Software Testing Types

Purpose of this Document

The main purpose of this document is to perform different types of Testing on Code Informatics website along with screenshots.
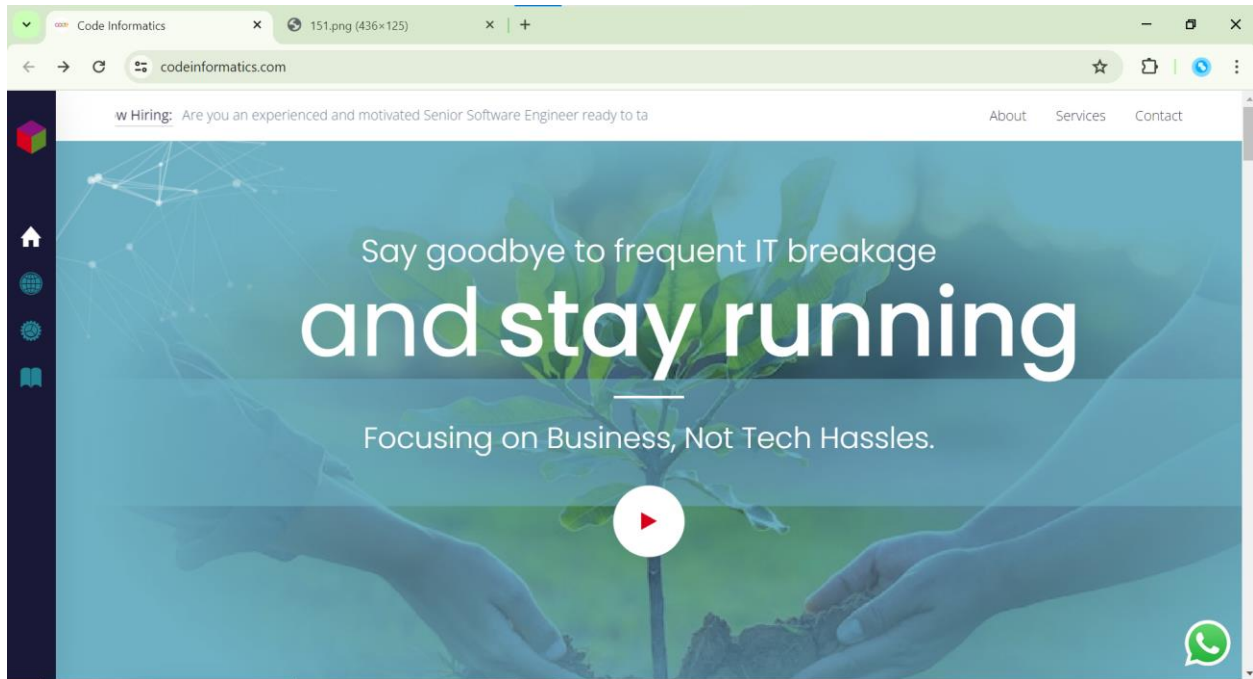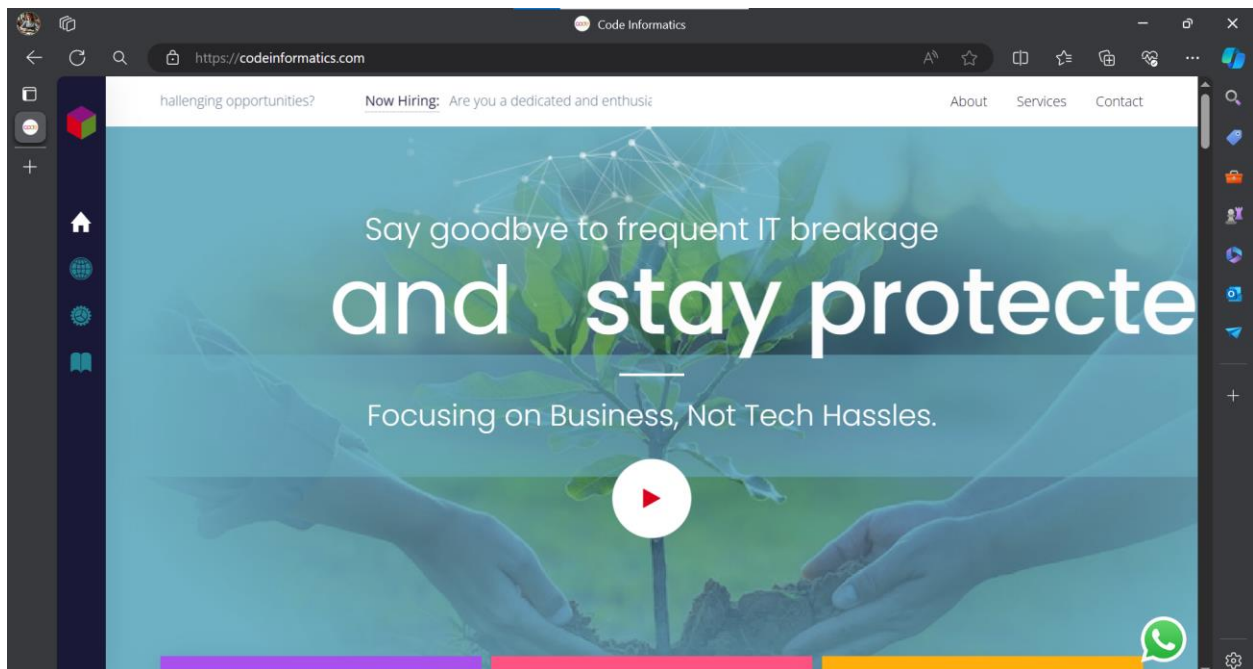
Contents

Cross Browser Testing:

For seeing, how our website shows on different browsers. We prefer Google Chrome & Microsoft Edge.
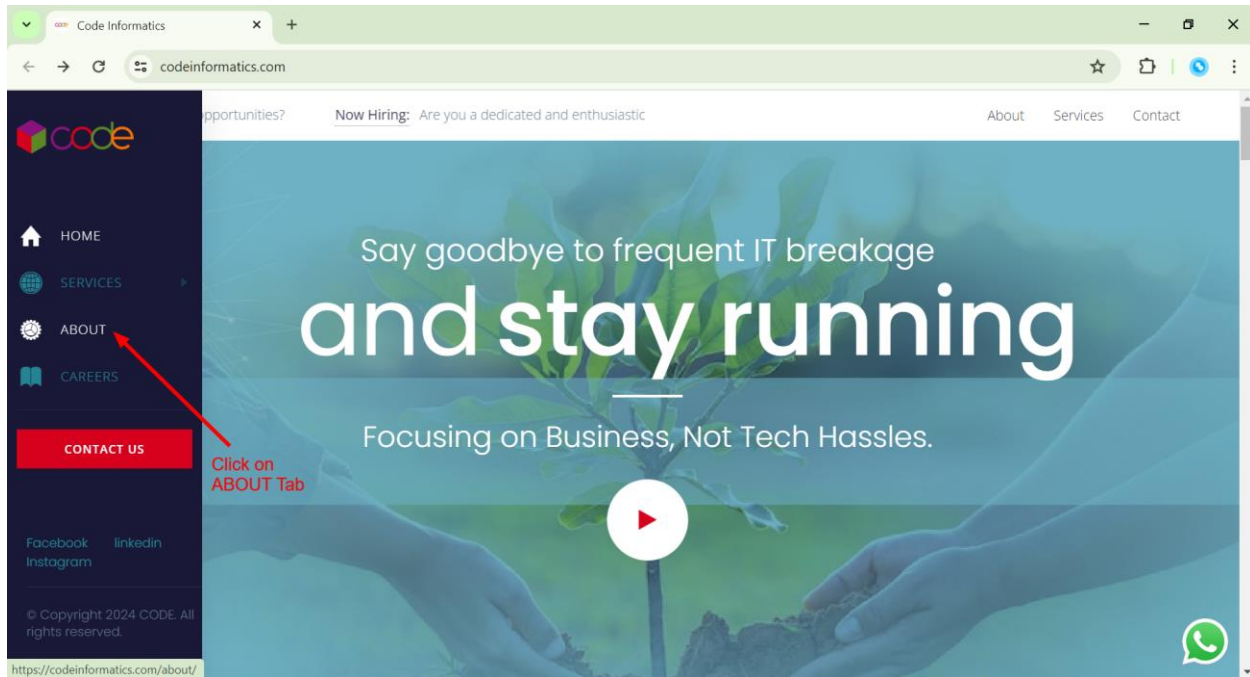
**Google Chrome:**

Microsoft Edge:

Black Box Testing:

In Black Box Testing, we will test our website without going to en-detail that we got from SRS (Software Requirement Specification) document. We just check functionality of modulus without knowing logic behind the feature.
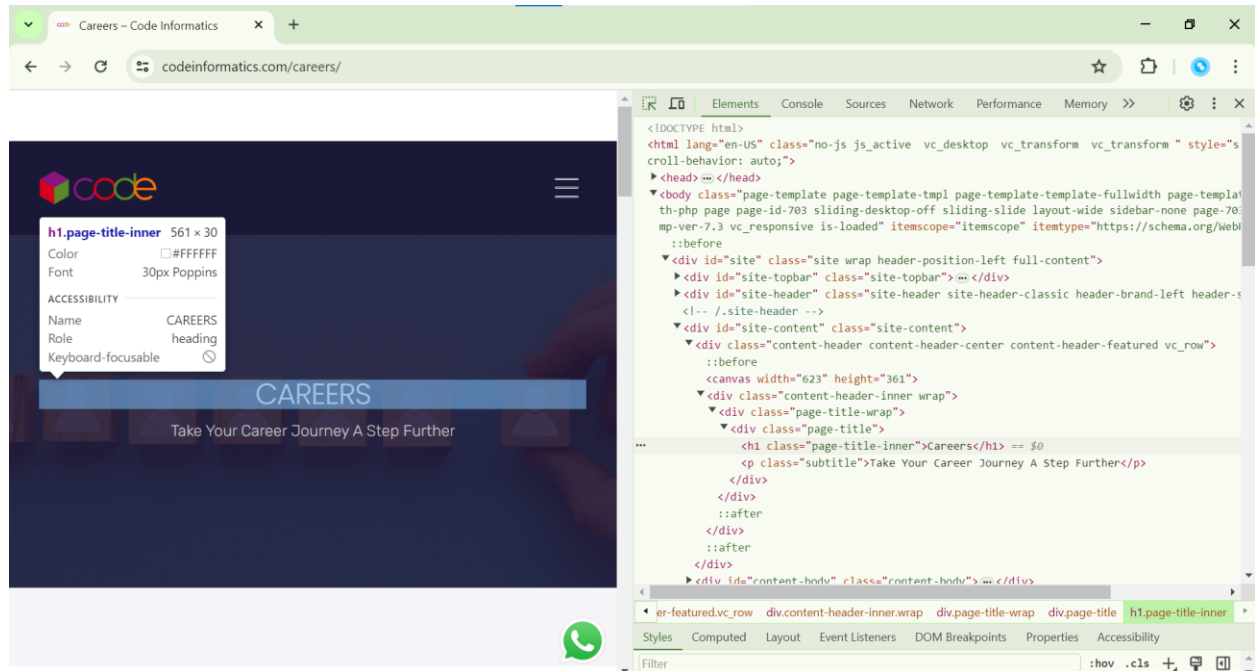

After Clicking on the ABOUT Tab, we are directed to the ABOUT Page. It means Functionality is working according to our requirements.
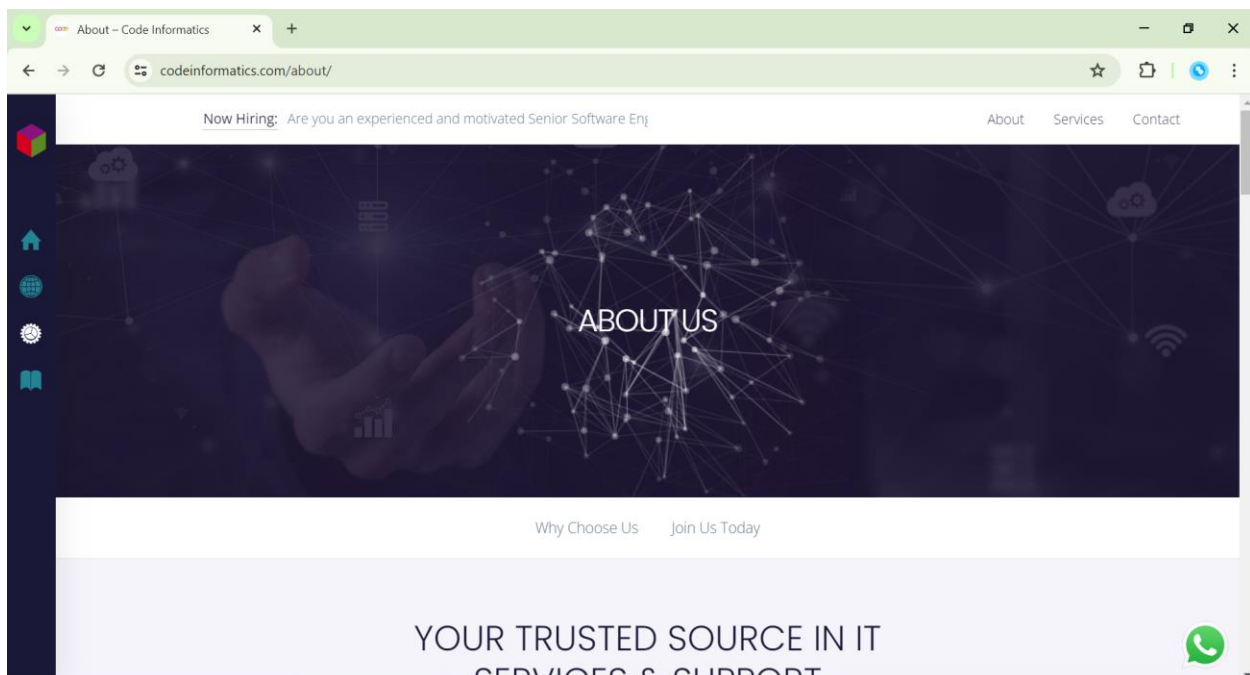
White Box Testing:

In White Box Testing, we must have knowledge of code that will help us for understanding logic of code. Because in this type of testing, we go through from internal logic of code of our website.


Here we are checking the code behind the Careers page (First Container) of the Code Informatics Website.

Integration Testing:

In Integration Testing, we test the combined functionality of the newly integrated module with the previous modules.

As we first have a module of Services, that featuring all the services we are providing. One of the services is Cloud Infrastructure which we want to check.
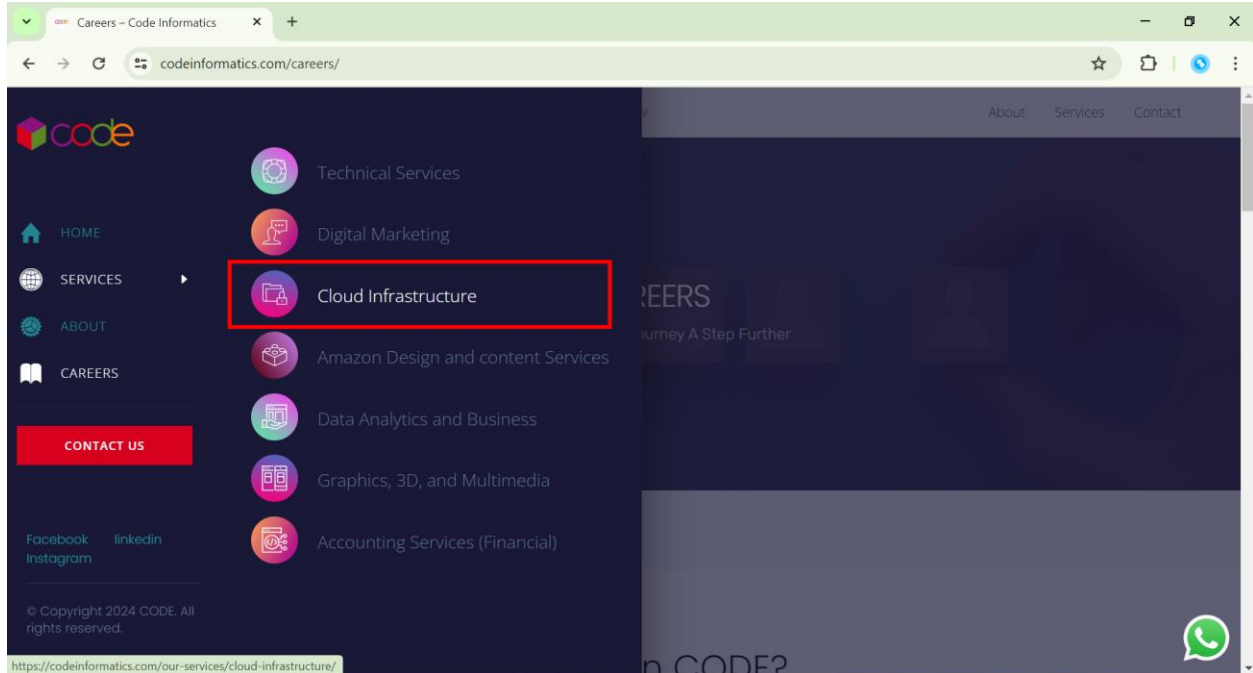
Then, there is button that have another module/functionality is added on Cloud Infrastructure page that is Contact Us. Now we will test whether this feature is performing accordingly SRS (Software Requirement Specification) or not.
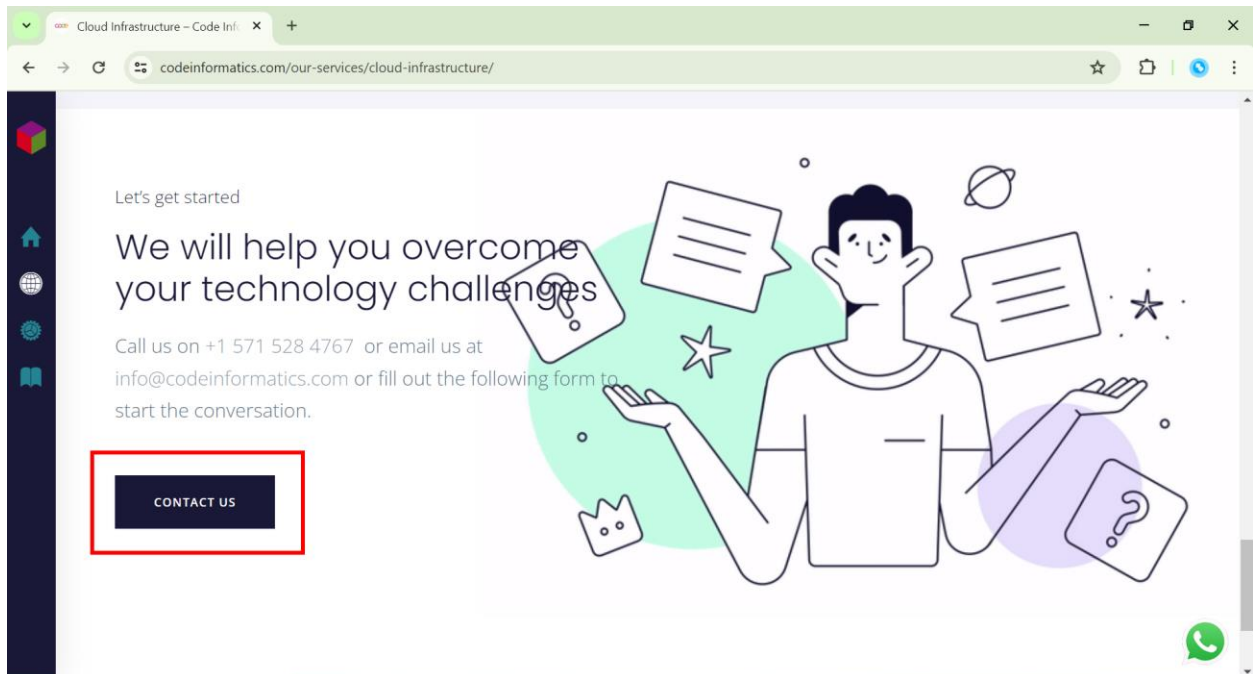
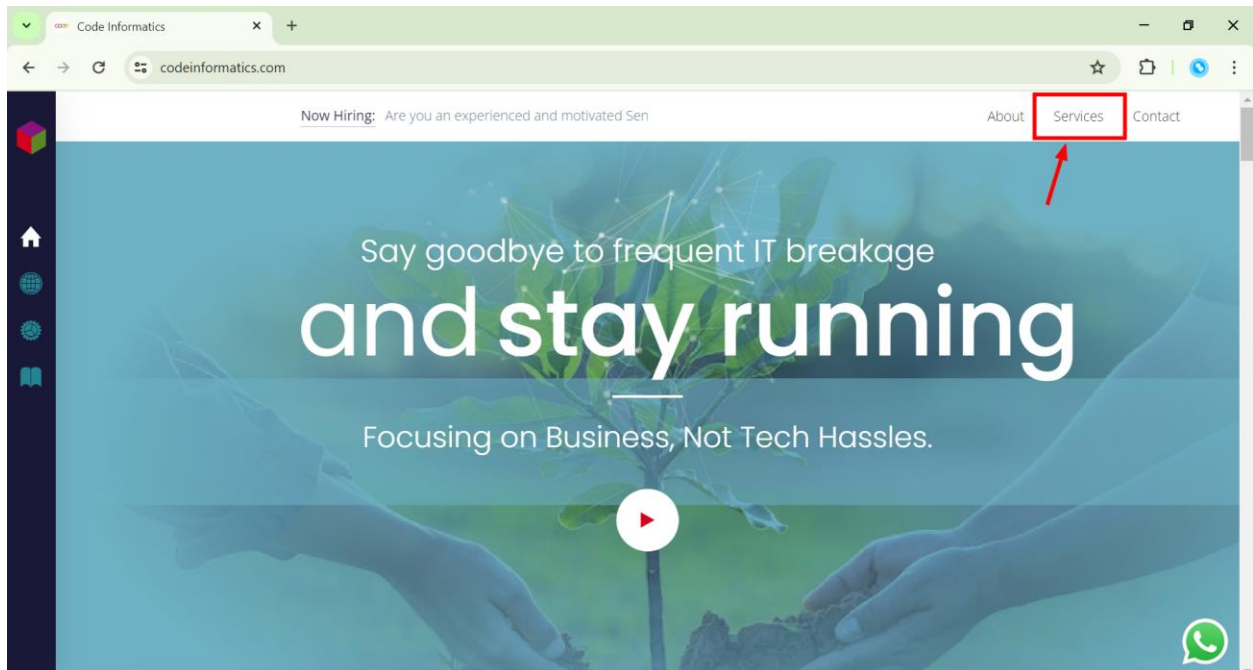When we click on the Contact Us Button we directed to the Contact Us page, which means the combined functionality of both modules are working fine.
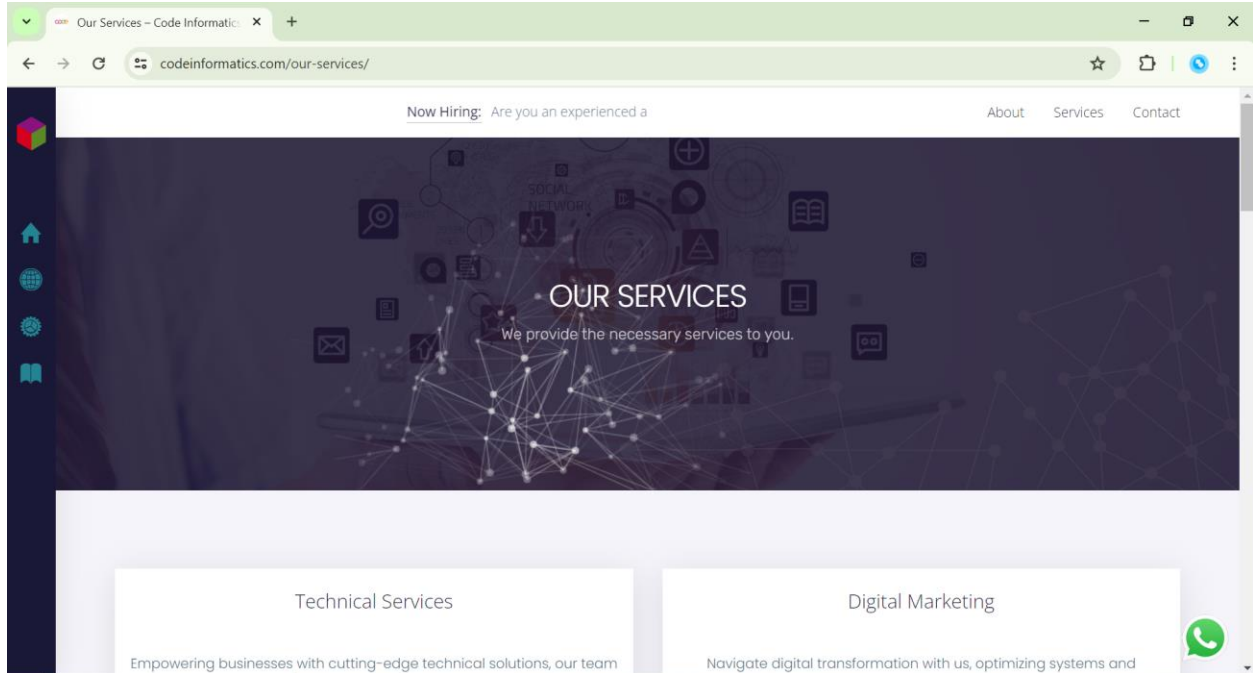
Functional Testing:

In Functional Testing, we will simply verify/check all the functionalities/features of our website against SRS.

W3C Validation:

During W3C Validation, the website URL is entered into the W3C website, which serves as a semi-automated testing tool for identifying bugs in the Code Informatics website.

We found 11 errors from W3C Validation of Services page of Code Informatics.
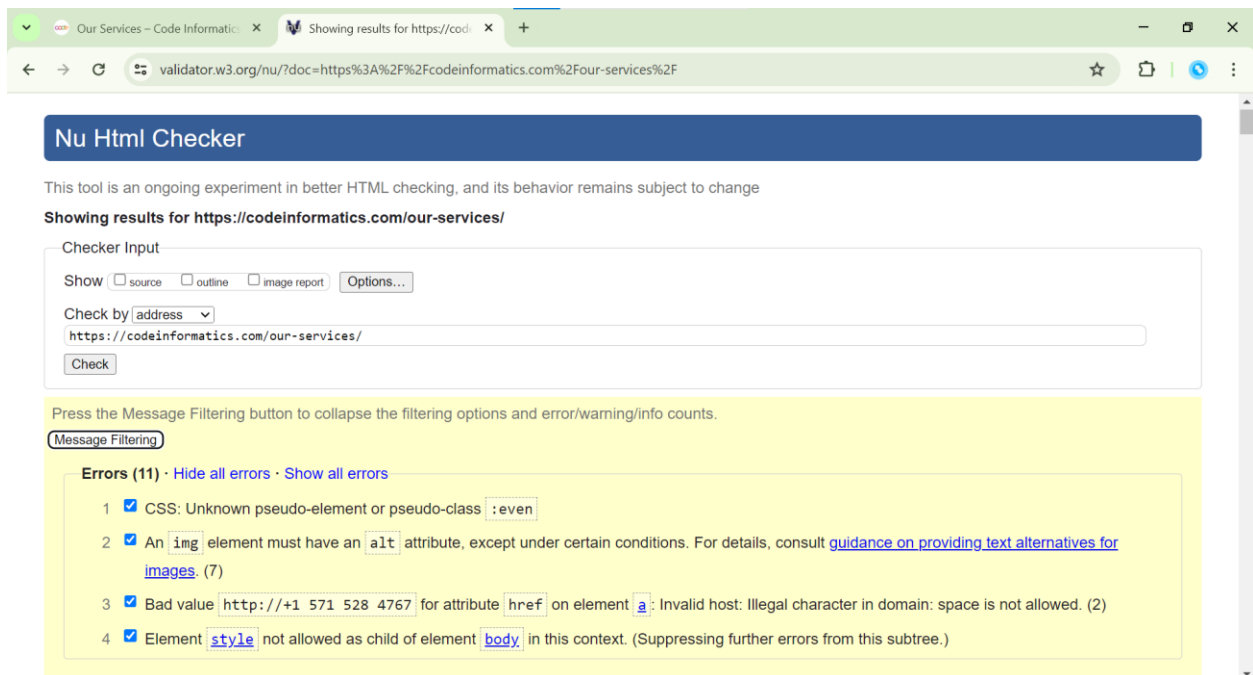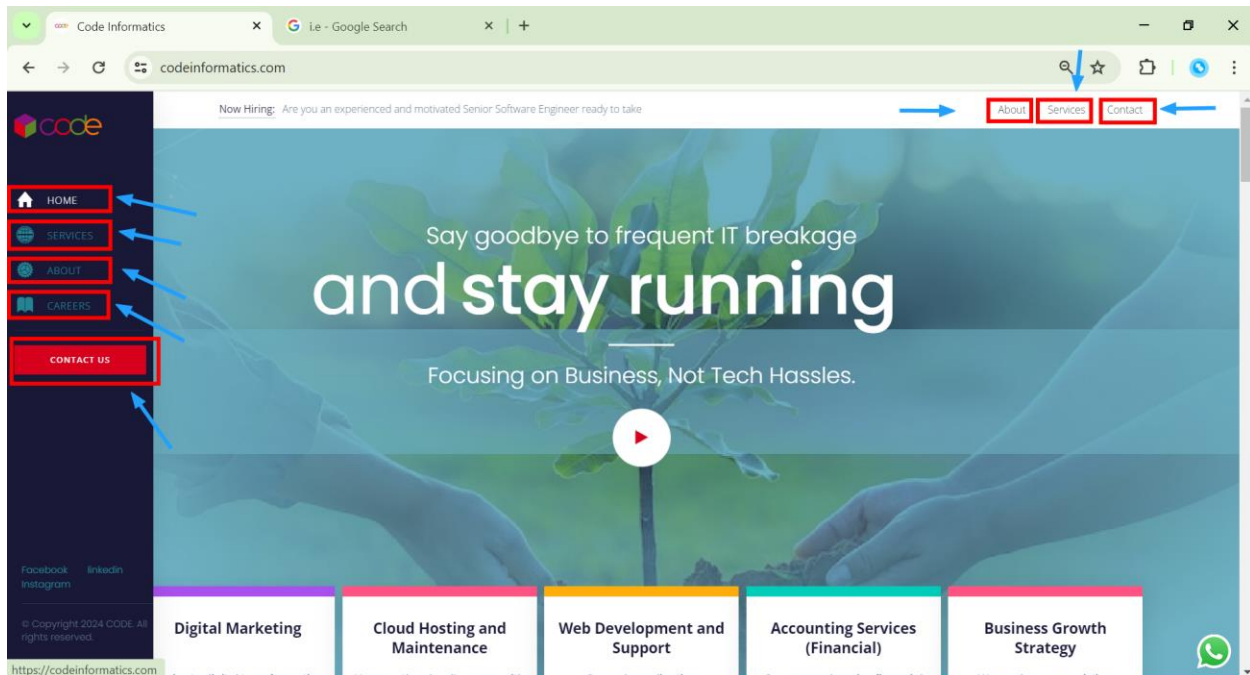
System Testing:

All the system's functionality has been thoroughly tested according to the specified requirements. However, it's essential to narrow the focus to a single domain—whether it's your any product (i.e. website, mobile app, or hardware).

The entire modules of Code Informatics will be tested.

1. Home
2. Services
   a. Technical Services
   b. Digital Marketing
   c. Cloud Infrastructure
   d. Amazon design & Content services
   e. Data Analytics & Business
   f. Graphics, 3D and Multimedia
   g. Accounting Services (Financials)
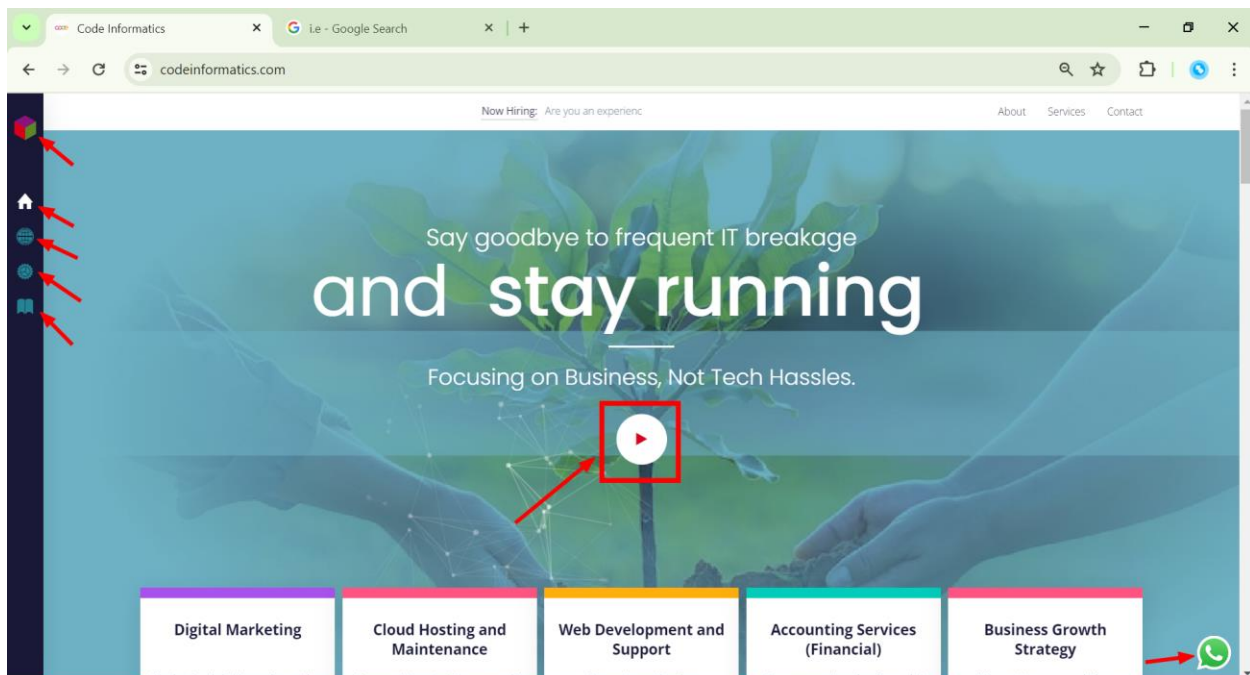3. About
4. Careers
5. Contact Us
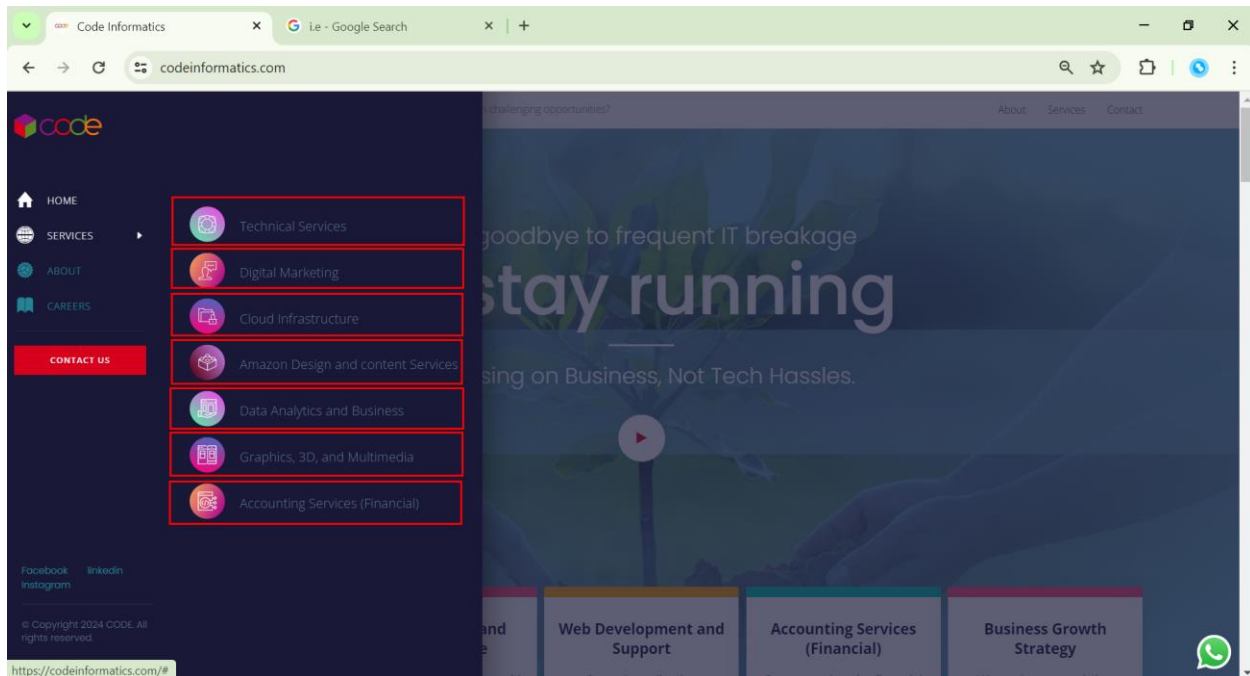
Usability Testing:

In Usability Testing, we check User Friendliness.

Mainly focus on grabbing customer/user attention. So, try to give smooth experience

In this Website, Icons are graphical representation that help customer/user to understand things.

Regression Testing:

In Regression Testing, when we add a new Module/Functionality we have to test the complete modules from the start to end for checking the newly added functionality has affected the other modules or not.

Suppose, we have added a new Module in Services. Now, we have to test that either this module/feature affect other modules or not.
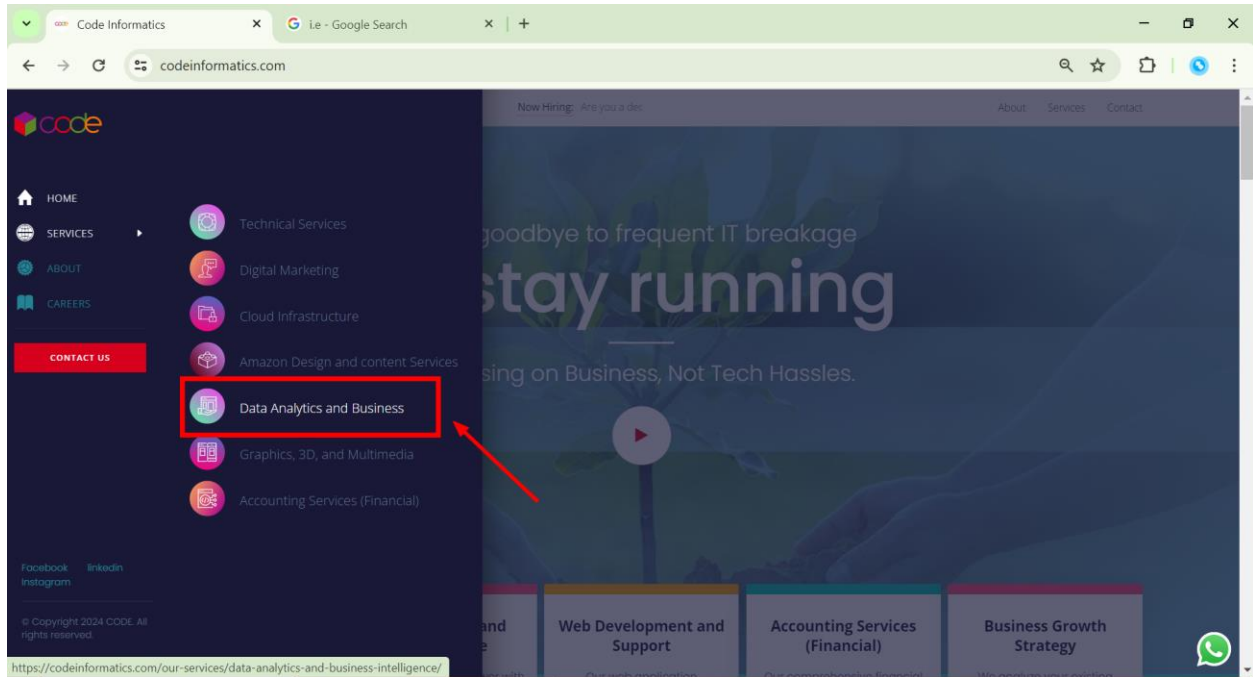

We will test all modules one by one. For verify, are they working correctly according to SRS (Software Requirement Specification) document?
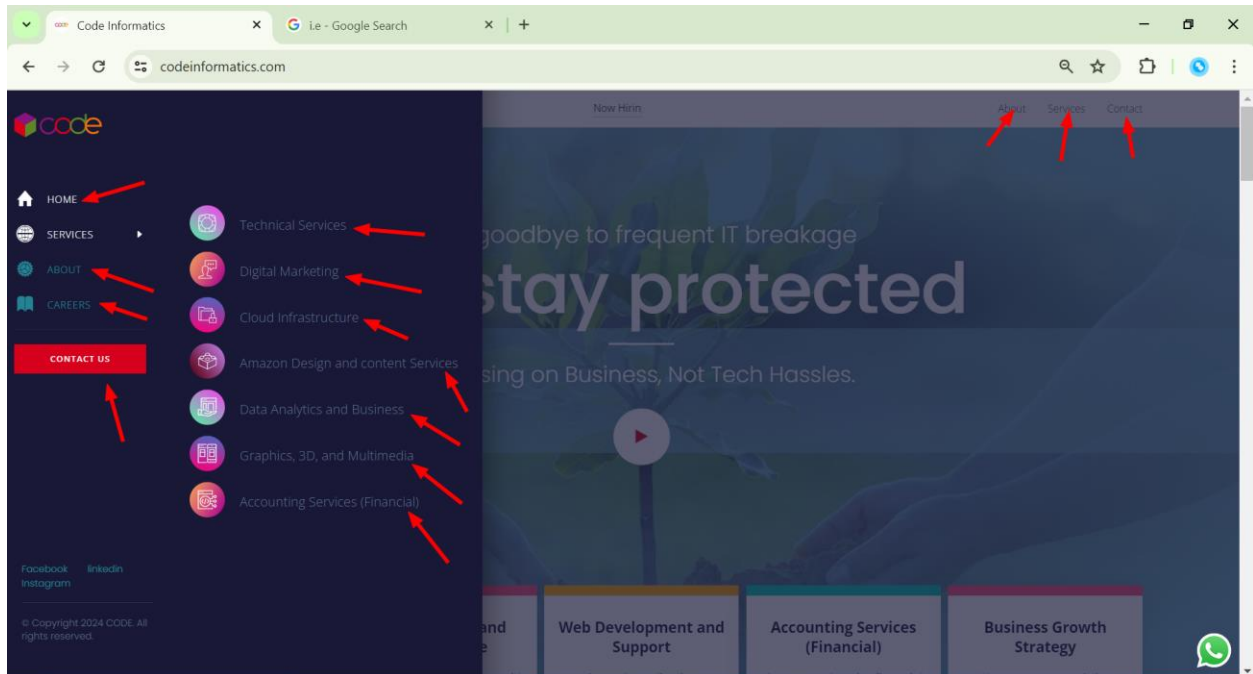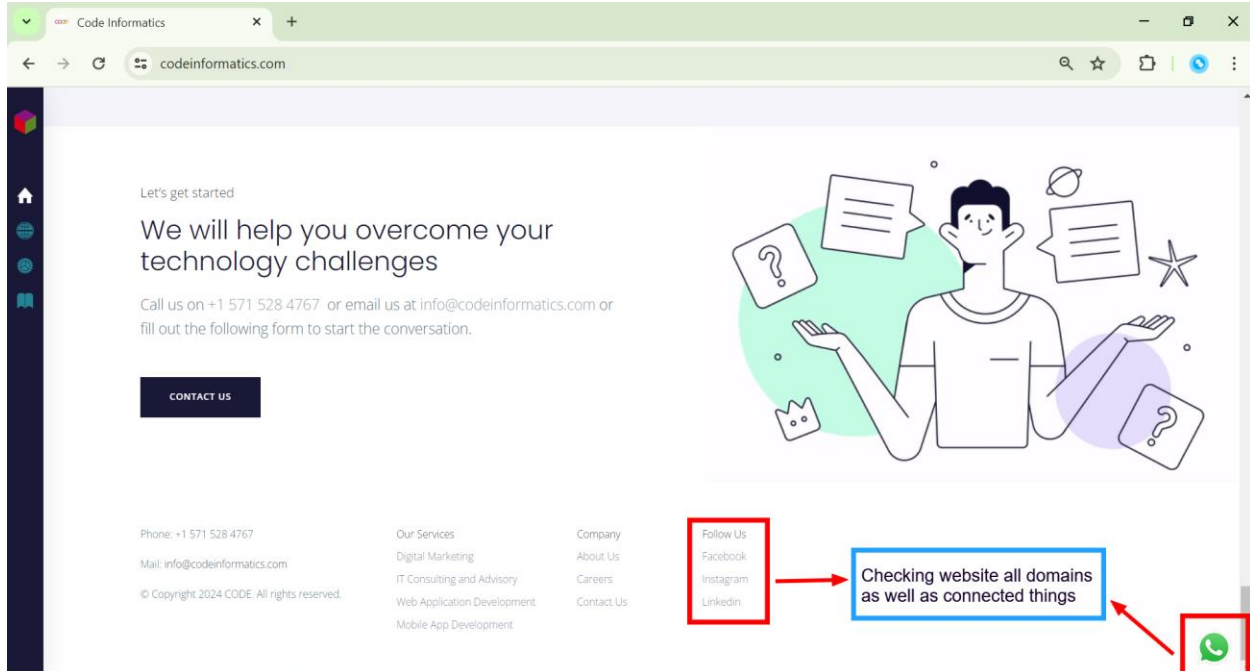
End-to-End Testing:

End-to-end testing is a software testing technique that evaluates the entire application workflow from start to finish. It simulates real-world user scenarios, ensuring that all components work together seamlessly and deliver the expected output as a unified entity.
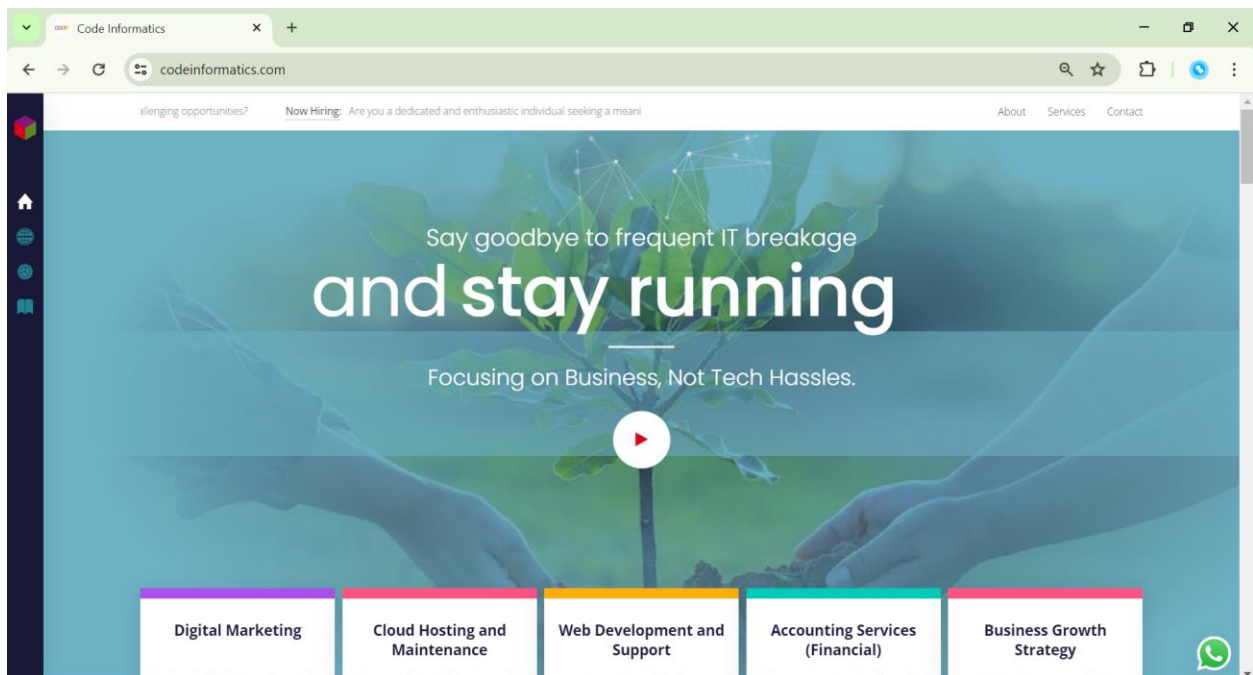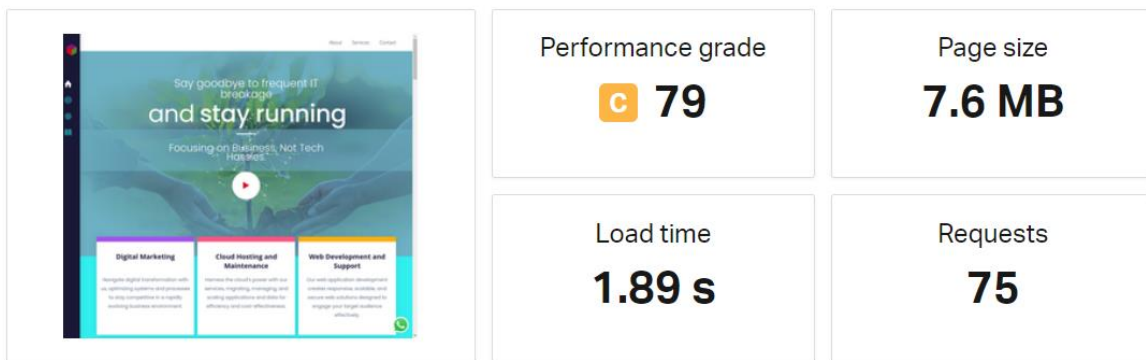
Performance Testing:

Performance testing evaluates how well a system performs under specific conditions. It checks things like loading speed, efficiency, and response time. We use a free tool for knowing loading time of Code Informatics Website.
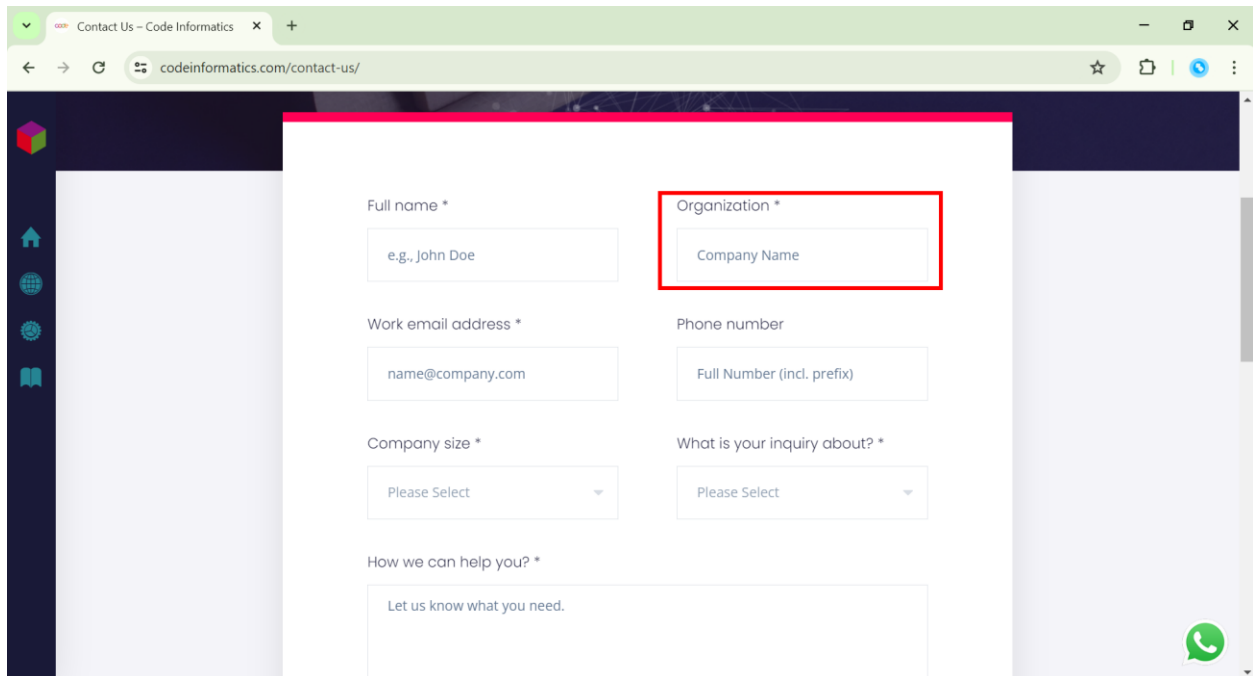
https://tools.pingdom.com/

Here is the result screenshot.

Performance grade	Page size
c 79	7.6 MB

Load time	Requests
1.89 s	75
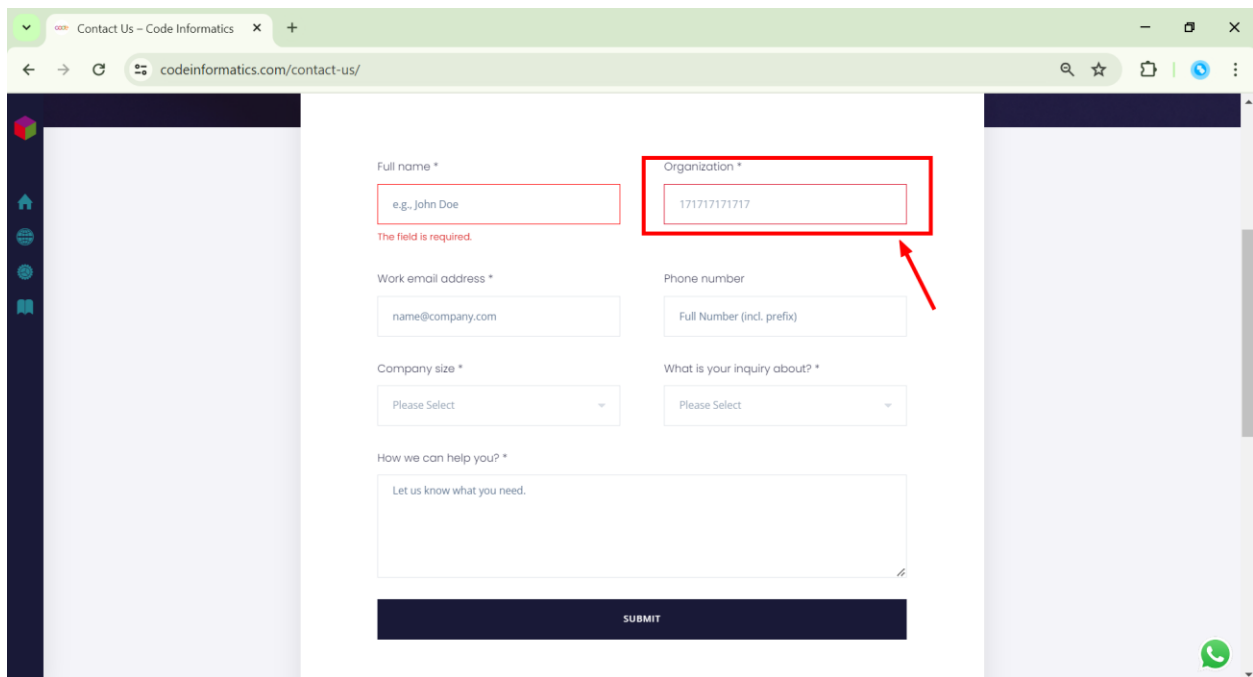
Stress Testing:

In stress testing, the system is intentionally pushed beyond its specified limits to determine when and how it fails. Essentially, negative testing is performed to assess how the system handles unfavorable conditions. For our website, we will specifically test the 'Contact Us' page by providing inputs that are considered unfavorable.

Here, we put number's instead of Organization name & leave all other fields blank.

After click on Submit button.


Load Testing:

In simple terms, **load testing** checks how well a software system or application handles different levels of user activity. It helps ensure that the system can handle both normal usage and peak loads without crashing or slowing down.

Sanity Testing:

Sanity Testing helps us determine if a new version of the system is stable enough for further testing. It ensures that there are no critical bugs that could crash the application and prevent further testing.

For example, we add a new module in our services and now we have to test our website. After release of new build of our website. We will do testing for ensuring. Are all basic/necessary modules/functionalities working or not? If any module/function not working according to SRS document. We will not move further.
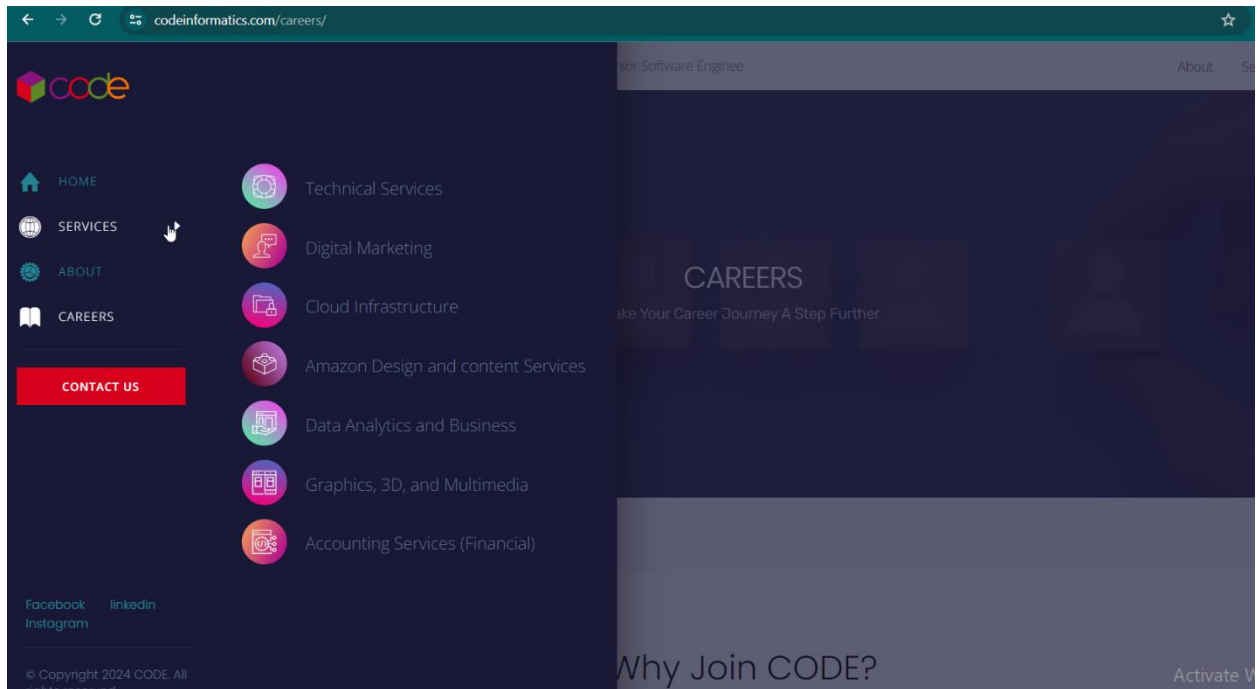
Other Types of Software Testing:

There are some other types of Software Testing which is not done by the SQA team. Those are following blow.

- Unit Testing
- UAT (User Acceptance Testing)

Conclusion:

Here we discuss only major testing types. Thers are more testing types that use for different purposes. Smoke Testing, Ad-Hoc Testing, Exploratory Testing, Monkey Testing, Security Testing, and Gray Box Testing.