

QA Assignment 3 and 4

Q1. Which software development technique is good for the systems that have third party API calls, cron jobs, data exports/imports, etc. ?

Ans. TDD(Test Driven Development), as it focuses on how functionality is implemented rather than focusing on end user needs. Above given applications suit this purpose.

Q2. Where does Test Automation fit in the Software Life Cycle? Explain with a diagram?

Ans.

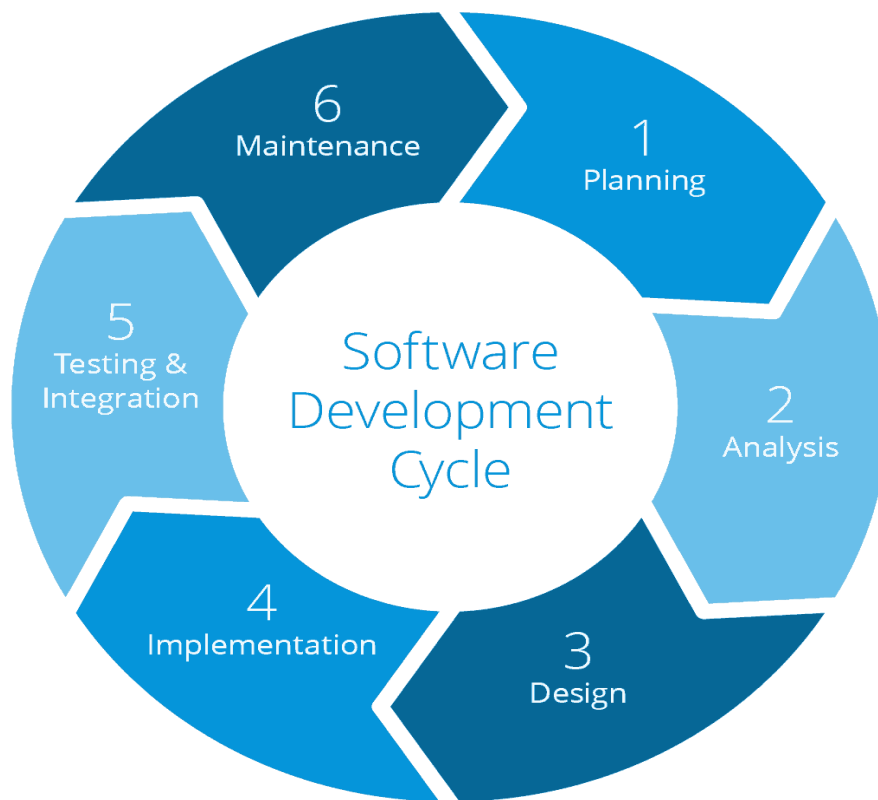


Fig: Software Development Life Cycle

Q3. Can we skip the manual testing and why?

Ans. No, Automation Testing is just robotic and can't act as a real user prospective. Manual testing, on the other end, allows the developing program to be used as it would be upon launch. Any bugs that may pop up when a user handles the program in a certain way are more likely to be caught with manual testing.

Q4. Give the names of the selector?

Ans. Targeting using Ids : -

```
<input id="email" value="">
```

```
#email
```

Targeting using attributes

```
<input name="email" value="">
```

```
[name="email"]
```

Targeting using class names : -

```
<div class="some-class another-class">...</div>
```

```
.some-class.another-class
```

Targeting using element tag : -

```
<div class="username">Justin</div>
```

```
<span class="username">Justin</span>
```

```
div.username
```

```
span.username
```

Targeting using hierarchy : -

```
<div class="name"> <label>Deekshika</label> </div> .name label
```

Targeting using ordering : -

```
<ul class="fruits">
```

```
  <li>Apple</li>
```

```
  <li>Banana</li>
```

```
  <li>Coconut</li>
```

```
</ul> .fruits li:nth-child(2)
```

Q5. What is the modular framework?

Ans. Modular framework consists of :-

- ☐ Driver scripts “drive” test execution.
- ☐ Interaction with the SUT done by functions in a test library.
- ☐ The objects are defined once and reusable in all test methods.
- ☐ Small and to-the-point methods are created for individual functionalities.
- ☐ The test case is the collection of these small methods and reusable objects.

Q6. Explain the Open source tool.

Ans. Open-source tools are software tools that are freely available without a commercial license. Many different kinds of open-source tools allow developers and others to do certain things in programming, maintaining technologies or other types of technology tasks.

Q7. What is a Hybrid framework?

Ans.

- Use the combination of two or more of the above-mentioned techniques, taking from their strengths and minimizing their weaknesses.
- The framework can use the modular approach along with either data-driven or keyword-driven framework.
- The framework can use scripts to perform some tasks that might be too difficult to implement in a pure keyword driven approach.

Q8. Write a name of record and replay tool.

Ans. Selenium IDE, record and replay approach is a popular approach among commercial tools. It's very easy to use and needs no programming skills.

Q9. What is the difference between BDD and Cucumber?

Ans. BDD (Behavior Driven Development) technique is a software development technique that defines the user behavior prior to writing test automation scripts or the functional pieces of code while Cucumber is a framework for writing and executing high level descriptions of your software's functionality. Cucumber plays a central role in a development approach called Behaviour Driven Development (BDD).

Q10. Can we replace the Regression testing from Test automation and how?

Ans. The answer to this question depends on the initial testing approach. If the initial testing approach was manual testing, then the regression testing is usually performed manually. Conversely, if the initial testing approach was automated testing, then the regression testing is usually performed by automated testing.

Q11. How many 'A's test script has? Explain them.

Ans.

1. **ARRANGEMENT** or Object Identification We identify objects (buttons, dropdowns etc.) either by their ids, names or by their Window Titles etc. In case of web application, we identify by user ID, or By XPath or By CSS or By Class Name etc. If nothing works, we then identify objects by using mouse coordinates (But it is not a reliable method of object identification).
2. **ACTION** on the Identified Object When the objects are identified, we perform some kind of actions on it either by mouse or by keyboard. For example, either we click, or we double-click, or we mouse hover over it or sometimes we drag-drop. Sometimes we write on text boxes. So any kind of action we perform on these objects are covered in this second step.
3. **ASSERTION** : The assertion is basically checking the object with some expected result. For example, if we press 2+3 on the calculator, the screen should show 5.