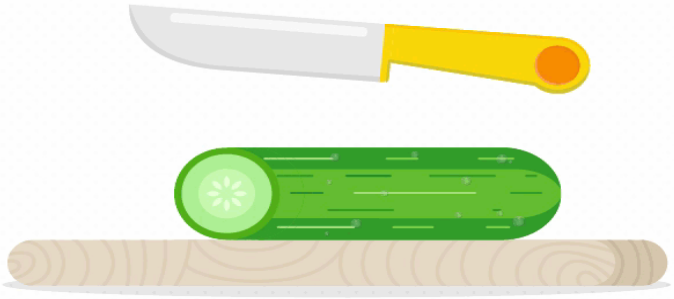


Testing with Cucumber

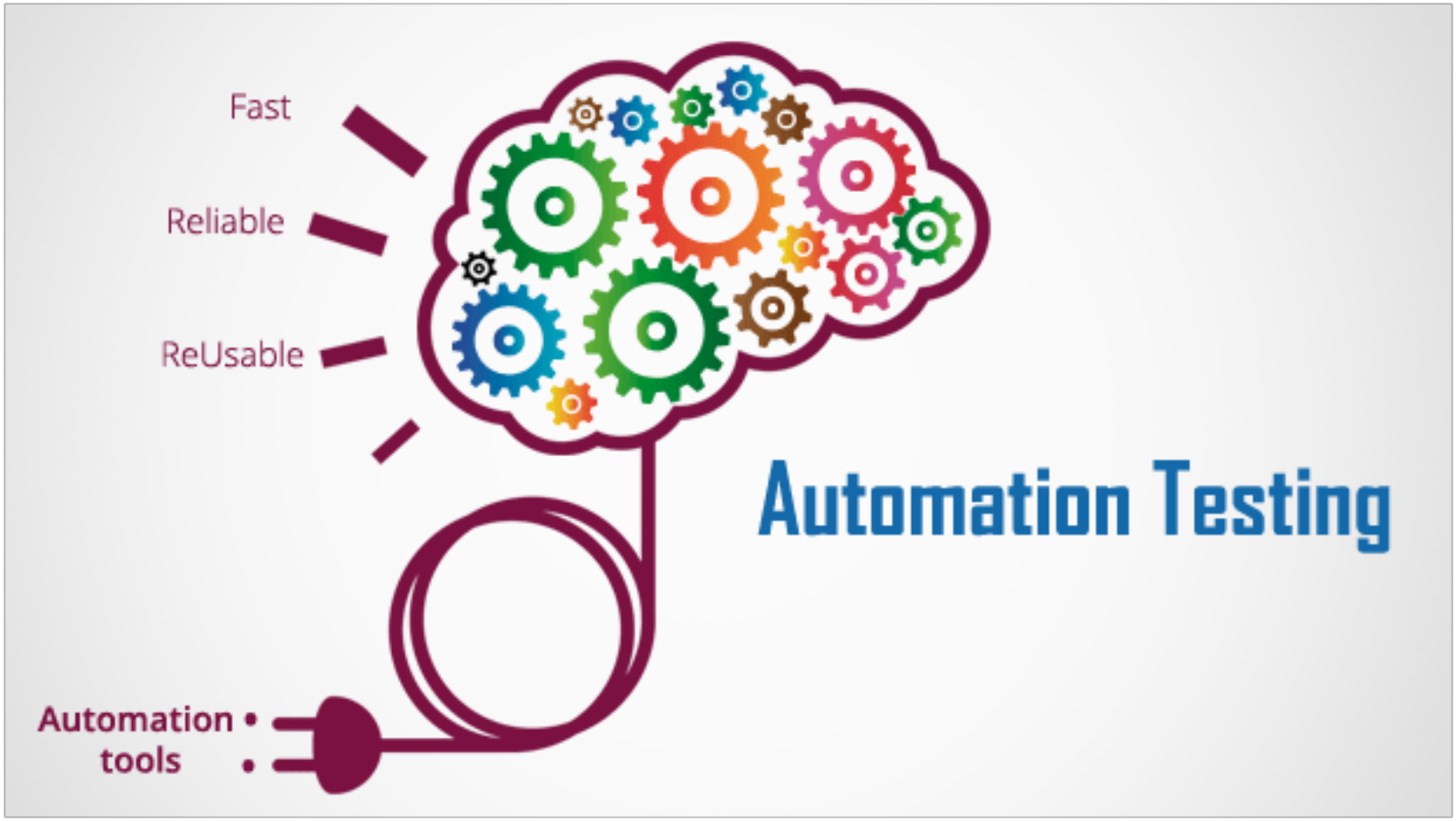
Developing Cucumber-Based Automation

Why Automation?

Automated testing is important due to following reasons:

- Manual Testing of all work flows, all fields, all negative scenarios is **time and cost consuming**
- Automation does not require Human intervention.
- Automation **increases speed of test execution**
- Automation helps increase **Test Coverage**
- Manual Testing can become boring and hence error prone.

Benefits of Automation Testing



What Are Benefits of Automated Testing?

Serious
Cost Reduction

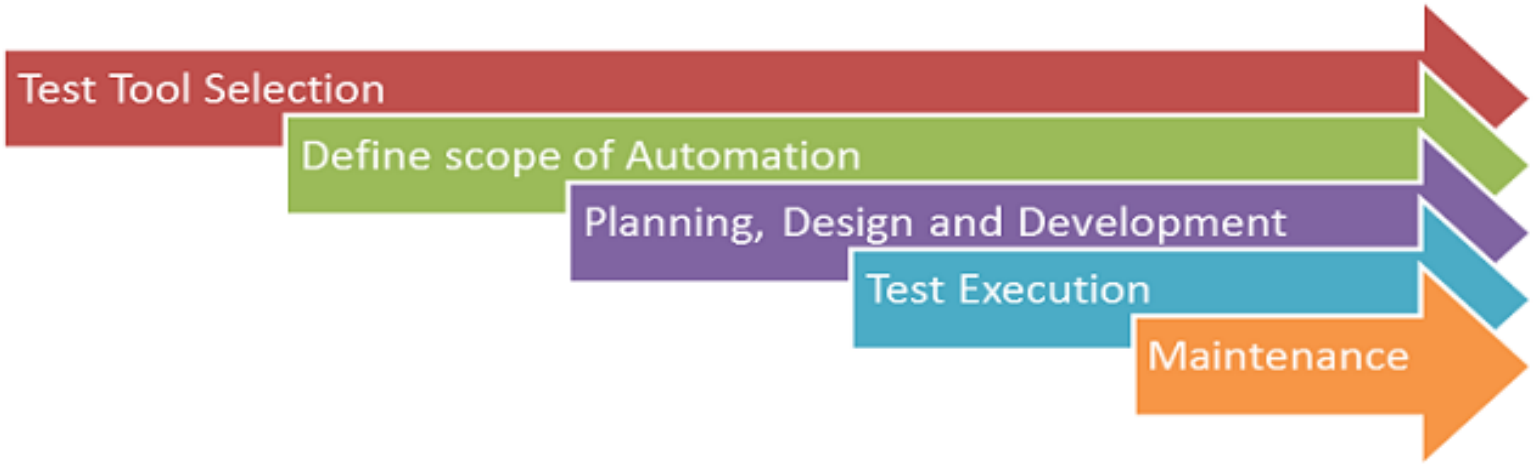
The number of resources for **regression test** are reduced.

You can reuse tests on **different versions** of an application, even if the user interface changes.

Automated tools run tests significantly faster than human users.

Automation Process

Following steps are followed in an Automation Process

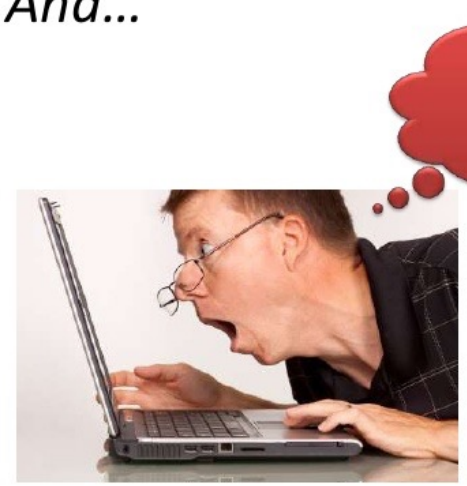


Cucumber

- Cucumber is a high-level testing framework that supports behavior driven development.
- It runs automated acceptance tests on web applications.
- Cucumber is a tool that executes plain-text functional descriptions as automated tests. The language that Cucumber understands is called Gherkin.

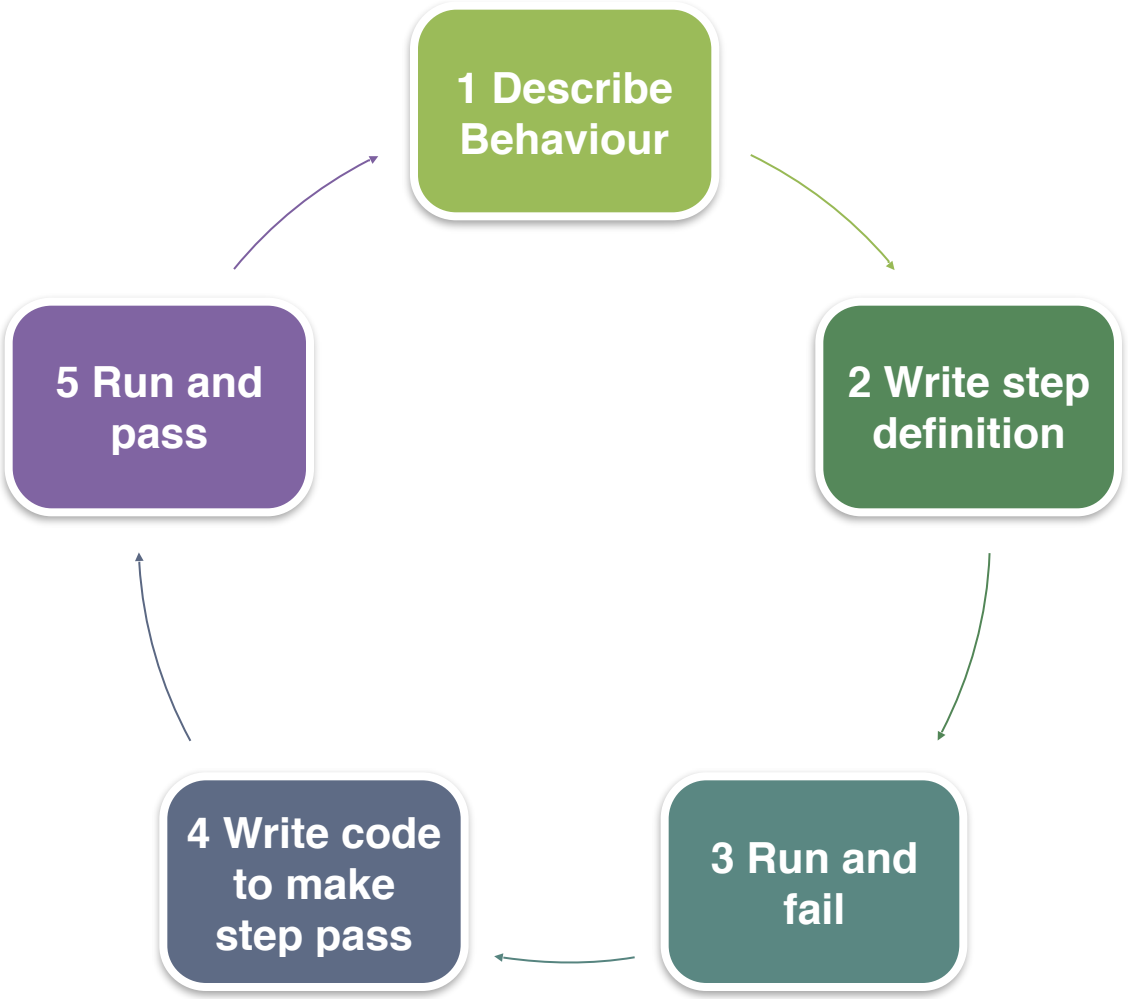
Why Cucumber?

And…



You don't understand your own code 😐

Describe the behaviour of your software in a very understandable way.


1 Describe Behaviour
2 Write step definition
3 Run and fail
4 Write code to make step pass
5 Run and pass

Cucumber

Feature Introduction

Every .feature file conventionally consists of a single feature. A line starting with the keyword Feature followed by free indented text starts a feature. A feature usually contains a list of scenarios. scenarios together independent of your file and directory structure.

Given The login page is opening
When I input username, password and click Login button
Then I am on the Home page

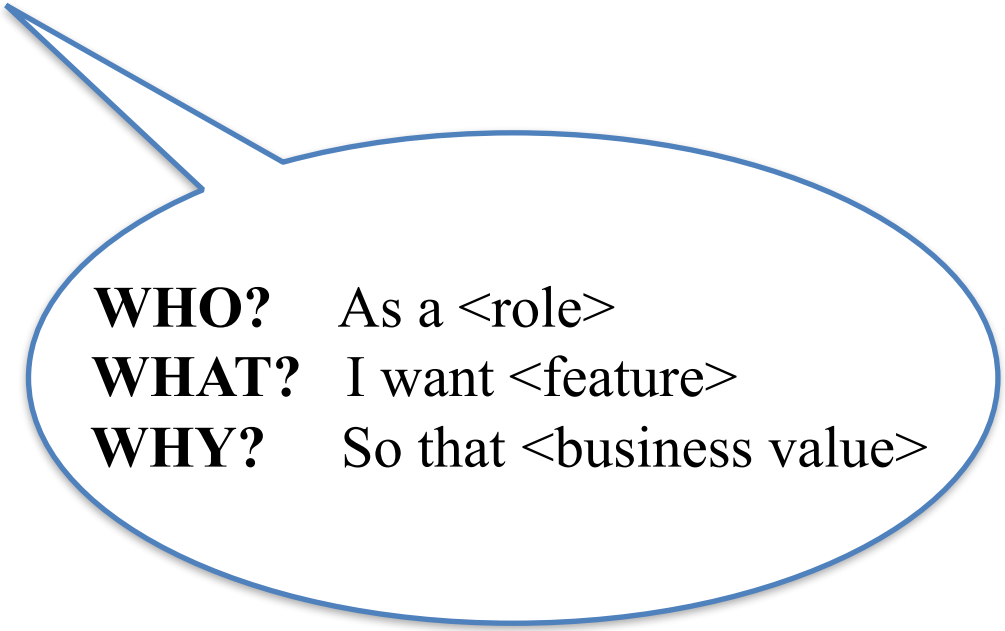
Cucumber Nomenclature

- **Feature:** Single file, ideally describing a single feature
- **Scenario:** A test case
- **Given-When-Then:** Test Preconditions, Execution and Postconditions
- **And:** Additional test constructs

Behaviour

Feature: <short description>

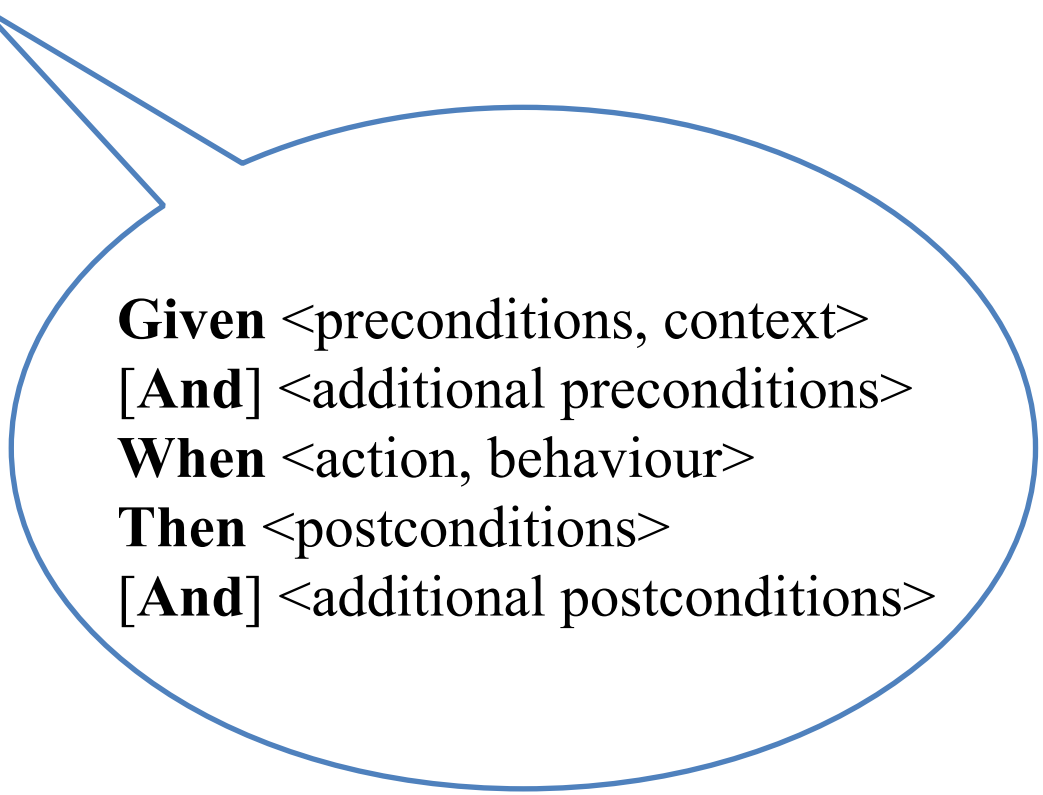
<story>

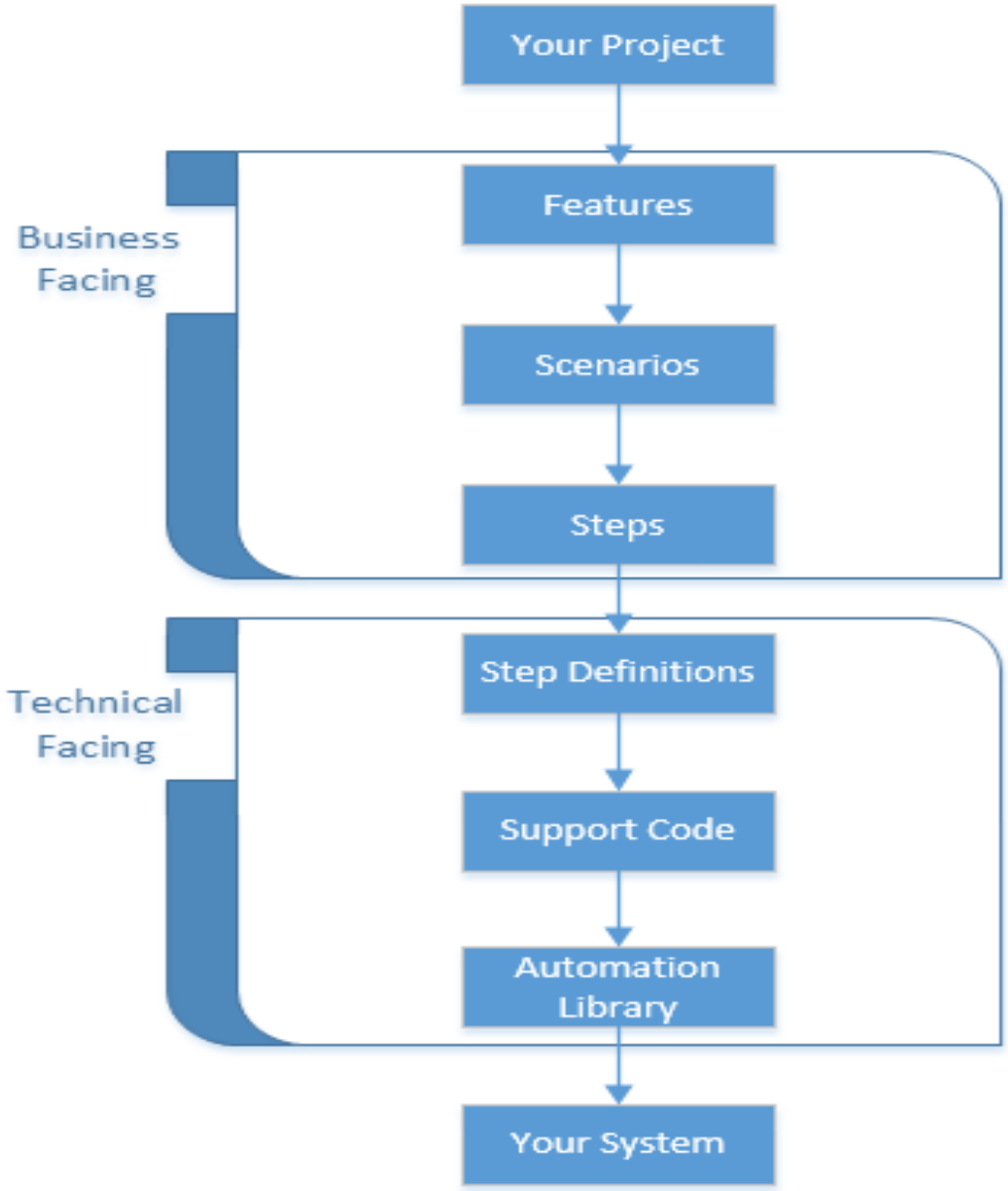


Scenario: <description>

<scenario 1>

<scenario n>




Your Project
Features
Scenarios
Steps
Business Facing
Step Definitions
Support Code
Automation Library
Technical Facing
Your System

What are the benefits?

- It is helpful to involve business stakeholders who can't easily read code
- Cucumber focuses on end-user experience
- Style of writing tests allow for easier reuse of code in the tests
- Quick and easy setup and execution
- Efficient tool for testing
- Instead of writing your tests purely in code, with Cucumber you start by writing a human-readable user story. Then, you write code to run the story and perform test(s) based on it.

Human Language support

@admin_login

Feature: Landing page

As a Admin
I want to see the landing page
So that I can login to the application

@smoke_login

Scenario: Click on customer login button for the first time

- Given I am on Home page
- When I click on Customer Login button
- Then Login page for the user should be displayed
- Given I login as a admin
- When I click on Sign In button
- Then List view page for the user should be displayed
  - List view page is displayed

Thank You!