SOFTWARE TESTING AND CASE TOOLS LAB

Course Code: 13IT2118 L P C

0 3 2

Pre Requisite: Software Engineering.

Course Educational Objectives:

The main objective of the course is to expose the students to different software testing tools and techniques. Upon completion of this course, the student should be able to:

- 1. Describe the Automation Testing Approach.
- 2. Describe test suites for software.
- 3. Describe Selenium server and demonstrate it using a script in Java/PHP
- 4. Describe a program to login a specific web page.
- 5. Describe a program to get the number of list items in a list / combo box

Course outcomes:

At the end of the course the student will be able to

- 1. Understands the Automation Testing Approach.
- 2. Write test suites for software.
- 3. Install Selenium server and demonstrate it using a script in Java/PHP
- 4. Write and test a program to login a specific web page.
- 5. Write and test a program to update 10 student records into table into Excel file.
- 6. Write and test a program to get the number of list items in a list / combo box.

Part A

- 1. Understand The Automation Testing Approach (Theory Concept)
- 2. Using Selenium IDE, Write a test suite containing minimum 4 test
- 3. Conduct a test suite for any two web sites.
- 4. Install Selenium server and demonstrate it using a script in Java/PHP
- 5. Write and test a program to login a specific web page.
- 6. Write and test a program to update 10 student records into table into Excel file

- 7. Write and test a program to select the number of students who have scored more than 60 in any one subject (or all subjects).
- 8. Write and test a program to provide total number of objects present/ available on the page
- 9. Write and test a program to get the number of list items in a list / combo box.
- 10. Write and test a program to count number of check boxes on the page checked and unchecked count.

Part B

- 1. The student should take up the case study of Unified Library application which is mentioned in the theory, and Model it in different views i.e Use case view, logical view, component view, Deployment view, Database design, forward and Reverse Engineering, and Generation of documentation of the project.
- 2. Student has to take up another case study of his/her own interest and do the same what ever mentioned in first problem. Some of the ideas regarding case studies are given in REFERENCES which were mentioned in theory syllabus can be referred for some idea.

Note: The analysis, design, coding, documentation, database design of mini project which will be carried out in 4th year should be done in object-oriented approach using UML and by using appropriate software which supports UML, otherwise the mini project will not be evaluated.

Text Books:

- 1. Unmesh Gundecha, *Instant Selenium Testing Tools Starter*, 1st Edition, Packet Publishing,2013.
- 2. Grady Booch, "The Unified Modeling Language User Guide", 1st Edition, Pearson Education, 2008.

References:

1. K. V. K. K. Prasad, Software Testing Tools, Dreamtech, 2004.

Web references:

http://docs.selieniumhq.org