



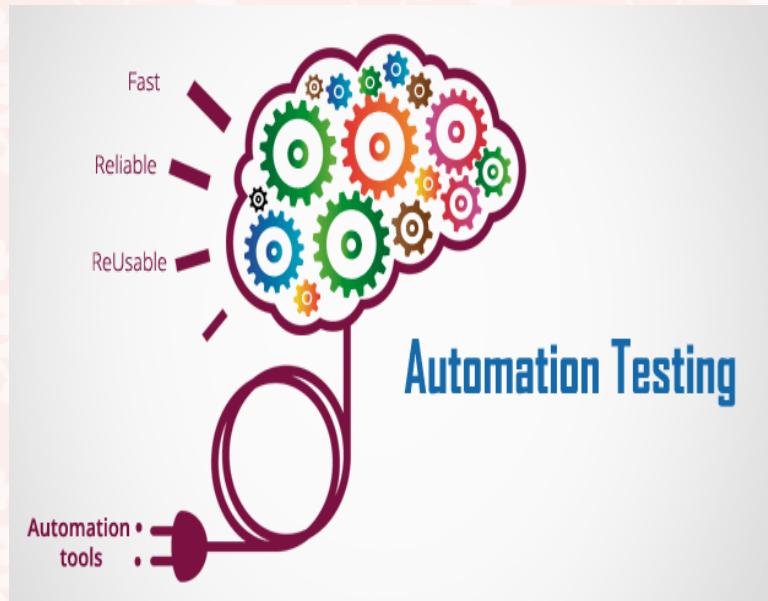
# End-to-End Automation Testing of Nykaa Website

**Capstone Project** – Selenium Automation Testing:  
Validating E-commerce functionality through  
automated workflows.

**Tools:** Selenium | Java | TestNG | Maven

**Name:** Sneha Kumari, Ritika Ruhal , Ravindra  
Kumar, Raghav Kaushal

**Qualification :** B.Tech in Computer Science and  
Engineering



# Introduction

This project automates the entire *end-to-end testing* process of the Nykaa e-commerce website. It focuses on validating key functionalities such as product selection, cart management, checkout, and navigation to the payment page. Using **Selenium WebDriver, TestNG, Maven, and Java**, the automation ensures reliability, faster test execution, and reduced manual effort. This presentation explains the project context and tools used.

# 01 Project Context: Nykaa E-commerce Platform Overview

## Application Under Test:

Nykaa Website

## Tools and Technologies Used:

- Programming Language: Java
- Automation Tool: Selenium WebDriver
- Test Framework: TestNG
- Build Tool: Maven

# **Automation Scope:**

- Launch Nykaa website
- Search and select a product
- Add product to cart
- Proceed to checkout
- Navigate till payment page

# **Outcome:**

- Automated critical user workflows
- Reduced dependency on manual testing
- Improved reliability of testing process
- Ensured smooth end-to-end functionality of the application



# Automation Testing Objectives

Automate end-to-end functionality of the Nykaa website using Selenium and Java to ensure smooth and reliable user experience.

## Key Activities:

- Designed automation framework using TestNG and Maven
- Automated test scenarios for product selection, cart validation, and checkout flow
- Executed tests across multiple scenarios
- Validated navigation till payment page





# 01

## Automation Testing Workflow

# Test Execution Console

The screenshot shows the Eclipse IDE interface with the following details:

- File Structure:** The left pane shows the "Package Explorer" with projects like "Eclipse\_direct\_push-master", "Nykaa\_Testing\_Project [Nykaa\_Project master]", and "Sneha\_14 [Java\_Testing\_Jan master]".
- Code Editor:** The main editor window displays the code for a test class named `TC_sneha.java`. The code includes imports for Selenium and TestNG, and a sleep method.
- Console Output:** The bottom pane shows the execution results of the test. It includes logs from TestNG, SLF4J, and Selenium, followed by the test results:

```
<terminated> TC_sneha [TestNG] C:\Users\Sneha.3.Kumar\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.fu
[RemoteTestNG] detected TestNG version 7.11.0
SLF4J{W}: No SLF4J providers were found.
SLF4J{W}: Defaulting to no-operation (NOP) logger implementation
SLF4J{W}: See https://www.slf4j.org/codes.html#noProviders for further details.
Feb 01, 2026 3:27:49 PM org.openqa.selenium.devtools.CdpVersionFinder findNearest
WARNING: Unable to find an exact match for CDP version 144, returning the closest
true
Price before: 396
Price after: 1170
PASSED: SeleniumPac.TC_sneha.tc1
=====
Default test
Tests run: 1, Failures: 0, Skips: 0
=====
```

# Web Application Screenshot

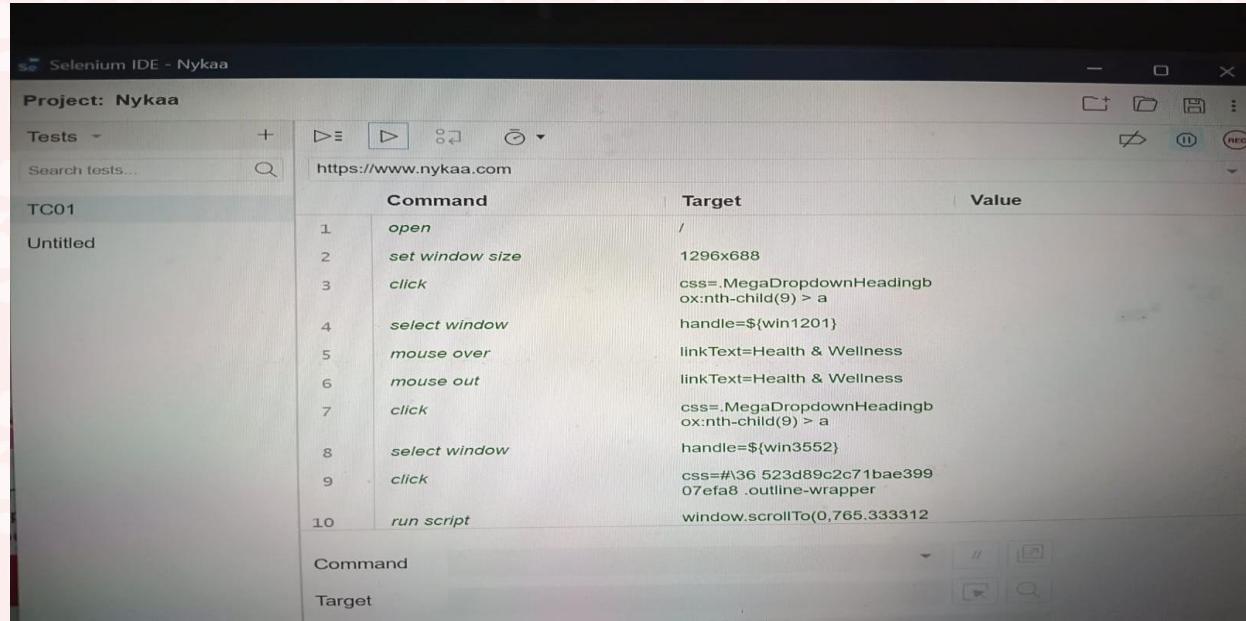
The Nykaa homepage features a top navigation bar with categories like Categories, Brands, Luxe, Nykaa Fashion, and Beauty Advice. A search bar and sign-in options are also present. The main content area includes a banner for 'MELA B3 SERUM' with a 98% skin improvement claim, a 'The Ordinary' product with a 'Visible reduces breakout in 1 hour' claim, and a 'BRIDGERTON' limited edition brow collection. A promotional banner at the bottom offers 'Extra 20% Off' on orders above ₹149 with code 'EXTRA20%'. A 'How may we help you?' chatbot is visible.

The 'BEAUTY BONANZA Get Your Amazing Deals!' page shows a grid of product categories: Skin Care, Health & Nutrition, Luxe Store, Perfumes & Deos, Hair Care, Bath & Body, Shaving, Beard Care, and Kits & Combos. Below this is a large advertisement for 'Jean paul GAULTIER "LE MALE" Elixir Absolu' featuring a shirtless male model with tattoos.

The 'Pay Day Deals Are Live! Shop Now!' page highlights a 'Ducati Sport Eau De Toilette' (100ml) priced at ₹3120 with a 20% discount. The product image shows a red bottle with a silver cap. The page includes delivery options and a pincode entry field.

The payment and account summary page shows a summary of 1 item in the bag, totaling ₹6249. It includes sections for account login, new user sign-up, and guest checkout options. A sidebar provides information about reward points, first-order discounts, and payment methods.

# Selenium Automation Testing



The screenshot shows the Selenium IDE interface with the title "Selenium IDE - Nykaa". The project is set to "Nykaa". A test case named "TC01" is selected, and its details are displayed in the main pane. The URL "https://www.nykaa.com" is specified. The test steps are listed in a table:

	Command	Target	Value
1	open	/	
2	set window size	1296x688	
3	click	css=.MegaDropdownHeadingb ox:nth-child(9) > a	
4	select window	handle=\${win1201}	
5	mouse over	linkText=Health & Wellness	
6	mouse out	linkText=Health & Wellness	
7	click	css=.MegaDropdownHeadingb ox:nth-child(9) > a	
8	select window	handle=\${win3552}	
9	click	css=#136_523d89c2c71bae399 07efa8 .outline-wrapper	
10	run script	window.scrollTo(0,765.333312)	



# Selenium WebDriver and TestNG Usage

Selenium WebDriver is employed to simulate user actions in real web browsers, enabling **robust UI automation**. TestNG manages test execution, allows grouping and prioritization of test cases, and generates detailed reports. Together, they create a stable framework that facilitates effective testing, debugging, and maintenance of automation scripts.



# Conclusions

- Successfully automated end-to-end testing of Nykaa website.
- Covered complete user journey from product selection to payment page.
- Reduced manual testing effort and improved execution speed.
- Gained hands-on experience with Selenium, TestNG, Maven, and Java.
- Enhanced understanding of real-world automation testing challenges.



# Thank You

