UNIFIED FUNCTIONAL TESTING AND AUTOMATION

Project report submitted in partial fulfillment of the requirement for the degree of

BACHELOR OF TECHNOLOGY

IN

ELECTRONICS AND COMMUNICATION ENGINEERING

By

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UNDER THE GUIDANCE OF

Mr. Somasekar

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

MAY 2021

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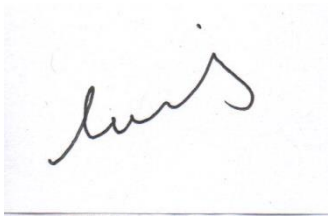
DECLARATION

We hereby declare that the work reported in the B.Tech Project Report entitled **"Unified functional Testing and Automation"** submitted at **Jaypee University of Information Technology, Waknaghat, India** is an authentic record of our work carried out under the supervision of **Mr. Somasekar .** I have not submitted this work elsewhere for any other degree or diploma.



_____

Nikunj Rastogi

171080

This is to certify that the above statement made by the candidates is correct to the best of my knowledge.

Head of the Department/Project Coordinator

ACKNOWLEDGEMENT

This report documents the work done during the submission of Major project under the supervision of MR. SOMASEKAR . This report first shall give the overview of the tasks completed during the period of work with technical details.

We would also like to thank our Head of Department Dr. Rajiv Kumar for granting us the opportunity to do our work.

Report shall also elaborate on the future work which can be persuaded as an advancement of current work.

I have tried my best to keep it small & technically simple.

NIKUNJ RASTOGI

LIST OF ACRONYMS AND ABBREVIATIONS.

MFT– Manual functional testing

SQL – Structured Query Language

XML -- Extensible Markup Language

JSON – Javascript object Notation

RTM – Requirement Traceabilty Index

DF– Defect Cases.

VBscript- Microsoft virtual basic scripting

UFT- Unified Functional Testing

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ABSTRACT

In this report of Unified functional testing and Automation we use certain concepts of functional testing and Sql along with Json and Vbscript and some very useful software libraries and fundamentals of XML.

Major aim is to gathered our desired results with satisfactory accuracy of above 85%.

Here we use Microfocus Unified Functional testing software

CHAPTER-1

FUNCTIONALTESTING

1.1. SOFTWARE TESTING

Software Testing is a method to verify whether the current active software product matches expectations or not and to ensure that software product is bug free. It involves execution of software components using manual testing or automated testing tools to evaluate properties of interest. The purpose of software testing is to identify whether errors, gaps or missing componential is there or not.

Software Testing is highly compulsory because if there are any defects available in the software, it can be identified early and can be resolved before the delivery of the product. Properly tested software product ensures reliability, well maintained interface, security and high performance resulting in time saving, cost effectiveness and customer satisfaction.

1.1.1 SOME MAJOR SOFTWARE TESTING LEVELS-

- Functional and Non-Functional testing
- Integration testing
- Unit testing
- System testing
- Acceptance testing
- Performance testing
- Security testing
- Usability testing
- Compatiblity testing
- Test complete testing

1.2. Functional vs Non Functional

Functional testing involves testing of the particular application designed according to the business requirements. It incorporates all test designs to ensure each part of software behaves as per the expectation by using cases provided by the design team & business analyst.

Non-functional testing methods generally focused on the operational aspects of a piece of software.

1.2.1. Unit Testing

Unit testing is first level of testing and is usually performed by the developers by their own. It is the process of ensuring individual components of software at the script level are functional or not and and work as per the expectation . Developers in a test-driven environment will typically write and run the tests prior to the software being passed over to the final testing team. it can be conducted manually, and automation makes this process really fast and helps in speeding up deliveries. Unit testing will also make the debugging process easier because finding issues earlier results to taking the less time to fix than if they were discovered later in the testing process.

1.2.2. Integration Testing

After each unit is thoroughly tested, it is integrated with other units to create modules or components that are designed to perform specific tasks or activities. These are then tested as group through integration testing to ensure whole segments of an application behave as expected (i.e, the interactions between units are seamless). These tests are often framed by user scenarios, such as logging into an application or opening files.

1.2.3. System Testing

System testing is a black box testing method used to evaluate the completed and integrated system, as a whole, to ensure it meets specified requirements. The functionality of the software is tested from end-to-end and is typically conducted by a

separate testing team than the development team before the product is pushed into production.

1.2.4 Acceptance Testing

Acceptance testing is the last step of functional testing and is used to assess whether the final piece of software is ready to be in the market or not. It involves assurance that the product is in compliance with the specified business criteria ,

TT_01	ksrtc bus booking-valid search	to check whether user is able to book if provide valid inputs	REQ_1
TT_02	ksrtc bus booking-invalid sear	to check whether user is able to book if provide invalid inputs	
TT_03	ksrtc bus booking-field valida	to check whether user is able to book if he provide partial valid	REQ_2
TT_04	ksrtc bus booking-search results	to check whether search button is working properly or not if user provide valid inputs	REQ_3

test cases

1.2.5. Performance Testing

It is a non-functional testing technique used to determine how an application behave under different condition with some parameters.

1- Load testing.
2- Stress testing
3- Endurance testing
4- Spike testing

1.2.6. Security Testing

With the rise in demand of cloud based server testing and cyber threats this creates the high concern for the security of data stored. It is non functional form of testing used to know whether the information or data is prptected or not. Primary aim behind the performing of this technique is to any loopholes and security risks in the system.

There are multiple types of this testing method, each of which aimed at verifying six basic principles of security:

1-– Integrity

2-– Authority

3– Authentication

4-- Confedentiality

5—Availabilty

6 – Non Repudiation

1.2.7. Usabilty Testing

It is used to measure how easy the application is to use from the user end perspective

And how smooth the interface is, the testing is generally perfomed during the acceptance testing stages, the goal is to determine whether the visible design and asthetics of application meet the intended workflow such as change password, log in with mobile number etc. it is the great way to review certain functions.

1.2.8 Compatibility Testing

This testing is used to measure how an application and software will work in different applications. The application is compatible or not with multiple operating syatems like Windows, IoS, and multiple browsers, extensions , the prime pourpose is to ensure that software functionality is consistently supported.

1.3. Test Process

Test process generally consists of 3 stages:

Plan – Analysis, strategy, Tools

Design – Testcases, scripts, environment, Scenarios

Execution – test report, Defect tracking, defect analysis, Report.

I no	Requirement id	Requirment description	Test scenario id	Test case id	Defect id
1	REQ_1		TT_01	TT_011	
				TT_012	
				TT_013	
				TT_014	
				TT_015	
				TT_016	
				TT_017	
				TT_018	
				TT_019	
				TT_0110	
				TT_0111	
				TT_0112	
				TT_0113	DF_001
				TT_0114	DF_001
				TT_0115	DF_001
				TT_0116	DF_001
				TT_0117	DF_001
				TT_0118	DF_001
2	REQ_2		TT_02	TT_021	
				TT_022	
3	REQ_3		TT_03	TT_031	
				TT_032	

defect report

This whole process is of 7 Activities:-

- Planning
- Monitoring
- Control
- Analysis
- Design
- Implementation
- Execution
- Completion

Environment is a place where testing is performed it could be a simulator , firefox windows10 etc

1.4. Alpha testing and Beta testing

- Alpha testing- In this type the prime customers to the company come and test the application.

- Beta testing- Customers test the software from their home. It means the version is under testing and give us bugs about the product.

1.5. Types of software Testing

1-Black Box Testing- In this the testing is performed without knowing the internal structure of the software, database and APIs

2- White Box Testing- Monitoring the internal structure of the software Includes in this type.

3-Dynamic testing- it includes the testing by running the cod dynamicaly or in the embedded form.

4-Retesting- It includes the testing after debugging.

5-Regression testing- It includes testing of unchanged areas to finally ensure that they are not affected by the changes

6-Smoke Testing- It includes the testing of main functionalties to ensure that the build is strong enough to continue with the further proceedings.

CHAPTER 2

SQL AND JSON COMMANDS

2.1. Structured Query language

SQL stands for structured query language that helps to access and manipulate databases . Although Sql is ANSI/ISO standard but there are many versions available

Of the SQL language, However to be Compliant with the standards they all are support at least major commands such as (**SELECT, UPDATE, DELETE, INSERT,WHERE)** in a similar manner.

2.2. What can SQL generally does

- SQL can execute queries against a database

- SQL can also retrieve data from database
- SQL insert records in a database
- SQL can update records in a database
- SQL can delete records from a database
- SQL can create new databases
- SQL can create new tables in database
- SQL can create stored procedures in database
- SQL can create views in database
- SQL can set permissions on tables, procedures, and views

2.3. RDBMS

RDBMS is generally the collection of data in form of tables(Rows and Column
One can retrieve data from the tables with the help of SELECT commands.

*SELECT*FROM students;*

It is an Example of SQL command that operates on the Table students

Modern Database systems SQL, IBM DB2, ORACLE, MY SQL are based on RDBMS.

2.4. SQL NULL Values

A field with no value is termed as Null value.

We have to use IS NULL AND IS NOT NULL Instead of conditional operators.

e.g

```
SELECT column_name
FROM table_name
WHERE column_name IS NOT NULL;
```

2.5. JSON COMMANDS.

Java script object notation is a file format which is used to store information in an organized and easy to access manner. It offers readable collection of data which can be accessed by using extension .json.

Here are some benefits of using Json:

- All browser support
- Parse in java using eval() function.
- Direct and crisp syntax
- Supported by most backend technologies
- Easily recognizes with java script
- Java script framework supporting it
- Transmit and serialization of data is possible

2.5.1. Rules associated with Json

1- Data should be in name value pairs
2- It should be separated by Commas
3- Objects should be hold by {} brackets.
4- Array should be hold by [] brackets

Data types available in json

- Number
- Boolean
- Null
- Object
- Array

2.6. JSON OBJECTS

A **JSON Object** is an entity in JSON which is enclosed in {} brackets and written in the unordered set of name and value pairs in which the name should be followed by ":" and the name/value pairs should be separated using "," (comma). It can be used when key names are arbitrary strings.

{String : Value , ……} //syntax

We can also insert the whitespace between the any pair of tokens

2.7. APPLICATIONS OF JSON

- It helps us to perform transfer data from webserver
- Allows to perform asynchronous data & calls without the page refresh need.
- Transmission of data between server and web application
- We can match json with modern programming language
- Restful APIs and web services use the json format to set public data.

2.8. POPULAR JSON ADDONS

- **JSON**
- **int:** it is a light weight data interchange format. An open source project which work as a validator and reformatter for the JSON.

- **JSON minifier tool:** it helps us to remove the excess whitespace present in our code

- **JSON Editor Online:** it is a online webbased tool which helps us in editing and format json script. It shows the change Side by Side.

- **JSON Formatter:** this tool is used to ease the read and debug process.

CHAPTER-3

EXTENSIBLE MARKUP LANGUAGE

3.1. INTRODUCTION

It is a text based markup language which is been derived from standard generalized markup language, tags of XML are used to organize and store the data not unlike html on how to showing or displaying it but this does not mean XML going to replace html but it generates new possibilities by adopting the successful and high demand features of HTML.

IMPORTANT CHARACTERISTICS OF XML

- It is extensible allows us to create our own descriptive tags
- It carries the data but not present
- It is of a public standard developed by the Word Wide Web Consotorium(W3C)

3.2. MARKUP

XML particularly defines the set of rules for documents encoding that helps to make it readable for both human and machine. Markup is generally the piece of information added to document that enhance its meaning in certain ways moreover identifies its parts and how they relate to each other , a markup language is a set of symbols that can be placed in the text of a document to demarcate and label the parts of that document.

<Message>

<Text>hello world</Text>

</Message>

3.3. USAGE OF XML

- To simplify the creation of HTML it can work behind the scene
- Exchange of information between organisation and system can be easily performed

- Can be used for offloading and reloading of database
- To create any desired output we easily merge with different style sheets

3.4. SYNTAX RULES

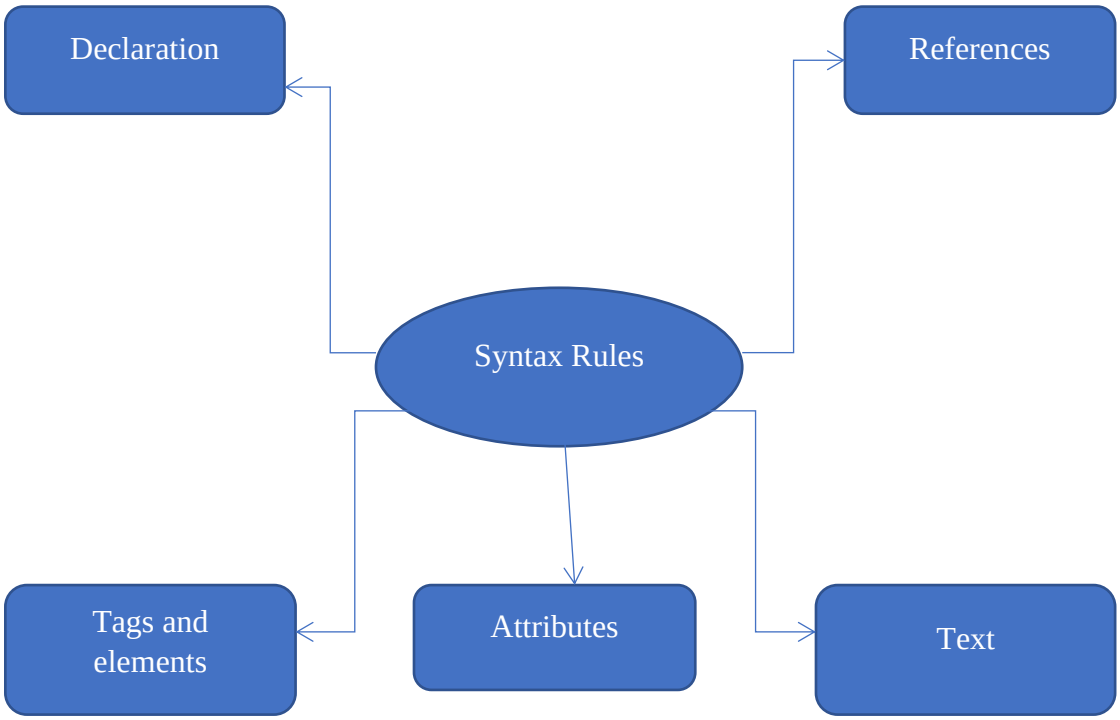


Fig 3.0

3.5. XML DECLARATION

<?xml version = “1.0” encoding = “utf-9”?>

3.5.1. Syntax rules

- The XML declaration case sensitive markup and should starts with "**<?xml>**" where "**xml**" is written in lower-case.
- If document contains XML declaration, then it compulsory should be the first statement of the XML document.
- An HTTP protocol override the value of *encoding* that mentioned in the XML declaration.

3.6 XML Tags

Tags are used to classify the scope of elements and also be used to insert comments, declared settings required for the parsing of the environment and to insert some special instructions

Xml tags are which are broadly classified

1- **Start tag-** every non-empty XML element should begins with the Start Tag

<address>

2- **End tag-** element which starts with START tag should ends by the end tag if not then it shows the error.

</address>

3- **Empty tag-** text between the start tag and the end tag is termed as content. Element without any content is empty tag.

<address>

</address>

Xml tags are the case sensitive so one have to be extra careful.

<address> optimus prime 32 </Address> //error

<address> optimus prime 32</address> //passed

- XML tags should be opened and closed in an appropriate order, i.e., an XML tag opened inside another element must be closed before the closing of outer element.
  .

e.g <*outer_element*>

<*inner_element*>

<name> prada </prada>

</inner_element>

<outer_element>

3.7. XML ENCODING

It is the process of converting the Unicode characters into binary equivalents. When the xml processor reads the xml document it encodes the document depending upon the type of encoding. Encoding type is present in prolog section of the Xml document.

broadly two types of encoding

UFT – 8 and UFT – 16

Where UFT stands for UCS Transformation format and UCS itself is Universal Character Set and 8 or 16 denotes the bits.

<? Xml version = "1.0" encoding = "UTF-16" standalone = "no" ?>

3.8. XML VALIDATION

The process of valiging the XML document is known as xml validation. It is said to be valid if its contents matches with the attributes ,

1) Well formed XML document
2) Valid document

If well described XML document is associated with the document declaration type then it is termed as valid document.

The XML document declaration type is way to draft XML language precisely. It inspects the validity and vocabulary of XML document. It can be either specified in the document or kept somewhere in the separate document.

CHAPTER-4

VB SCRIPT FUNDAMENTALS.

4.1. INTRODUCTION

Microsoft VB script is generally the active scripting language developed by the Microsoft which is modeled on Virtual basic. It is the most used language by the software tester on unified functional testing which is the automation testing tool

VBA is the tool of Microsoft which is available not only on Microsoft products like MS tool but also available in the software used for CAD and Designing. It is also used for client side scripting in Internet Explorer.

Environments Where VBScript Runs are as follows-

- **IIS(Internet Information Server)**
- **IE(Internet Explorer)**
- **WSH(Windows Script Host)**

4.2. Essential Features of VB script

- This lightweight interpretating language have a lightning fast interpretator.
- It is an object based programming language not an object oriented like C++,java.
- It uses a server side scripting environment(ASP) for creating dynamic web pages
- Window scripting host used by Windows system administrators for automation of windows desktop.
- It has very accurate command line support
- It is a case insensitive language.
- Here all declared variable are variant by default.

4.3. Syntax and Enabling

Vb script syntax is defined as the set of rules under which commands is given by the developer and interpreted by the browser or environments.

<script type= "text/vbscript">

Document.write("Major project submission")

</script>

When the statement is bit lengthy then user wants to break into some fragments this can be possible with the help of CONCATENATION which is declared by using "_". This enhances the readability of the code.

4.3.1. Reserved Words

In VB script we have a set of words which are reserved these words should not be used as Variable and constant or any other identifier.

loop	nothing	next	optional	Me	new	Null	not	on
option	or	preserve	private	public	Rem	Resume	Select	Set
Shared	Single	Static	Stop	Sub	Then	To	True	Type
As	And	Boolean	Byte	ByVal	ByRef	Call	Case	Class
Cost	Currency	Debug	Dim	Do	Double	Each	Else	Elself
Empty	End	Enum	EndIf	Exit	Event	False	For	Function
Get	Goto	If	Imp	In	Integer	Is	Let	Like
Long	Until	While	With	Xor	Execute	Erase	Msgbox	Randomize

Table 4.1

One can also use COMMENTS in VB scripts at some place in order to present the logic that we used in the code. It includes developed by, modified by and also some incorporated logics that we might need in future.

Not all the browsers support the VB script only internet explorer supports so that many developers prefer java script over VB script. In internet explorer one have to enable it.

4.4. Steps required to turn ON the VB script

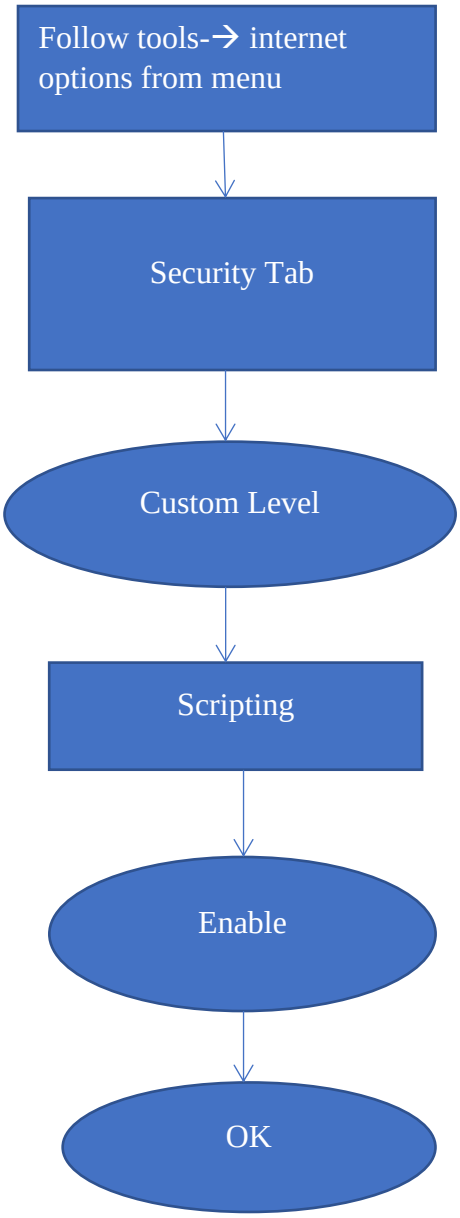


Fig 4.1

4.5. Declaring Variables and constants

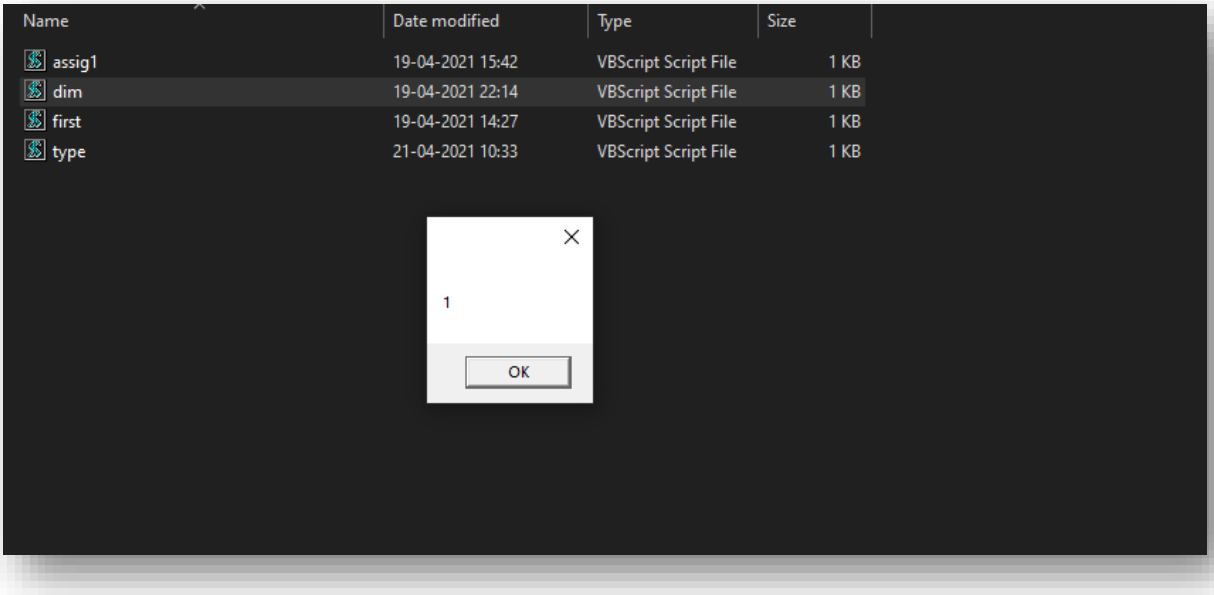
Variable is a named memory location that is used to store value which have changed during the execution . there is only one fundamental datatype known as VARIANT.

- Variable must begin with an alphabet
- Variable name not exceed the 255 characters limit.
- It must be declared using the Dim Key word.

Dim var //single variable

Dim var1,var2 // multiple variables

In the variables the values are assigned in similar format as of the algebraic expression. Variable name followed by (=) followed by variable value.



Numeric value declaration

.

4.6. Loops in the VB script

In some situations we have to execute a particular block of code several number of times, this can be made possible with the help of loops available in VB script

Loop control statements alters the execution from its normal sequence resulting all the remaining statements will not executed

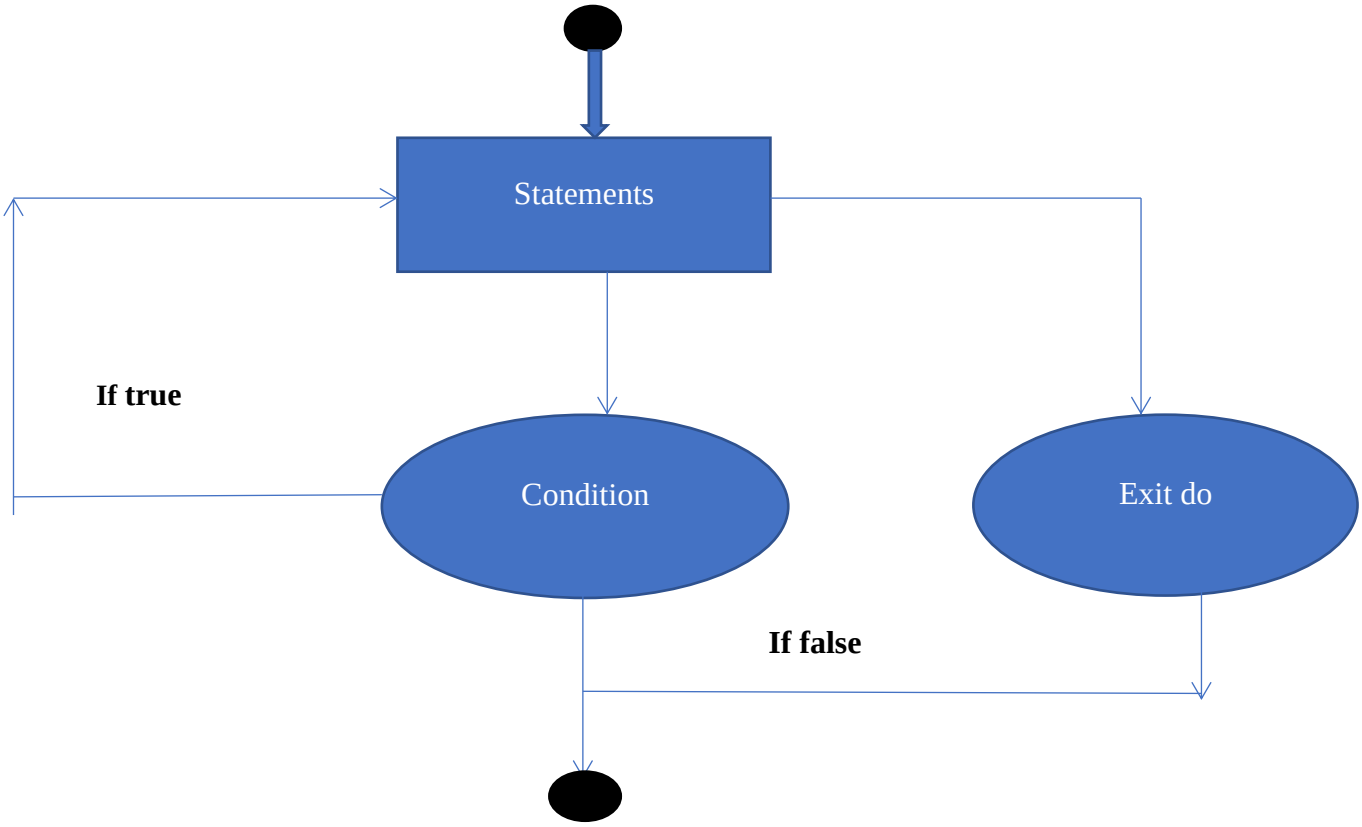


Fig 4.2

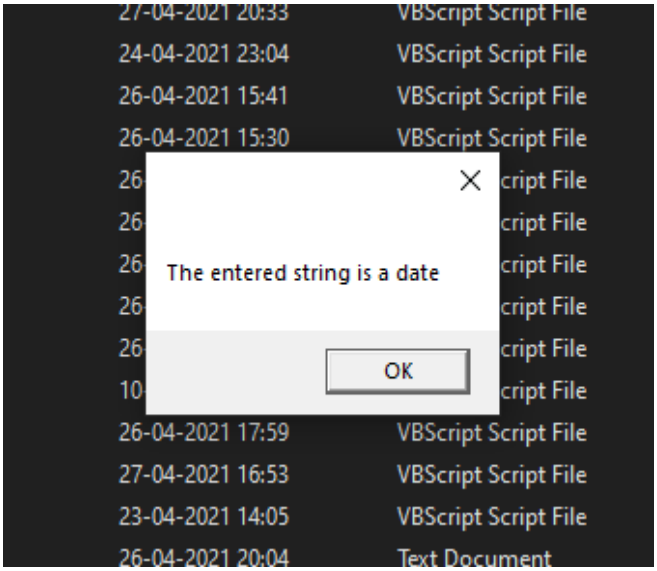
Loop control statements-

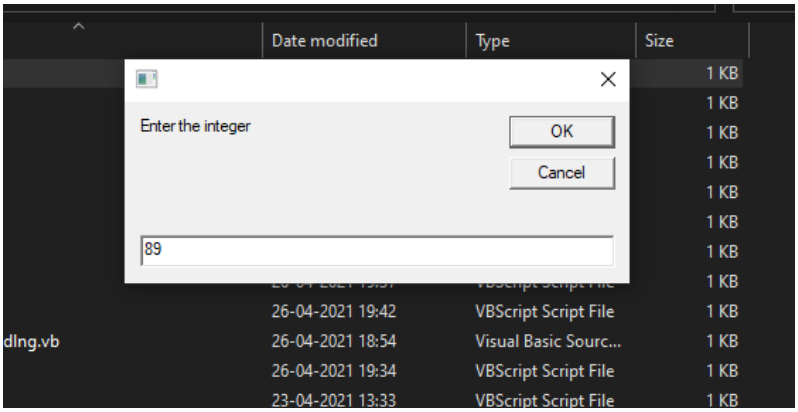
Statement Name	Working
Exit For Statement	It terminates the for loop execution
Exit Do Statement	It terminates the do loop execution

Table 4.2

Loop type	Description
For loop	Sequence of statements execute multiple times and abbreviates the code
For…Each Loop	Execution is possible if at least one element is present in the group
While…wend loops	It tests the condition before executing loop body
Do…While loops	It will execute as long as condition is true
Do..Until loops	It will execute as long as the condition is false

Table 4.3





CHAPTER -5

UNIFIED FUNCTIONAL TESTING

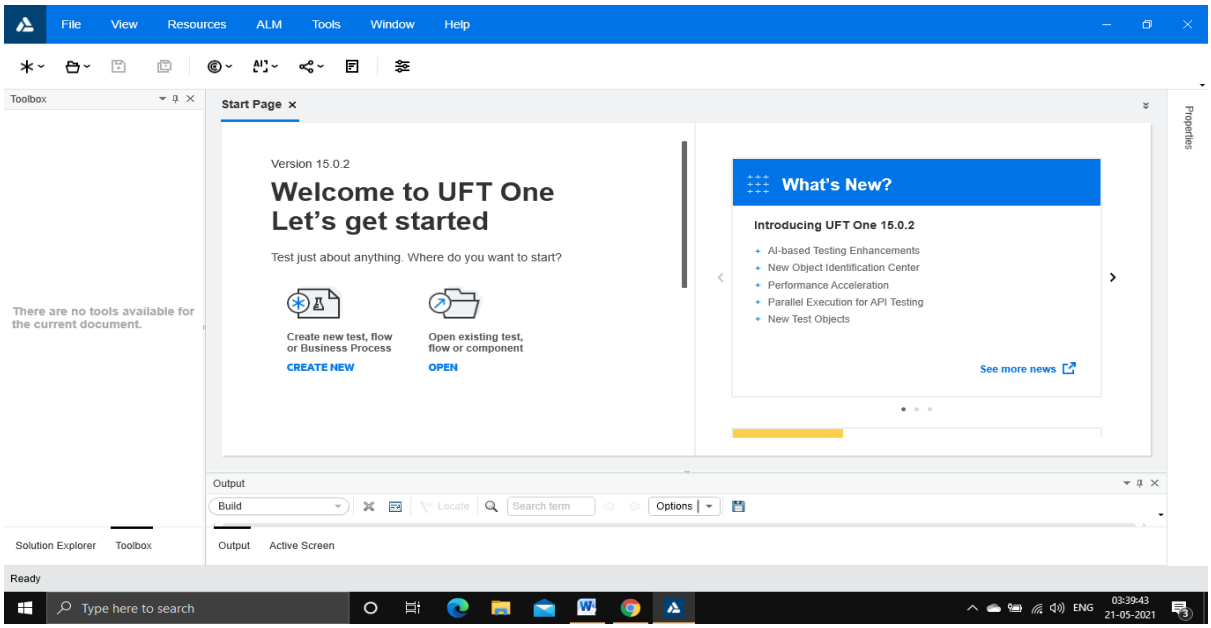
5.1. Introduction

It is the functional testing automation which can be performed on HP unified functional testing software or at Micro Focus Unified functional testing software, it helps us to check the functioning of the web pages, web sites, social media sites etc. in order to test the functionality we must have to create its object. this object is been stored inside the repository it is termed as object repository one can easily create the object repository form the Resources and store it for the further proceedings.

On opening the UFT software we get a ADD INS menu from which we have to select the ADD INS we require during our testing process.

Suppose one wants to validate a website then we must have to select the WEB ADD IN

There are several types of ADD INS available like java ,mobile, oracle and many more.



5.2. Creation of New test

In order to create the new test for testing we must allow the UFT extension in the browser

After doing that when we click on the installed software then screen as shown above appears in front of us.

New test is been created through following steps:

- Click on New test
- Select a name for the test
- Click create
- New test is been created

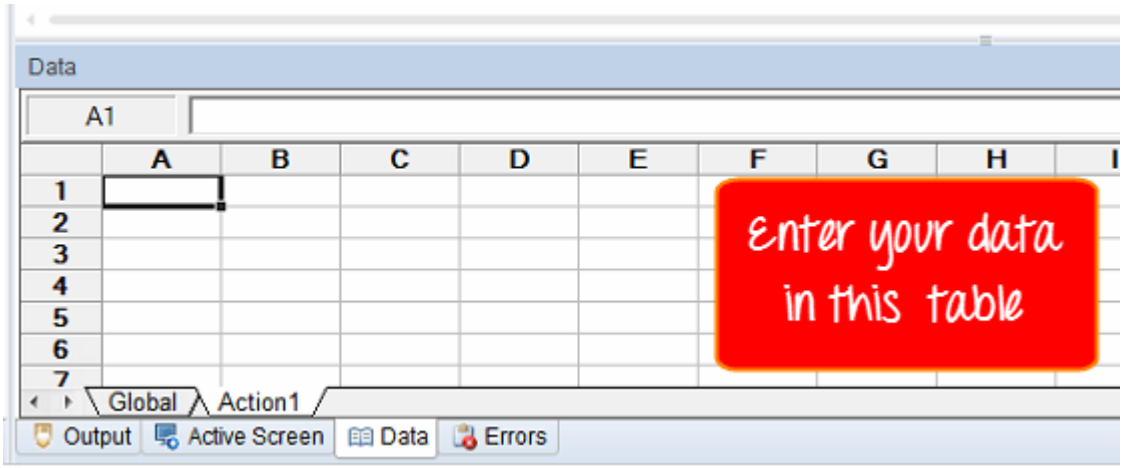
UFT remembers the ADD INS that you select so that next time when you opens the software the previously selected ADD INS is reselected by default

Following are the major components of the IDE:

1) Menu Bar
2) Properties Window
3) Solution Explorer
4) Toolbox tab
5) Active screen
6) Document tab
7) Data tab

5.3. Data table.

We can enter the data in our test with the help of data table .this data table is in the form of spreadsheet. For certain testings of softwares or websites we need to provide external values these values is been entered in the data table, during execution these values are automatically accessed.



Source guru99

5.4. Object repository

For the further execution of the test we need to create the object repository of the application or webpage we are going to test. This object repository is been saved in our system in the form of .tsr file.

Steps to create an object repository

- Go to resources
- Select object repository from drop down
- Click on (+) add objects to local
- Click on the top of application and webpage.
- An object is created
- Manage your repositories from object repository manager.

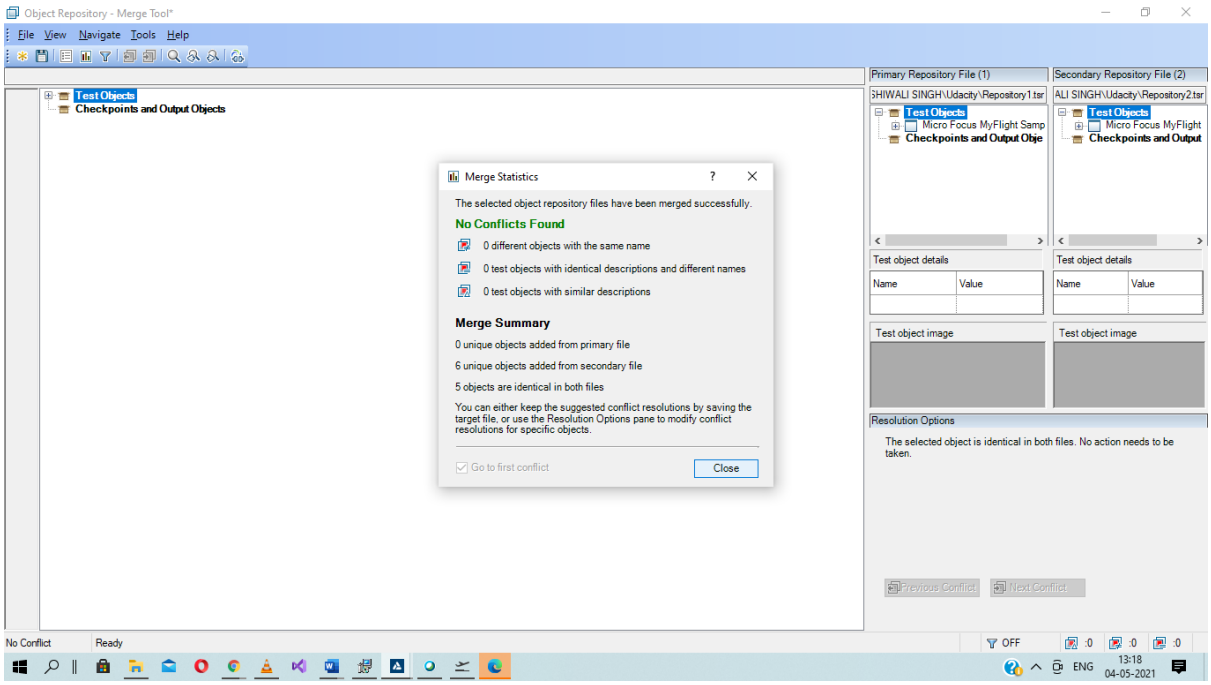
To test the web application or the website. The test should be started with

SystemUtil.Run “iexplore.exe” , “website name”
Browser(“Name”).page(“page name”).Sync

SystemUtil command is used by default by uft in order to open any application

5.4.1. Merging of repository

We can merge two repositories in the UFT Uft one allows us to merge two shared object repositories in to single shared object repository.



5.5. Record

Before starting the recording first we need to identify the steps that we need to Automated. When we click on record then the current software window is minimized an then what settings we choose in the record settings on that basis our script starts generating automatically.

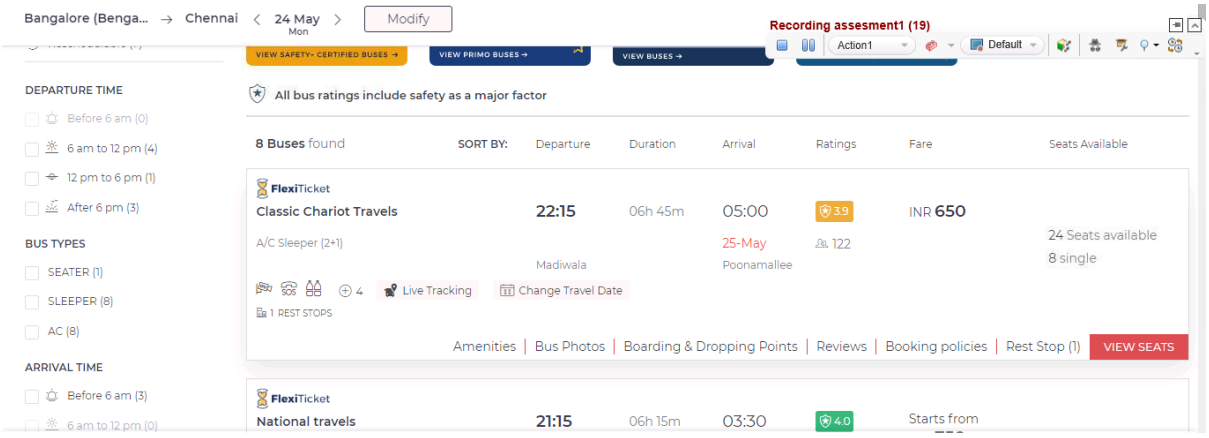
And when we end our application after going through the intermediate steps then we have to stop the recording and our final script is now visible in the action screen.

Below is the example of the recorded script of bus booking application

```
Window("Program Manager").WinListView("SysListView32").Activate "Google Chrome"
Browser("Website restore error").Navigate "https://www.redbus.in/"
Browser("Website restore error").Page("Book Bus Travels, AC Volvo").WebEdit("WebEdit").Set "bang"
Browser("Website restore error").Page("Book Bus Travels, AC Volvo").WebElement("Bangalore (All Locations)").Click
Browser("Website restore error").Page("Book Bus Travels, AC Volvo").WebEdit("WebEdit_2").Set "mumbai"
Browser("Website restore error").Page("Book Bus Travels, AC Volvo").WebElement("Mumbai (All Locations)").Click
Browser("Website restore error").Page("Book Bus Travels, AC Volvo").WebElement("21").Click
Browser("Website restore error").Page("Book Bus Travels, AC Volvo").WebButton("Search Buses").Click
Browser("Website restore error").Page("Bangalore (Bengaluru)").WebElement("WebElement").Click
Browser("Website restore error").Page("Bangalore (Bengaluru)").WebElement("WebElement").Click
Browser("Website restore error").Page("Bangalore (Bengaluru)").Image("no_bus").Click
Browser("Website restore error").Page("Bangalore (Bengaluru)").WebElement("WebElement").Click
Browser("Website restore error").Page("Bangalore (Bengaluru)").WebElement("WebElement_2").Click
Browser("Website restore error").Page("Bangalore (Bengaluru)").WebElement("All bus ratings include").Click
```

Source- system

Output of the recorded script



Record is one of the most essential feature of Micro focus UFT.

5.6. keyword and Expert View

In expert view each line is a test step in vb script

Dialog("login").WinEdit("Prime user"). Set "Admin"

Here object name is displayed in parantheses and objects in hierarchy is seprated by the dots. In order to keep things in perspective, object hierarchy is a object oriented concept where a set of objects in parent child relationship.

The operations done on the objects is always shown in the end of statement foolwed by the values associated with it.

In keyword view data is comprised in form of table in which each step is denoted by the seprate row whereas each column represents different parts of steps associated with it

On comparing the line of script in UFT, we will observe that the same object hierarchy is displayed in both Expert & Keyword Views and they map to the same operation and argument value.

Essentially, Keyword & Expert view contain the same data but arranged in a different format. we can perform all the operations like creating a test, modifying a step. using the Keyword View but to gain expertise over the tool we restrict ourselves to the Expert View.

In uft when one oress ctrl+spacebar automatically a list of all possible properties and methods are opened by cdefault.

5.7. Checkpoints and Parametrization

Uft provides us to pick different types of tests inputs during run process. This process of providing different inputs during run through external parameters is known as parametrization.

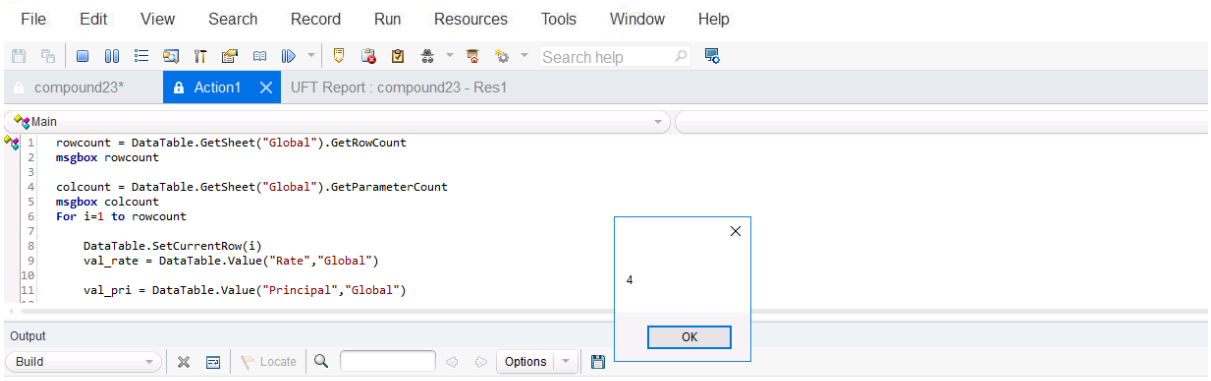
Types of parametrization Available in UFT

1) Input parameters
2) Test/action parameters
3) Random number parameters
4) Environment variable parameters

The easiest way to parametrize an argument is

1) Click the keyword view
2) Click the parametrization icon

Value Configuration Dialog Box Opens. Currently, the value is Constant. Click on Parameter Radio Button. UFT assigns default name to this parameter and we can give a name of your choice & click "OK."



Advantages of parametrization:

1) Reduces time and effort
2) Allows to pick different values during run time.
3) Data driver usage allows to use the same data for various input boxes.

During testing if we need to validate certain conditions between the current step and next step this can be possible with the help of adding some valid checkpoints between the scripts .

If the current value gone through the created checkpoint then it generates the pass otherwise it generates the fail.

One can add valid checkpoints with the help of GetRoProperty.

There are 8 types of checkpoints available in UFT are as follows:

1) Standard checkpoint
2) Bitmap checkpoint
3) Image checkpoint
4) Accesibility checkpoint
5) Data base checkpoint
6) Text checkpoint
7) Xml checkpoint
8) Table checkpoint.

UFT provides the default name to the checkpoint but one may change it accordingly.

References

1) https://www.javatpoint.com/functional-testing/manualfunctionaltesting

2) https://testsigma.com/blog/different-functional-testing-types-explained-in-detail/

3) https://www.w3schools.com/sql/sql_intro.asp

4) https://www.tutorialspoint.com/sql/sql-select-database.htm

5) https://www.tutorialspoint.com/vbscript/vbscript_syntax.htm

6) https://www.researchgate.net/publication/229577668_Visual_Basic_Scripting_Edition_VBScript

Appendix

2.1


```
<?xml version="1.0"?>
- <Environment>
  - <Variable>
      <Name>Applicant_id</Name>
      <Value>2345</Value>
    </Variable>
  - <Variable>
      <Name>Applicant_Name</Name>
      <Value>prin</Value>
    </Variable>
  - <Variable>
      <Name>Department</Name>
      <Value>Civil</Value>
    </Variable>
  - <Variable>
      <Name>Degree</Name>
      <Value>BE</Value>
    </Variable>
  - <Variable>
      <Name>Marks</Name>
      <Value>80</Value>
    </Variable>
  - <Variable>
      <Name>MobileNo</Name>
      <Value>878675456</Value>
    </Variable>
</Environment>
```

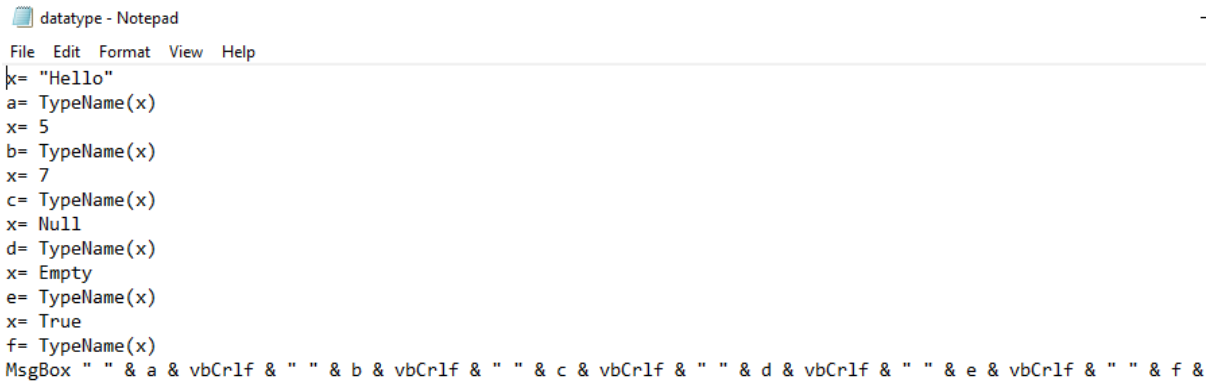
3.1

Validate_String - Notepad

File Edit Format View Help

```
On Error Resume Next
date_input=InputBox("Enter the date ",SITE_TITLE, "DD-MM-YYYY")
if len(date_input)<>10 Then
    Err.Raise (101)
    MsgBox " Error " & err.Description & " "& err.Number
else if isdate(date_input)="True" then
 MsgBox "The entered string is a date"
 else
    Err.Raise (102)
    MsgBox "Error: " &err.Description & " " & err.Number
 End if
End if
```

3.2.



4.1.

Array printing in UFT

Dim A(5)

A(1)="micro"

A(2)="focus"

A(3)="unified"

A(4)="functional"

A(5)="testing"

For iterator = 1 To UBound(A) Step 1

Msgbox A(iterator)

Next

Msgbox "Size of Array is:" &UBound(A)

Project Report Undertaking

I Mr. /Ms. NIKUNJ RASTOGI -Roll No. 171080 is doing Branch ECE my internship with Cognizant from Mar-21 to June-21

As per procedure I have to submit my project report to the university related to my work that I have done during this internship.

I have compiled my project report. But due to COVID-19 situation my project mentor in the company is not able to sign my project report.

So I hereby declare that the project report is fully designed/developed by me and no part of the work is borrowed or purchased from any agency. And I'll produce a certificate/document of my internship completion with the company to TnP Cell whenever COVID-19 situation gets normal.

Signature

Name NIKUNJ RASTOGI

Roll No. 171080

Date 20/5/021

Declaration :