Frontend Testing

Now, we'll be introduced to the concept of frontend testing and the different tools that implement it.

WE'LL COVER THE FOLLOWING

- Automated Frontend Testing
  - Role in DevOps / Continuous Integration
- Frontend Testing Tools
  - Selenium
  - CircleCI
  - Jasmine
- Test Your Knowledge!

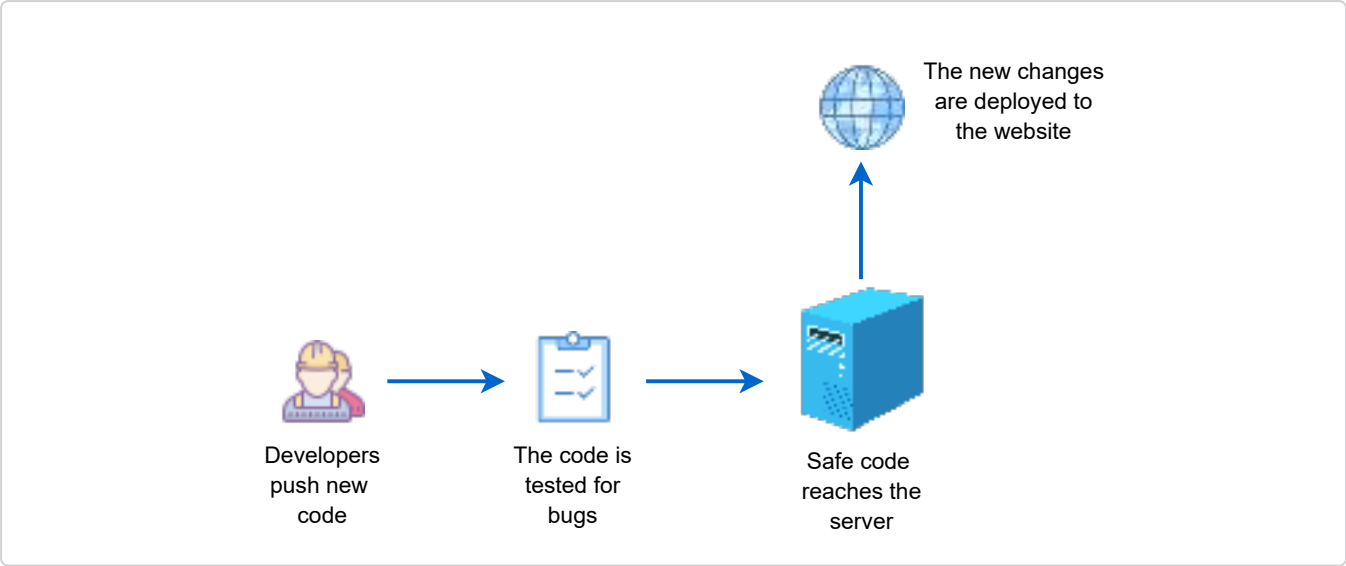
Frontend testing refers to the process of checking the functionality of our GUI components such as forms or buttons. It can help us detect flaws in our styling or JavaScript, resulting in a more efficient UI and UX.

Automated Frontend Testing

It is always possible to execute frontend testing manually by ourselves, but using **automated frontend testing softwares** is a wiser idea. This is because automated tests take into account a much wider ranger of test cases, some of which may be missed by a human tester.

Role in DevOps / Continuous Integration

DevOps and **continuous integration** are development approaches which smoothen out the delivery and maintenance of our application. Changes and fixes can be integrated faster. Automated tools play an important role in these approaches as the testing phase becomes faster.



Frontend Testing Tools

Let's examine some of the most popular frontend testing tools to see what perks they provide us.

Selenium

Selenium carries out web application tests on browsers. It comes as an in-built extension for Mozilla and Chrome, and can be used on all other browsers as well. We can make complex automated test suites in several languages such as Java, Perl, C#, Python etc.

Check out Selenium here.

CircleCI

CircleCI is a great tool for implementing Continuous Integration (testing code before it is pushed into a repository). It is a cloud hosted service which allows us to integrate new code into our application safely and quick.

It also uses the Rest API, which gives it a high degree of flexibility. However, we may need to install third party software to acquire some complex functionalities.

Learn more about CircleCI here.

Jasmine

This is a browser testing tool for JavaScript. Jasmine boasts a clean and simple

syntax, which makes it easy to use. It can test our application using **matchers**

which return a boolean value based on a the success/failure of the test. **Specs** can be used to describe a test.

Jasmine does not depend on any other JS packages.

For more detail, visit the official website.

Test Your Knowledge!

Q Frontend testing refers to

COMPLETED 0%

1 of 1

These are just a few tools among the plethora of testing utilities available to us. In the next lesson, we will move on to the concept of **backend testing**.