# Stepping into Test - Programme

A Draft

- Module : Testing in an Agile Team
  - What is the Agile lifecycle
  - Roles within an Agile team
  - When does an Engineer in Test need to be involved
  - What are the different ceremonies in the current team - Retro, Planning, 3 Amigos ,etc.
  - Tools of the Trade : Jira, confluence
  - Ticket creation and "Definition of Done"
  - Estimation of tickets

- Module : Different types of Testing covered in a Story lifecycle preferably through ticket exercise
  - How to start testing a feature of the products, what are the steps to take - what kind of groundwork is involved to get started, when to get involved.
  - What is manual and automated acceptance testing.
  - Different techniques of Manual Testing
    - Example Apps at least 2 different Web apps to test before testing on a ticket
    - A ticket for testing one of our products
  - What is unit testing, integration testing

- Module: Testing Front End User interface
  - Concept of cookies
  - Caching
  - Sessions
  - Responsive web design: Testing Different
  - iFrames

- Module: Testing a product with RESTFul API interface
  - Fundamentals of RESTFul API , Parameters, Headers,  response and request body used, Response codes
  - How to write test Scenarios for an API

- Tools used for Testing an API : Postman
- Using Authenticated methods for an API like the Dev Cert

- Module: Writing Code
  - Write a Selenium Testcase
  - Using the IDE
  - Concepts of Page Objects

- Module: Git fundamentals
  - Concepts of a DVCS
  - Creating a repo
  - What do the commands used on a daily basis do
  - Recommended reading: First couple of chapters of Pro Git

- Module: Build tools
  - Building with Maven
  - Continuous integration with Jenkins

- Module: Using a Test Framework like Cucumber
  - Gherkin: Using scenarios, examples, background
  - How to write a feature file
  - Passing parameters through a feature file
  - Step Definitions and supporting code

- Module: Test Automation Exercise with Selenium and Cucumber JVM

## Advanced Topics

- Concept of Test Pyramid
- Testing for Volume and Load
- Security Vulnerabilities