

**SOFTWARE TESTING LAB**

**OBJECTIVES:**

- Demonstrate the UML diagrams with ATM system descriptions.
- Demonstrate the working of software testing tools with c language.
- Study of testing tools- win runner, selenium etc.
- Writing test cases for various applications

- 1 Write programs in ‘C’ Language to demonstrate the working of the following constructs:
  - i) do...while
  - ii) while....do
  - iii) if...else
  - iv) switch
  - v) for
- 2 “A program written in ‘C’ language for Matrix Multiplication fails” Introspect the causes for its failure and write down the possible reasons for its failure.
- 3 Take any system (e.g. ATM system) and study its system specifications and report the various bugs.
- 4 Write the test cases for any known application (e.g. Banking application)
- 5 Create a test plan document for any application (e.g. Library Management System)
- 6 Study of Win Runner Testing Tool and its implementation
  - a) Win runner Testing Process and Win runner User Interface.
  - b) How Win Runner identifies GUI(Graphical User Interface) objects in an application and describes the two modes for organizing GUI map files.
  - c) How to record a test script and explains the basics of Test Script Language (TSL).
  - d) How to synchronize a test when the application responds slowly.
  - e) How to create a test that checks GUI objects and compare the behaviour of GUI objects in different versions of the sample application.
  - f) How to create and run a test that checks bitmaps in your application and run the test on different versions of the sample application and examine any differences, pixel by pixel.

- g) How to Create Data-Driven Tests which supports to run a single test on several sets of data from a data table.
  - h) How to read and check text found in GUI objects and bitmaps.
  - i) How to create a batch test that automatically runs the tests.
  - j) How to update the GUI object descriptions which in turn supports test scripts as the application changes.
- 7 Apply Win Runner testing tool implementation in any real time applications.

**OUTCOMES:**

- Find practical solutions to the problems
  - Solve specific problems alone or in teams
  - Manage a project from beginning to end
  - Work independently as well as in teams
- Define, formulate and analyze a problem