**Learner: Sibongile Maseko**

**Superhero:**

JAVA CHECKLIST

|  |  |
| --- | --- |
| **How to create classes** | Y/N |
| I can create Instance variables and am able to to use another class type variable in another class | Y |
| If I don't understand above, I have already asked for help, and I still don't understand | N |
| I am able to create constructors and understand what a constructor does | Y |
| If I don't understand above, I have already asked for help, and I still don't understand | N |
| I know how to create setters and getters | Y |
| If I don't understand above, I have already asked for help, and I still don't understand | N |
| I know why I am creating setters & getters (ie. I understand encapsulation?) | Y |
| If I don't understand above, I have already asked for help, and I still don't understand | N |
| I know how to create a toString() function | Y |
| If I don't understand above, I have already asked for help, and I still don't understand | N |
| I know what a toString() function does | Y |
| If I don't understand above, I have already asked for help, and I still don't understand | N |
| I can add other necessary functions for the class and am able to take in other class parameters e.g testFunction(Driver D, String s) | Y |
| If I don't understand above, I have already asked for help, and I still don't understand | N |
|  | Y |
| **How to call the class Object** |  |
| I have the ability to call created class objects e.g Car c = new Car() | Y |
| If I don't understand above, I have already asked for help, and I still don't understand | YN |
| I have the ability to add one class object to other new class object e.g Driver D = new Driver(c, name) | Y |
| If I don't understand above, I have already asked for help, and I still don't understand | N |
|  |  |
|  |  |

|  |  |
| --- | --- |
| **Other OOP Concepts** |  |
| I understand Polymorphism | Y |
| If I don't understand above, I have already asked for help, and I still don't understand | N |
| I know how to use Polymorphism | Y |
| If I don't understand above, I have already asked for help, and I still don't understand | N |
| I know how encapsulation works | Y |
| If I don't understand above, I have already asked for help, and I still don't understand | N |
| I understand how interfaces and Abstract classes work | Y |
| If I don't understand above, I have already asked for help, and I still don't understand | N |
| I understand how to use interfaces and abstract classes | Y |
| If I don't understand above, I have already asked for help, and I still don't understand | N |
| I understand how Inheritance works | Y |
| If I don't understand above, I have already asked for help, and I still don't understand | N |
| I know how to use Inheritance | Y |
| If I don't understand above, I have already asked for help, and I still don't understand | N |
| I know how to read and write to CSV | Y |
| If I don't understand above, I have already asked for help, and I still don't understand | N |
| I know how to use ArrayLists | Y |
| If I don't understand above, I have already asked for help, and I still don't understand | N |
| I know how to use Arrays | Y |
| If I don't understand above, I have already asked for help, and I still don't understand | N |
| I understand what Overriding | Y |
| If I don't understand above, I have already asked for help, and I still don't understand | N |
| I know how to override methods | Y |
| I understand what Overloading is | Y |
| If I don't understand above, I have already asked for help, and I still don't understand | N |
| I know how to overload methods | Y |
| If I don't understand above, I have already asked for help, and I still don't understand | N |
|  |  |
| **Errors and Debugging** |  |
| I have the Ability to understand what the errors mean when shown on the terminal - e.g can not find symbol, NullPointerException, IndexOutofBound etc, if not, I google and understand what the errors mean | Y |
| If I don't understand above, I have already asked for help, and I still don't understand | N |
| I have the Ability to use System.out.println to debug e.g printing out the contents of the variable in middle of code to see if the variable is holding the expected value | Y |
| If I don't understand above, I have already asked for help, and I still don't understand | N |
| I understand how to use a try catch flow to handle exceptions | Y |
| If I don't understand above, I have already asked for help, and I still don't understand | N |
| **I constantly compile my code to see if I have errors, eg. after every piece of logic I write, or after each variable or loop.** | Y |
| **I know how to use the main function in a class to test the functionality of the class** | Y |

Please note that the below checklist needs to be filled by a **Superhero checklist**. This follows [Feynman Techniqu](https://medium.com/taking-note/learning-from-the-feynman-technique-5373014ad230)e. Practicing this will improve your understanding of concepts and also improve your abilities to communicate better.

|  |  |
| --- | --- |
| **Super hero soft skills checklist** | Y/N |
| I am able to help my peers when asked for help with patience |  |
|  |  |
| I was able to **guide (not give solution)** my peers with debugging code, ie improving my debugging skills |  |
| I was able to explain OOP concepts building my understanding as well |  |
| I know how to create setters and getters |  |
| If I don't understand above, I have already asked for help, and I still don't understand |  |
| I know why I am creating setters & getters (ie. I understand encapsulation?) |  |
| If I don't understand above, I have already asked for help, and I still don't understand |  |
| I know how to create a toString() function |  |
| If I don't understand above, I have already asked for help, and I still don't understand |  |
| I know what a toString() function does |  |
| If I don't understand above, I have already asked for help, and I still don't understand |  |
| I can add other necessary functions for the class and am able to take in other class parameters e.g testFunction(Driver D, String s) |  |
| If I don't understand above, I have already asked for help, and I still don't understand |  |
|  |  |
| **How to call the class Object** |  |
| I have the ability to call created class objects e.g Car c = new Car() | Y |
| If I don't understand above, I have already asked for help, and I still don't understand | N |
| I have the ability to add one class object to other new class object e.g Driver D = new Driver(c, name) | Y |
| If I don't understand above, I have already asked for help, and I still don't understand | N |
|  |  |
|  |  |