**QEA Selenium with Java**

**(INTQEA22QE063)**

**Project Title: Identify New Bikes**

**A picture containing outdoor, carrying, pulling

Description automatically generated**

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**1. Introduction**

For making the site reliable, scalable, accessible and sustainable Quality Assurance (QA) team must adopt and maintain the coding standards which allows code readability and makes it easier to understand.

**1.1. Scope**

The practices of targeted towards code readability and maintenance of coding standards and maintaining standard Indentation and naming conventions which demonstrate the knowledge of professionalism.

* Writing Java code that is easy to maintain and easy for demonstrations.
* Increase code usability.

**1.2 Quality Objective**

* Ensure the Application Under Test conforms to functional and non-functional requirements
* Ensure the AUT meets the quality specifications defined by the client
* Bugs/issues are identified and fixed before go live

**2. Source File**

The header should be followed by the package and import statements and then the documentation comments exactly in the following sequence and indented to the same level.

**2.1. Filename**

The source file name consists of the case-sensitive name of the top-level class it contains, plus the .java extension.

**2.2. Source File Structure**

A source file consists of, in order:

* Package Name.
* Imports
* Class definition

**2.3. Indentation**

1. There must be a space after giving a comma between two function arguments.
2. Proper indentation should be there at the beginning and end of each block in the program.
3. All braces should start from a new line and the code following the end of braces should also start from a new line.

**2.4. Naming Conventions**

* Local variables and Global variables should be named using camel case lettering starting with a small letter. (e.g., localData).
* Constant Data should be named using upper case letters only. (e.g., CONSTDATA).
* Avoid use of digits for naming variables.
* The names of functions should be written in camel case starting
* The name of the function must describe the use of the function.

**2.5. Comments**

Block comments may be used at the beginning of each file and before each method or within methods.  A block comment should have a blank line before its start.

Single-line comments can appear on a single line indented to the level of the code that follows. If a comment cannot be written in a single line, it should follow the block comment format. A single-line comment should be preceded by a blank line

**3. Exception Handling**

You must follow the below Java coding guidelines for implementing effective exception handling.

1. Always write a catch block for handling exceptions.
2. Make sure to add a logging message or the stack trace in the catch block.
3. Avoid catching the general exception and have a specific exception.
4. The clean-up code should be added in the <finally> block.
5. This provides a single location for the clean-up, and it is guaranteed to run.

**4. Tools and Plugins**

* Selenium with Java
* Maven
* Apache POI
* Chrome version 90.0.4430.93
* Edge version 90.0.818.51

**5. Project Workflow**

Open browser

Navigate to home page

Click on new bikes

Open zigwheels

Click on upcoming bikes

Click on used cars

Select Chennai city

Search for honda bikes under 4 lakhs

Retrieve the names

Retrieve bikes name & price

Click on login

Navigate to home page

Use invalid email and capture error message.

Stop

*Figure 1: Project Workflow*