1. Cucumber is a popular tool used for Behavior Driven Development (BDD) in software testing. It is an open-source tool that helps in writing test cases in a natural language format that can be easily understood by all stakeholders, including developers, testers, and business analysts. In this project, we will explain the basics of Cucumber setup using Maven, Extent Reports, and Cucumber Eclipse Plugin.

Maven is a build automation tool used for managing dependencies and building projects. To set up Maven for Cucumber, follow these steps:

Step 1: Download and install Maven on your system.

Step 2: Create a new Maven project in Eclipse.

Step 3: Add the Cucumber dependency to the pom.xml file. The dependency should look like this:

<dependency>

<groupId>io.cucumber</groupId>

<artifactId>cucumber-java</artifactId>

<version>6.10.4</version>

<scope>test</scope>

</dependency>

Step 4: Add the JUnit dependency to the pom.xml file. The dependency should look like this:

<dependency>

<groupId>junit</groupId>

<artifactId>junit</artifactId>

<version>4.13.2</version>

<scope>test</scope>

</dependency>

2. Setting up Extent Reports for Cucumber

Extent Reports is a reporting tool that provides interactive and customizable reports for your test results. To set up Extent Reports for Cucumber, follow these steps:

Step 1: Add the Extent Reports dependency to the pom.xml file. The dependency should look like this:

<dependency>

<groupId>com.aventstack</groupId>

<artifactId>extentreports</artifactId>

<version>5.0.6</version>

</dependency>

Step 2: Create a new ExtentReports object in your Cucumber test class.

Step 3: Create a new ExtentTest object for each scenario in your feature file.

Step 4: Add the test steps and their results to the ExtentTest object.

Step 5: Generate the Extent Reports HTML report using the ExtentReports object.

3. Setting up Cucumber Eclipse Plugin

Cucumber Eclipse Plugin is a plugin that provides support for Cucumber in Eclipse. To set up Cucumber Eclipse Plugin, follow these steps:

Step 1: Open Eclipse and go to Help > Eclipse Marketplace.

Step 2: Search for "Cucumber Eclipse Plugin" and install the plugin.

Step 3: Restart Eclipse.

Step 4: Create a new Cucumber feature file by right-clicking on your project and selecting New > Other > Cucumber > Feature File.

Step 5: Write your feature file using the Gherkin syntax.

Step 6: Create a new Cucumber test class by right-clicking on your project and selecting New > Other > Cucumber > Step Definition Class.

Step 7: Write your step definitions in the test class.