### Components Of Framework:

* This framework has following components.
  + Trigger.bat file **-- Framework Specific**
  + testng.xml **-- Framework Specific**
  + RunManager **-- Project Specific**
* Execution Controller
* TestData
  + library **-- Framework Specific**
* Excel Library
* LIstnerCLass
* WebLibrary
* Global Variables
  + TestScript Definitions **-- Project Specific**
* Module Definition
* ObjectRepository
* UserLibrary
  + Jar Files**-- Framework Specific**
  + BrowserServers**-- Framework Specific**
  + AutiITFiles**-- Framework Specific**
  + Results**-- Project Specific[Auto Generated]**

### Trigger.bat

* This file is used to trigger the executions of the testcases from windows explorer.
* Trigger.bat file will inturn invokes the testng.xml
* testng.xml will Takecare of the furthur executions.
* This is **framework specific file**

### testng.xml

* This file is used to trigger the executions of the testcases from eclipse.
* In this the references of the listner classes,libraries and testscript definitions are provided.
* This is **framework specific file**

### Run Manager

* In RunManager, we have two sheets
* Execution Controller
* TestData

### Execution Controller:

* This is an excel file in which all the testcase information is stored along with execution flag
* The following is the template of the Run Manager file



* Here the testengineer can select the testcases that are to be executed in the current Run.
* For the testscript development, the first task will be to mention the testcase in the runmanager.xls file.
* This is a **project specific file**

### Test Data

* In this folder we have to specify the testdata that is required for the execution of the testcase
* The TestData is stored against the testcasenames in these files
* The following is the template of specifying the testdata



* The Testdata is stored in the format of **FieldName:=TestData** for that field

**Example**:

UserName:=user02

Name:=Srinivas

* The following can be the naming convention that can be used for preparing the testdata.
* The FieldNames should have similar name of the field in the webpage.
* Firstletter of the Fieldname should start with capital letter
* FieldName should not contain any spaces
* If you have more than one significant word for a field name use Capital letter for each word.

**Example**:

* For relationship name field give the fieldname in testdata as RelationshipName
* For maritial status field give the field name in testdata as MaritialStatus
* This is a **Project specific file.**

### Library

* This contains the reusable methods for working with excel sheets,Report generation, working withWeb Pages etc.
* This is generally a **framework specific folder**.
* The methods or classes in this folder can be used by the listnerclasses or testcase definitions.
* These are specified in **com.library** package.

### Excel Library

* In this library all the methods that re required for the interactions with the excel sheets are specified.
* These methods can be used while developing a testcase for reading and writing the data to excel.
* The following are the sample methods in WebLibrary
* getdata
* getExecuteStatus
* getPriority
* getDescription
* The methods in this library are **generic,framework specific** and can be useful in writing the testcase.

### Global Variables

* This contains all the varibales which are to be accessed globally by all the classes

### ListnerClass

### This is the core script of the framework which drives the complete execution.

### ListnerClass implements **IAnnotationTransformer** Listner and **ITestListner** Listner

### Test Runner script opens the Runmanager file and checks the test cases that are set for execution.

### All the testcases that are selected are executed one by one sequentially.

### This is **framework specific script.**

### WebLibrary

* In this library all the methods that re required for the interactions with the webpage are specified.
* These methods can be used while developing a testcase for performing operations on the webelements.
* The following are the sample methods in WebLibrary
* setText
* clickElement
* Exist

The methods in this library are **generic,framework specific** and can be useful in writing the testcase.

### TestCase Definitions

* In this, we will define the actual testscripts code.
* We will create a method for every testcase,inside **TestScriptDefinitionspackage**.
* The testcase name should be same in RunManager,TestData Sheeet,methodName in test.testcasespackage.
* While writing the testcases, we will use the necessary methods which are already defined in
* **weblibrary and**
* **userlibrary classes**.
* This is a **project specific folder**

### JarFiles

* In This Folder all the required jar files for the framework are placed.
* These jar fields includes POI,Selenium,Extent Report files.
* For setting a project, first we need to add these jar files to the project in the eclipse.
* This is **framework specific component.**

### Results

* In this folder, results will be generated for every run.
* For every run,a folder is created with a date and time stamp.
* Inside the folder the respective screenshots and results summary.html is stored.
* This will be a **project specific folder**

### UserLibrary

* In this library, the Test Engineer can add methods for the reusable steps across the testcases.
* Before/After writing the testcases, TestEngineer will check for the reusability components in the testcase.
* Will check if the method is already existing for this functionality.
* If existing, TE can use that method in the testcase.
* Else,TE can add a method to the user library.
* The methods in this library are **generic,framework specific** and can be useful in writing the testcase.

### WebLibrary Methods:

**Methods on Web Elements:**

**setText():**

/\*\*

\* To Enter text into text field

\* **@author** AnkitReddy

\* **@author** tmasters.ankit@gmail.com,

\* **@Address** Testing Masters Technologies,Madhapur,9100034464,

\* testingmasters.madhapur@gmail.com

\* **@param** by -- get element reference

\* **@param** strValue -- TestData

\* **@param** driver -- driver Reference

\* **@return** -- true/false

\*

\*/

**protected** **static** **boolean** setText(By by,String strValue,WebDriver driver)

{

}

**clickElement():**

/\*\*

\* To Click on a Particulal Field

\* **@author** AnkitReddy

\* **@author** tmasters.ankit@gmail.com,

\* **@Address** Testing Masters Technologies,Madhapur,9100034464,

\* testingmasters.madhapur@gmail.com

\* **@param** by -- get element reference

\* **@param** driver -- driver Reference

\* **@return** -- true/false

\*

\*/

**protected** **static** **boolean** clickElement(By by,WebDriver driver)

{

}

**exists():**

/\*\*

\* To Verify Existence of WebElement

\* **@author** AnkitReddy

\* **@author** tmasters.ankit@gmail.com,

\* **@Address** Testing Masters Technologies,Madhapur,9100034464,

\* testingmasters.madhapur@gmail.com

\* **@param** by -- get element reference

\* **@param** driver -- driver Reference

\* **@return** -- true/false

\*

\*/

**protected** **static** **boolean** exists(By by,WebDriver driver)

{

}

**highlight():**

/\*\*

\* To Highlight Web Element

\* **@author** AnkitReddy

\* **@author** tmasters.ankit@gmail.com,

\* **@Address** Testing Masters Technologies,Madhapur,9100034464,

\* testingmasters.madhapur@gmail.com

\* **@param** by -- get element reference

\* **@param** driver -- driver Reference

\* **@return** -- true/false

\*

\*/

**protected** **static** **void** highlight(By by,WebDriver driver)

{

}

**setTextAndEscape():**

/\*\*

\* To Set Text into Web ELement and Escape. Mostly this method used for calender applications

\* **@author** AnkitReddy

\* **@author** tmasters.ankit@gmail.com,

\* **@Address** Testing Masters Technologies,Madhapur,9100034464,

\* testingmasters.madhapur@gmail.com

\* **@param** by -- get element reference

\* **@param** strValue -- TestData

\* **@param** driver -- driver Reference

\* **@return** -- true/false

\*

\*/

**protected** **static** **boolean** setTextAndEscape(By by,String Value,WebDriver driver)

{

}

**selectValueByText():**

/\*\*

\* To Set text from Drop down

\* **@author** AnkitReddy

\* **@author** tmasters.ankit@gmail.com,

\* **@Address** Testing Masters Technologies,Madhapur,9100034464,

\* testingmasters.madhapur@gmail.com

\* **@param** by -- get Element Reference

\* **@param** StrValue --Value to be select

\* **@param** driver -- driver Reference

\* **@return** -- true/false

\*/

**protected** **static** **boolean** SelectValueByText(By by,String StrValue,WebDriver driver)

{

}

**clickELements():**

/\*\*

\* To click on Array of Elements

\* **@author** AnkitReddy

\* **@author** tmasters.ankit@gmail.com,

\* **@Address** Testing Masters Technologies,Madhapur,9100034464,

\* testingmasters.madhapur@gmail.com

\* **@param** by -- get Element Referece

\* **@param** driver -- driver Reference

\* **@return** -- true/false

\*/

**protected** **static** **boolean** clickElements(By by,WebDriver driver)

{

}

**getElementText():**

/\*\*

\* To Get Text From Element

\* **@author** AnkitReddy

\* **@author** tmasters.ankit@gmail.com,

\* **@Address** Testing Masters Technologies,Madhapur,9100034464,

\* testingmasters.madhapur@gmail.com

\* **@param** by -- Get Element Reference

\* **@param** driver -- driver Reference

\* **@return** -- Element Text/Null

\*/

**protected** **static** String getElementText(By by,WebDriver driver)

{

}

**mouseHover():**

/\*\*

\* To Perform MoseHover on Web Element

\* **@author** AnkitReddy

\* **@author** tmasters.ankit@gmail.com,

\* **@Address** Testing Masters Technologies,Madhapur,9100034464,

\* testingmasters.madhapur@gmail.com

\* **@param** by -- get element reference

\* **@param** driver -- driver Reference

\* **@return** -- true/false

\*

\*/

**protected** **static** **boolean** mouseHover(By by,WebDriver driver)

{

}

**rightClikc():**

/\*\*

\* To Perform Right Click or To get Pop Up Window

\* **@author** AnkitReddy

\* **@author** tmasters.ankit@gmail.com,

\* **@Address** Testing Masters Technologies,Madhapur,9100034464,

\* testingmasters.madhapur@gmail.com

\* **@param** by -- get element reference

\* **@param** driver -- driver Reference

\* **@return** -- true/false

\*

\*/

**protected** **static** **boolean** rightClick(By by,WebDriver driver)

{

}

**dragAndDrop():**

/\*\*

\* To Perform drag and drop Operation on Element

\* **@author** AnkitReddy

\* **@author** tmasters.ankit@gmail.com,

\* **@Address** Testing Masters Technologies,Madhapur,9100034464,

\* testingmasters.madhapur@gmail.com

\* **@param** by -- get element reference

\* **@param** StrDropXpath -- Xpath of the Destination WebElement

\* **@param** driver -- driver Reference

\* **@return** -- true/false

\*

\*/

**protected** **static** **boolean** dragAndDrop(String StrDragXpath,String StrDropXpath,WebDriver driver)

{

}

**Methods on Windows and Frames:**

**switchTOframe():**

/\*\*

\* To Switch to a Frame on Window.

\* **@author** AnkitReddy

\* **@author** tmasters.ankit@gmail.com,

\* **@Address** Testing Masters Technologies,Madhapur,9100034464,

\* testingmasters.madhapur@gmail.com

\* **@param** by -- get reference

\* **@param** driver -- driver Reference

\* **@return** -- true/false

\*

\*/

**protected** **static** WebDriver switchToframe(By by,WebDriver driver)

{

}

**switchToWindowByTitle():**

/\*\*

\* To Switch to a Window Based on Title

\* **@author** AnkitReddy

\* **@author** tmasters.ankit@gmail.com,

\* **@Address** Testing Masters Technologies,Madhapur,9100034464,

\* testingmasters.madhapur@gmail.com

\* **@param** StrTitle -- Title of Window.

\* **@param** driver -- driver Reference

\* **@return** -- true/false \*

\*/

**protected** **static** WebDriver switchToWindowByTitle(String StrTitle,WebDriver driver)

{

}

**switchTowindowByURL():**

/\*\*

\* To Switch to a window based on URL

\* **@author** AnkitReddy

\* **@author** tmasters.ankit@gmail.com,

\* **@Address** Testing Masters Technologies,Madhapur,9100034464,

\* testingmasters.madhapur@gmail.com

\* **@param** StrURL -- URL of the Window to Switch

\* **@param** driver -- driver Reference

\* **@return** -- true/false

\*

\*/

**protected** **static** WebDriver switchToWindowByURL(String StrURL,WebDriver driver)

{

}

**closeWindowByTitle():**

/\*\*

\* To Close Window Based on Window Title

\* **@author** AnkitReddy

\* **@author** tmasters.ankit@gmail.com,

\* **@Address** Testing Masters Technologies,Madhapur,9100034464,

\* testingmasters.madhapur@gmail.com

\* **@param** StrTitle -- Window Title which you want to Close

\* **@param** driver -- driver Reference

\* **@return** -- true/false

\*

\*/

**protected** **static** **boolean** closeWindowByTitle(String StrTitle,WebDriver driver)

{

}

/\*\*

\* To Close Window Based on URL

\* **@author** AnkitReddy

\* **@author** tmasters.ankit@gmail.com,

\* **@Address** Testing Masters Technologies,Madhapur,9100034464,

\* testingmasters.madhapur@gmail.com

\* **@param** StrURL -- URL of Window You want to close.

\* **@param** driver -- driver Reference

\* **@return** -- true/false

\*

\*/

**protected** **static** **boolean** closeWindowByURL(String StrURL,WebDriver driver)

{

}

**Methods on Alerts:**

**alertGetText():**

/\*\*

\* To get text of Alert.

\* **@author** AnkitReddy

\* **@author** tmasters.ankit@gmail.com,

\* **@Address** Testing Masters Technologies,Madhapur,9100034464,

\* testingmasters.madhapur@gmail.com

\* **@param** driver -- driver Reference

\* **@return** -- true/false

\*

\*/

**protected** **static** String alertGetText(WebDriver driver)

{

}

**acceptAlert():**

/\*\*

\* To accept the alert.

\* **@author** AnkitReddy

\* **@author** tmasters.ankit@gmail.com,

\* **@Address** Testing Masters Technologies,Madhapur,9100034464,

\* testingmasters.madhapur@gmail.com

\* **@param** driver -- driver Reference

\* **@return** -- true/false

\*

\*/

**protected** **static** **boolean** acceptAlert(WebDriver driver)

{

}

**dismissALert():**

/\*\*

\* To dismiss alert.

\* **@author** AnkitReddy

\* **@author** tmasters.ankit@gmail.com,

\* **@Address** Testing Masters Technologies,Madhapur,9100034464,

\* testingmasters.madhapur@gmail.com

\* **@param** driver -- driver Reference

\* **@return** -- true/false

\*

\*/

**protected** **static** **boolean** dismissAlert(WebDriver driver)

{

}

**AlertExists():**

/\*\*

\* To Verify alert Exist.

\* **@author** AnkitReddy

\* **@author** tmasters.ankit@gmail.com,

\* **@Address** Testing Masters Technologies,Madhapur,9100034464,

\* testingmasters.madhapur@gmail.com

\* **@param** driver -- driver Reference

\* **@return** -- true/false

\*

\*/

**protected** **static** **boolean** AlertExist(WebDriver driver)

{

}

**Methods on Implicit Wait & Dynamic Wait:**

**setImplicitWait():**

/\*\*

\* To set Max TimeOut For Driver Instance.

\* **@author** AnkitReddy

\* **@author** tmasters.ankit@gmail.com,

\* **@Address** Testing Masters Technologies,Madhapur,9100034464,

\* testingmasters.madhapur@gmail.com

\* **@param** TimeInsec -- number of seconds to wait.

\* **@param** driver -- driver Reference

\* **@return** -- true/false

\*

\*/

**protected** **static** WebDriver SetImplicitWait(**int** TimeInSec,WebDriver driver)

{

}

**wait():**

/\*\*

\* To wait for a Specified Time Duration.(in Seconds)

\* **@author** AnkitReddy

\* **@author** tmasters.ankit@gmail.com,

\* **@Address** Testing Masters Technologies,Madhapur,9100034464,

\* testingmasters.madhapur@gmail.com

\* **@param** TimeInsec -- number of seconds to wait.

\* **@param** driver -- driver Reference

\* **@return** -- true/false

\*

\*/

**protected** **static** **boolean** wait(**int** timeInSec)

{

}

**dynamicWait():**

/\*\*

\* To Wait Specified time Duration untile Web Element Exist on Page.

\* **@author** AnkitReddy

\* **@author** tmasters.ankit@gmail.com,

\* **@Address** Testing Masters Technologies,Madhapur,9100034464,

\* testingmasters.madhapur@gmail.com

\* **@param** StrXpath -- Xpath of Web Element.

\* **@param** TimeInsec -- number of seconds to wait.

\* **@param** driver -- driver Reference

\* **@return** -- true/false

\*

\*/

**protected** **static** **boolean** dynamicWait(By by,WebDriver driver,**int** waittimeinsec)

{

}

**WaitAlertExistent():**

/\*\*

\* To verify alert exist after particular time instance.

\* **@author** AnkitReddy

\* **@author** tmasters.ankit@gmail.com,

\* **@Address** Testing Masters Technologies,Madhapur,9100034464,

\* testingmasters.madhapur@gmail.com

\* **@param** TimeInsec -- number of seconds to wait.

\* **@param** driver -- driver Reference

\* **@return** -- true/false

\*

\*/

**protected** **static** **boolean** WaitAlertExistence(**int** TimeInSec,WebDriver driver)

{

}

**Methods on To Upload Files:**

**AutoITFileUpload():**

/\*\*

\* To upload File based on .exe file

\* **@author** AnkitReddy

\* **@author** tmasters.ankit@gmail.com,

\* **@Address** Testing Masters Technologies,Madhapur,9100034464,

\* testingmasters.madhapur@gmail.com

\* **@param** exeFileName -- Name of the File to upload.

\* **@param** exeFilePath -- Path of the File where it Located.

\* **@return** -- true/false

\*

\*/

**protected** **static** **boolean** AutoITFileUpload(String exeFileName,String Filepath)

{

}

**RobotKeysFileUpload():**

/\*\*

\* To Upload file Based on Path

\* **@author** AnkitReddy

\* **@author** tmasters.ankit@gmail.com,

\* **@Address** Testing Masters Technologies,Madhapur,9100034464,

\* testingmasters.madhapur@gmail.com

\* **@param** FilePath -- Path of File where it is located.

\* **@return** -- true/false

\*

\*/

**protected** **static** **boolean** RobotKeysFileUpload(String Filepath)

{

}

**Methods on To Browser handlinng and URL launching:**

**launchBrowser():**

/\*\*

\* To Launch Browser Base on Name Given

\* **@author** AnkitReddy

\* **@author** tmasters.ankit@gmail.com,

\* **@Address** Testing Masters Technologies,Madhapur,9100034464,

\* testingmasters.madhapur@gmail.com

\* **@param** by -- get element reference

\* **@param** driver -- driver Reference

\* **@return** -- true/false

\*

\*/

**protected** **static** WebDriver launchBrowser(String BrowserName)

{

}

**quitDriver():**

/\*\*

\* To Close all Window Instances.

\* **@author** AnkitReddy

\* **@author** tmasters.ankit@gmail.com,

\* **@Address** Testing Masters Technologies,Madhapur,9100034464,

\* testingmasters.madhapur@gmail.com

\* **@param** driver -- driver Reference

\* **@return** -- true/false

\*

\*/

**protected** **static** Boolean quitDriver(WebDriver driver)

{

}

**OpenUrl():**

/\*\*

\* To Open URL in the Driver Reference

\* **@author** AnkitReddy

\* **@author** tmasters.ankit@gmail.com,

\* **@Address** Testing Masters Technologies,Madhapur,9100034464,

\* testingmasters.madhapur@gmail.com

\* **@param** URL -- address of Web Application to Open

\* **@param** driver -- driver Reference

\* **@return** -- true/false

\*

\*/

**protected** **static** Boolean OpenUrl(String URL,WebDriver driver)

{

}