

To Develop an E-learning Application Using TDD

Project Overview: Developing an E-learning Application with Test-Driven Development (TDD) using TestNG

Objective:

The objective of this project is to create a robust and scalable e-learning web application that provides users with access to a variety of courses, practice materials, and training videos. The development approach will follow the principles of Test-Driven Development (TDD) using TestNG as the testing framework.

Tools and Technologies:

- Eclipse IDE: The development environment for writing, testing, and debugging Java code. Eclipse provides a user-friendly interface and facilitates easy integration with various plugins, making it an ideal choice for Java development.
- Java Development Kit (Version 8): Java is the programming language chosen for building the backend of the e-learning application. JDK 8 offers a stable and widely supported platform for Java development.
- Selenium Standalone Server (Version 3.141.59): Selenium is a powerful tool for automating web applications for testing purposes. The standalone server will be utilized to drive browser automation, ensuring the functionality of the web application is thoroughly tested.
- TestNG: TestNG is a testing framework inspired by JUnit and NUnit but with additional features that make it more powerful and easier to use. It will be employed for implementing Test-Driven Development, allowing for the creation of tests before the actual code, ensuring a more reliable and maintainable application.