# Continuous Testing – Test Automation

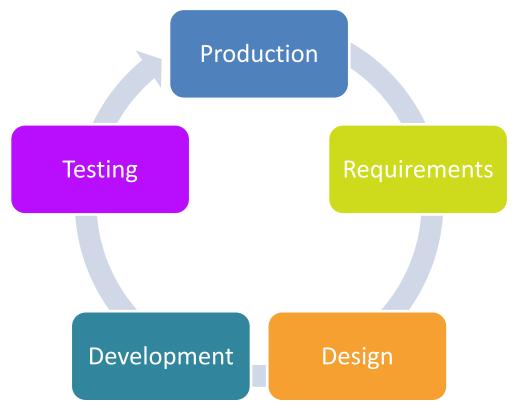


# **Prepared By:**Anil Mundra, Arpit Mishra





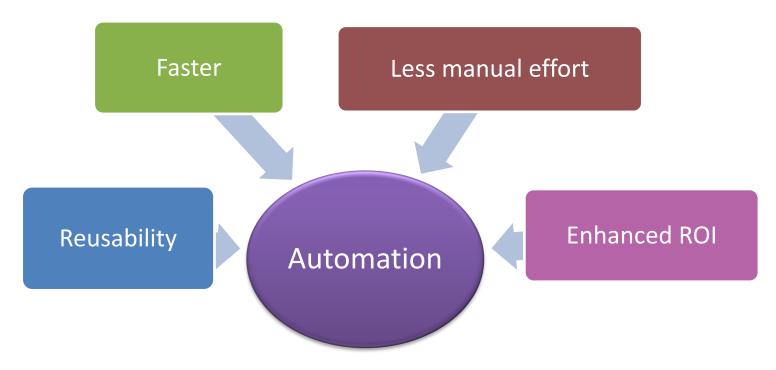
 SDLC is a process followed for a software project, within a software organization. It consists of a detailed plan describing how to develop, maintain, replace and alter or enhance specific software.



# **Testing && Automation Testing Benefits**



- Software Testing: (<Expected Result> == <Actual Result>) ? Pass: Bug
- Test Automation : Automation testing is a Software testing technique to automatically test and compare the actual outcome with the expected outcome.

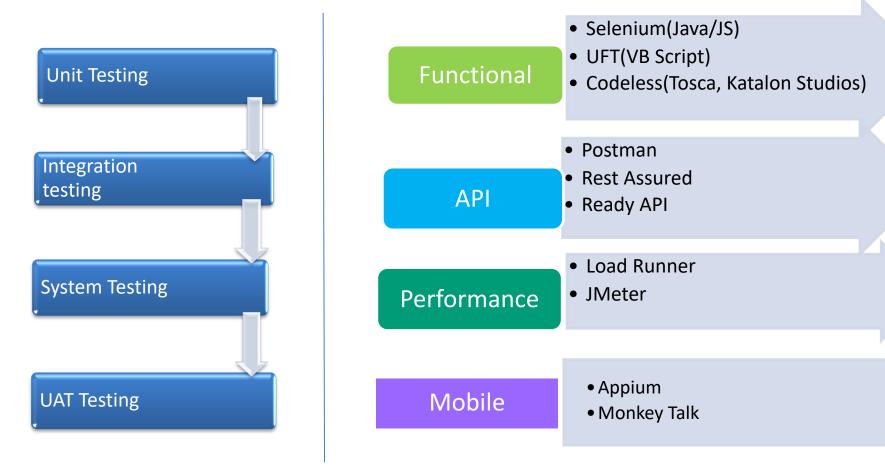


## **System Under Test**

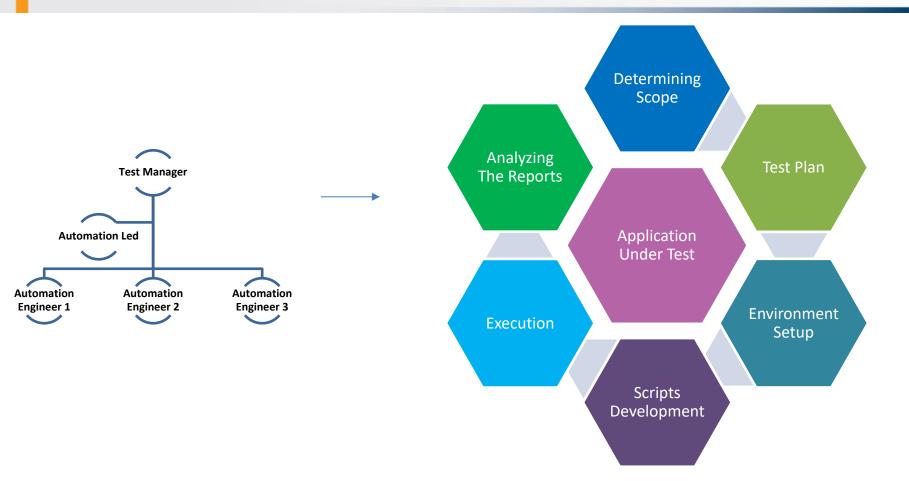


- **SUT**: refers to a system that is being tested for correct operation. ... The term is used mostly in software testing.
- **Standalone**: runs locally on the device and doesn't require anything else to be functional.
- Web Applications: an application program that is stored on a remote server and delivered over the Internet through a browser interface.
- Enterprise Level Applications: large software system platform designed to operate in a corporate environment such as business or government. EAs are complex, scalable, component-based, distributed and mission critical.
- Mobile Applications: most commonly referred to as an app, is a type of application software designed to run on a mobile device, such as a smartphone or tablet computer.

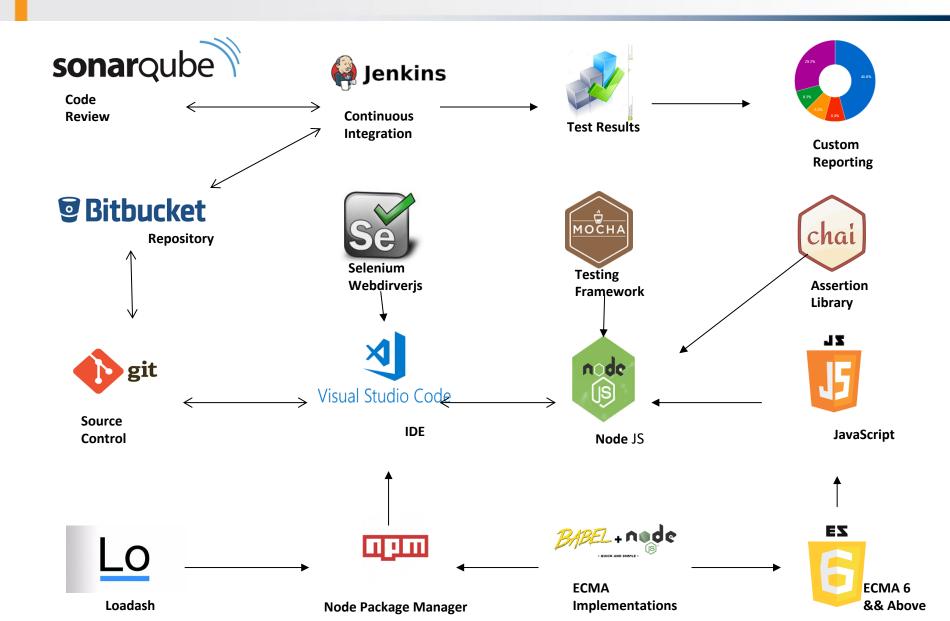




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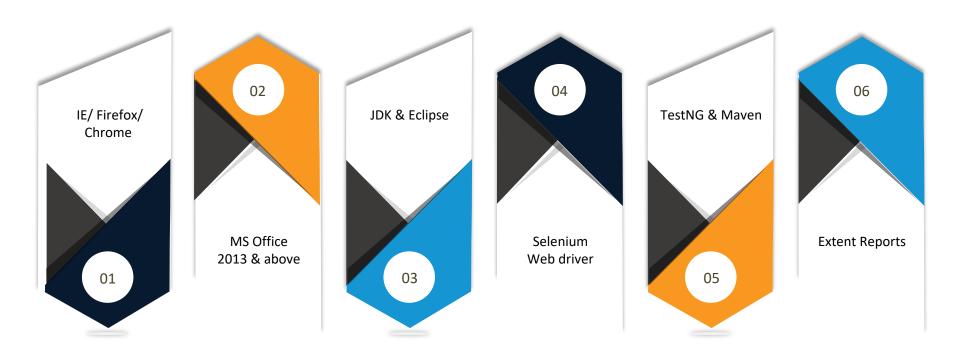


Slide 8

- Strong Programing Skills: Java, Python, C# or Java Script
- Good Database Knowledge: Oracle, MySQL, SQL Server or Postgres.
- Good understanding & Problem Solving Skills.
- Understanding of Agile, Devops and CI/CD process.
- Understanding of web services.

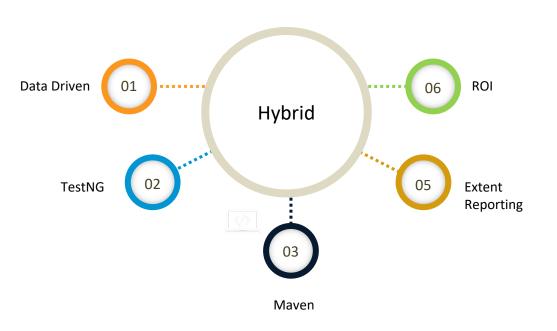
# Selenium -Automation Framework -Pre-Requisites





## **About TEK Automation Framework**





- Hybrid Driven Framework
  - Data
  - TestNG
  - Maven Build
- Flexible Data Management
- Lesser Code Maintenance
- Lesser technical Knowledge to work, automate & execute flows.
- Reporting Granularity
  - Test Suite / Test Case / Test Step / Test Step details of reporting









Webpages



Actions

Framework



Driver Script



Maven Dependencies



Test Data



**Extent Reporting** 





- Identification of Functions required for flow
- Giving Data input to the functions

#### Execution

 Flow is executed as directed by testing.xml file mentioned through driver script











#### **Driver Script**

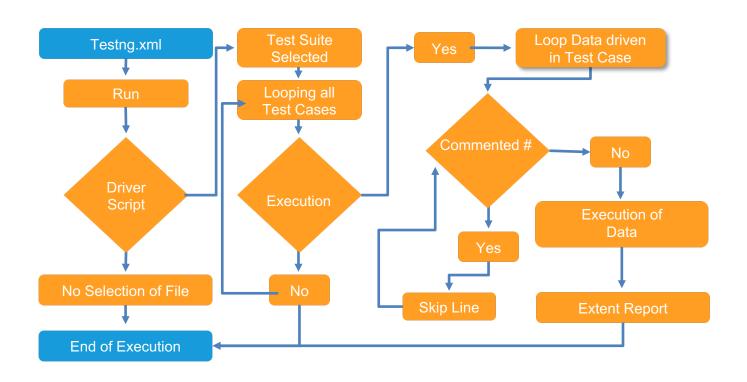
- Excel File Location
- Using Data providers to execute the flow multiple times
- Arranging the functions sequentially
- Calls the driver script class from suite testing xml file

#### **Extent Reporting**

Test Suite / Test Case / Test Step / Test Step Details

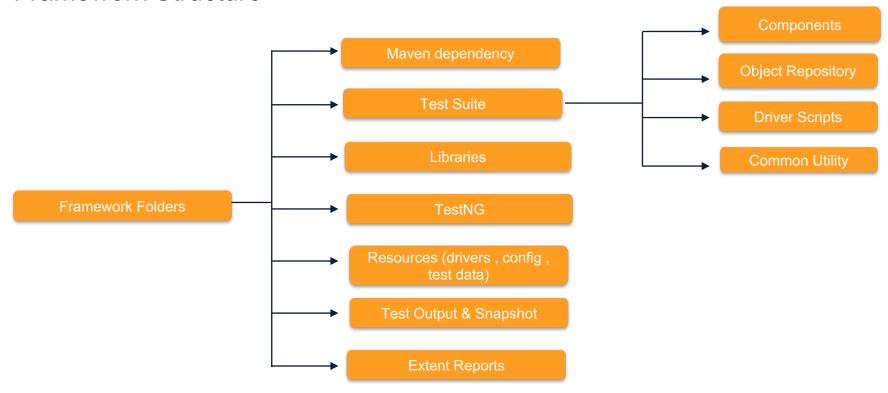
# Framework Architecture







## Framework Structure





Designed functional test cases for ready to automate.

#### **Execution of Test Case**

By Passing the input datasheet to Driver Script, we execute the flow.



Working with Framework









#### **Creation of Test Suite**

Designed a flexible way to group multiple test cases using testing.

#### Reports

Generating the reports with the help extent report.

# Thank You



