**HCL Selenium Interview QA**

139. Define Abstract class and object class & its methods? [**JAVA**]

**Abstract class:** It is a class that is declared with a keyword *abstract*. It can contain field variables, abstract methods (only method declarations) and normal (or) non-abstract methods (methods with implementation). We can’t able to instantiate an abstract class (it means we can’t able to create an object for an abstract class) but we can extend it to other class.

**Abstract method:** It’s a method that is declared with a keyword *abstract* and it doesn’t have an implementation part.

***Where we used in our Framework?***

Reporter class is abstract class, where we declared field variables, non-abstract methods such as reportStep(), startResult() & endResult() and abstract method takeSnap(). As we noted, the implementation part is not present for takeSnap() method and its implemented in GenericWrapper class (subclass of Reporter). If we not implemented takeSnap() method in GenericWrapper class, then this class also need to changed as abstract class.

**Object class:** It’s a parent class of all classes in java by default. In other words, it is the topmost class of java. Every class in java is directly or indirectly derived from the Object class. If a class does not extend any other class then it is directly a child class of Object and if it extends other class then it is an indirectly derived. Therefore the Object class methods are available to all Java classes. Hence Object class acts as a root of the class hierarchy.

|  |  |
| --- | --- |
| **Modifier and Type** | **Method and Description** |
| protected Object | **clone()** - Creates and returns a copy of this object. |
| boolean | **equals(Object obj)** - Indicates whether some other object is "equal to" this one. |
| protected void | **finalize()** - Called by the garbage collector on an object when garbage collection determines that there are no more references to the object. |
| Class<?> | **getClass()** - Returns the runtime class of this Object. |
| int | **hashCode()** - Returns a hash code value for the object. |
| void | **notify()** - Wakes up a single thread that is waiting on this object's monitor. |
| void | **notifyAll()** - Wakes up all threads that are waiting on this object's monitor. |
| String | **toString()** - Returns a string representation of the object. |
| void | **wait()** - Causes the current thread to wait until another thread invokes the notify() method or the notifyAll() method for this object. |
| void | **wait(long timeout)** - Causes the current thread to wait until either another thread invokes the notify() method or the notifyAll() method for this object, or a specified amount of time has elapsed. |
| void | **wait(long timeout, int nanos**) - Causes the current thread to wait until another thread invokes the notify() method or the notifyAll() method for this object, or some other thread interrupts the current thread, or a certain amount of real time has elapsed. |

140. Can a variable declared as private static final can be accessed by other class in same package/different package? [**JAVA**]

**No**. We can’t able to access the private variables outside a class. It means that the variable is not visible anywhere except its own class. We can user either public or protected access modifier for that Constant variable (static final variable).

For e.g.,

**SAME Package with 2 different classes:**

*Package1Class0.java*

package samplePackage;

public class Package1Class0 {

// It is visible to everywhere

public static final String COMPANY\_NAME = "QEagle";

// It is visible to anywhere except non-subclasses in other packages

protected static final String COMPANY\_ADDRESS = "Chennai";

public static void main(String args[]){

System.out.println("My constant data Package1Class0 is : "+COMPANY\_NAME);

System.out.println("My constant data Package1Class0 is : "+COMPANY\_ADDRESS);

}

}

*Package1Class1.java (directly used)*

public class Package1Class1 extends Package1Class0{

public static void main(String args[]){

System.out.println("My constant data Package1Class0 is : "+COMPANY\_NAME);

System.out.println("My constant data Package1Class0 is : "+COMPANY\_ADDRESS);

}

}

**Different Package and it class extends the Package1Class0:**

*Package2Class0.java (directly used by extending the super class)*

package samplePackage1;

import samplePackage.Package1Class0;

public class Package2Class0 extends Package1Class0{

public static void main(String args[]){

System.out.println("My constant data Package1Class0 is : "+COMPANY\_NAME);

System.out.println("My constant data Package1Class0 is : "+COMPANY\_ADDRESS);

}

}

141. Rise of static keyword for variable, method?

142. about the report that we provide to customers in our project?

143. Challenges faced in your project?

144. When do we use selenium grid?

145. Self introduction?

146. Tell about your projects and Role and responsibilities?

147. What are frameworks you have using in your project?

148. Draw the framework architecture and explain the framework?

149. Different types of locators. Which locator is your preference and why?

150. Diff between findElement() and findElements()?

151. How will you navigate the pages using selenium?

152. What is data driven framework? Explain poi.jar?

153. Write sample selenium program with verifyEquals and assertEquals that you used in your projects?

154. Diff between driver.findElement(By.id("")) and driver.findElementById("")

155. In what format you are giving your report to client

156. How to handle multiple window?

157. How will you handle drop-down?

158. In the mail inbox how will you find the email with attachement?

159. Challenges faced in your automation project and how you overcome those?

160. What is keyword driven framework?

161. Selenium remote execution?

162. What is CSS Selector?

163. How do you handle popup windows in your projects..?

164. What is the difference between Implicit and Explicit wait?

165. Scenario -- I have three unique buttons in my page. (Display names are different). The internal ID & Name changes on every page load. I need to click on each button in sequence.

167. How will you upload file in a web page using selenium?

168. How to take screen shot using selenium?

169. Do you know about Selenium RC?

170. What is Test NG and annotations?

171. What is XPath Axes?

172. Java

173. How would rate yourself in java out of 5.