2' to quit, anything else to keep playing!
```

There is no question for this one but I added plenty of comments inside of the code to further explain it. Kind of went overboard on this and most likely off track.

Part 4: Using the Debugger

Code visible (Person.java):

```java
 * Grabbing a random name through a random number => switch case on the random number => gi
 * a separate name per number.
 * @return
 */
public static String GetRandomName()
{
    Random random = new Random();
    int num = random.nextInt(6);
    switch (num)
    {
    case 0:  return "Phillip";
    case 1:  return "Ryan";
    case 2:  return "Joey";
    case 3:  return "Pete";
    case 4:  return "Bob";
    case 5:  return "John";
    case 6:  return "Smith";
    }
    return null;
}
/**
 * Main generates a person, who has a random age and name, then also generates a height and
 * @param args
 */
public static void main(String args[])
{
    Random random = new Random();
```

Variables panel:

Name	Value
no method return value	
this	Person (id=20)
name	"Phillip" (id=21)
amountOfSleep	889.0

C:\Program Files\Java\jdk-18\bin\javaw.exe (Apr 15, 2022, 1:21:20 AM) [pid: 23656]
- Driver [Java Application]
  C:\Program Files\Java\jdk-18\bin\javaw.exe (Apr 15, 2022, 2:08:46 AM) [pid: 17096]
- Driver [Java Application]
  C:\Program Files\Java\jdk-18\bin\javaw.exe (Apr 15, 2022, 2:10:19 AM) [pid: 4276]
- Driver [Java Application]
  C:\Program Files\Java\jdk-18\bin\javaw.exe (Apr 15, 2022, 2:11:02 AM) [pid: 17264]
- Driver [Java Application]
  C:\Program Files\Java\jdk-18\bin\javaw.exe (Apr 15, 2022, 2:11:42 AM) [pid: 15504]
- Person [Java Application]
  - app.Person at localhost:51232
    - Thread [main] (Suspended)
      <obsolete method in<unknown declaring type>>
  C:\Program Files\Java\jdk-18\bin\javaw.exe (Apr 15, 2022, 2:32:45 AM) [pid: 25644]
- Person [Java Application]
  - app.Person at localhost:51430
    - Thread [main] (Suspended)
      Person.main(String[]) line: 94
  C:\Program Files\Java\jdk-18\bin\javaw.exe (Apr 15, 2022, 2:35:24 AM) [pid: 2044]

- Person [Java Application]
  - app.Person at localhost:51232
    - Thread [main] (Suspended)
      <obsolete method in<unknown declaring type>>
  C:\Program Files\Java\jdk-18\bin\javaw.exe (Apr 15, 2022, 2:32:45 AM) [pid: 25644]
- Person [Java Application]
  - app.Person at localhost:51584
    - Thread [main] (Suspended)
      Person.main(String[]) line: 96
  C:\Program Files\Java\jdk-18\bin\javaw.exe (Apr 15, 2022, 2:37:14 AM) [pid: 18520]