# Automation Basics

* + Fundamentals of Test Automation
    - * + Any Language Java/Python/C#
        + Any automation tool like : Selenium/API/Mobile/JMeter/DB
        + CI & CD
        + SDLC & STLC
  + What are the advantages of automation testing?

# Introduction to Selenium

* + What Selenium is and How it is Used in Real time
  + Features of Selenium

# Selenium IDE

* + Installing IDE
  + Building Test Scripts
  + Running Test Scripts
  + Locating Elements on the web page
  + Limitations of Selenium IDE

# WebDriver Basics - I

* + Selenium Web Driver Overview
  + Configuring WebDriver in eclipse
  + WebDriver Architecture
  + Web Driver Drivers
  + Locating Elements in Web Driver
  + Handling Web elements
  + Running test in multiple browsers
  + Synchronization
  + Handling AJAX controls
  + Handling JavaScript alerts, prompts and confirmations

# WebDriver Basics - II

* + Handling Multiple frames
  + Handling Multiple windows
  + Capturing screenshots
  + Browser navigation
  + Handling Keyboard and Mouse Events
  + Handling Autosuggestions
  + Handling Web Tables
  + Finding Broken Links
  + File upload and Download using AutoIt

# TestNG

* + How to Install TestNG plug-in in Eclipse
  + Various Annotations
  + Assertions
  + Writing Selenium test script from scratch
  + Reports using TestNG

# Project Details

* + Application overview
    - Bank project overview
    - Project Description
    - Tools used in the project (Jenkins, Maven, GitHub, Docker and AutoIt)
    - Roles and Responsibilities
  + Automation process
    - Automation life cycle
    - Identify test cases what to be automated
    - Authoring the scripts
    - Executing the scripts
    - Analyze the reports

# WebDriver - Framework

* + Introduction to Various Frameworks
  + Data-Driven Tests Using POI
  + Reading, Writing data into Excel
  + Database Connection (JDBC)
  + Reading, Writing data into MySQL
  + Page Object Model Framework (POM)
  + Writing scripts Using page Object Model

# TestNG

* + Configuring Test Suites
  + Passing Parameters to Tests
  + Parallel Test Execution Capability
  + Re-run failed test scripts
  + Attributes of @Test
  + Running TestNG suites from command prompt

# Build Automation Tool (Maven)

* + Creating Maven project
  + Understanding of POM .xml
  + Maven Integration with TestNG
  + Executing Scripts Using Maven build tool

# Cucumber Framework

* + Overview of BDD, TDD
  + Cucumber Project Setup
  + Gherkin Keywords
  + Working with simple scenario
  + Cucumber options
  + Generating Cucumber Reports
  + Cucumber Advanced Features
    - Working with Data table
    - Page Object Model in Cucumber
    - Background and Hooks examples in Cucumber

# Continuous Integration Tool (Jenkins)

* + Configuring Jenkins
  + Executing the windows commands in Jenkins Free Style project
  + Creating Maven Job
  + Manage Plug-ins
  + Scheduling the Jobs

# GitHub

* + What is Version Control System
  + What is GitHub
  + Git commands
  + Pushing Our Project Into GitHub
  + Git vs. GitHub

# Selenium GRID

* + What is Selenium Grid?
  + Setting up Grid - Hub and Nodes?
  + Running Test Scripts on Selenium Grid

# Docker

* + Docker Basics & Installation
  + Integrate Selenium Grid with Docker
  + Running our automated tests inside a Docker container

# Interview Questions and Sample Resumes