**FORMAT FOR PREPARATION OF PROJECT REPORT FOR**

**B. TECH. IT STUDENTS**

The sequence in which the project report material should be arranged and bound should be as follows:

1. Cover Page & Title Page along with the same Format as previous SRS (Guide name, branch, Dept. College etc.)

2. Abstract (If you have modified or added any more modules then add the new Description else just take a new prints)

3. Design (Use case, Swim lane, Class diagram, Sequence Diagram, State machine if any)

4. Testing: Atleast five Unit testing and five System testing (Write the test cases according to your problem scenario) Refer the pdf and Exl sheets for references.

5. Cyclomatic Complexity (Any two from your sample code, any modules). By using all 3 formulas, draw the Flow graph/program Graph along with necessary steps to compute the cyclomatic complexity

6. Result Discussion and Conclusion: Write your Result discussion and conclusion as per your expected objective

7. References: All the materials, websites you followed to achieve your objective.

**Note: The table and figures shall be introduced in the appropriate places.**

**PAGE DIMENSION AND BINDING SPECIFICATIONS:**

The dimension of the project report should be in A4 size.

**PREPARATION FORMAT:**

Using Font Style Times New Roman and Font Size 12.

**Abstract –** Abstract should be one page synopsis of the project report typed double line spacing, Font Style Times New Roman and Font Size 12.

**REFERENCES**

1. Ariponnammal, S. and Natarajan, S. (1994) ‘Transport Phonomena of Sm Sel – X Asx’, Pramana – Journal of Physics Vol.42, No.1, pp.421-425.

2. Barnard, R.W. and Kellogg, C. (1980) ‘Applications of Convolution Operators to Problems in Univalent Function Theory’, Michigan Mach, J., Vol.27, pp.81–94.

3. Shin, K.G. and Mckay, N.D. (1984) ‘Open Loop Minimum Time Control of Mechanical Manipulations and its Applications’, Proc.Amer.Contr.Conf., San Diego, CA, pp. 1231-1236.

**TYPING INSTRUCTIONS:**

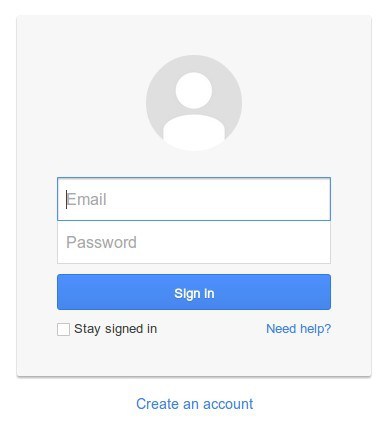
The impression on the typed copies should be black in colour. One and a half spacing should be used for typing the general text. The general text shall be typed in the Font style ‘Times New Roman’ and Font size 12.

**Fields required in writing the test cases (Check the pdf for examples)**

1. **Test case id:**
2. **Test case(unit to test):**
3. **Preconditions:**
4. **Input test data:**
5. **Priority:**
6. **Steps to be executed:**
7. **Expected result:**
8. **Actual result:**
9. **Pass/Fail:**
10. **Comments:**

Just read once before writing any test cases for your project. You need to write 5 Unit t testing and 5 system testing.

This article explains test cases both negative and positive for the login screen. I’m taking example of gmail login screen. If you want you can take example of Word Press or yahoo login screen or any other of your choice. The positive and negative scenarios depends on the information given the requirement document.



As we are testing gmail login screen we are limited to the application which is already published with limited set of information available to test. So our best approach is exploratory testing of the web app.I’m laying down a process which you can follow in order to come up with a login screen test cases. First we’ll write the test requirements based on our exploratory testing observation and after tht we’ll write the test scenarios and then form the negative and positive test cases.   You can make use of following login screen of gmail for your testing.

**Test Requirements**

As we don’t have the official Google requirements for the login screen. We’ll come up with our own requirement set for the login screen. We’ll write the scenario based on these requirements.

* Username should contain letter, number and period.
* Username should not be left blank.
* Username should not be more than 40 characters.
* Username should not start with or contain any symbols.
* Password should be atleast 6 characters.
* Password should contain combination of letter, numbers and symbols.
* Password should not contain spaces and period.
* Password should not be more than 40 characters.

**Test Scenarios**

Write down the test scenarios based on the following test types:

**User Interface**

Here are some of the questions that can help you form test cases.

* Where is the cursor focus in text area when you load the page?
* Does enter key works as a substitue for the sign in button action?
* Does username and password text field appears in order?
* Does remmeber me check box selected by default?
* Does the login page has register link for new users?
* Does the user interface look as per the design specification?
* Does login screen behaves responsively to mobile or tablet screen?
* Do the link on page remain active or are dead?

**Functionality**

Login screen functionality varies with each type of application. So there is going to be a difference between yahoo login and gmail login. Here’s some general possible functionality scenarios.

* Does the login form works successfully?
* Is logout link redirects back to the login screen? Is logout link functional?
* Does forgot password link works? Does it redirect to valid password recovery page?
* Do forward and backward buttons work properly while logged in? and also for logged out user?
* Does form works similar in every popular browser?
* How errors are handled and displayed?

**Security**

Security of the form is very crucial and you can use following scenarios to form your test cases.

* Does textbox offers masking of characters in password field?
* Does masked characters allow deciphering if copied?
* Is it possible to copy and paste the password?
* is there any minimum password length?
* is the form giving away security information if the source is viewed?
* Does form allows accessing pages without logging in?
* is URL manipulation allows access to members only area of mail?
* is multiple accounts from same IP but different browser allowed at the same time?
* are cookied allowed? are they disabled or allowed to be edited?

Once you go through these scenarios, you need to come up with following possible positive and negative test cases.

**Positive test cases.**

* Enter valid username and password.
* Click on forgot password link and retrieve the password for the username.
* Click on register link and fill out the form and register username and password.
* Use enter button after typing correct username and password.
* Use tab to navigate from username textbox to password textbox and then to login button.

**Negative test cases**

* Enter valid username and invalid password.
* Enter valid password but invalid username.
* Keep both field blank and hit enter or click login button.
* Keep username blank and enter password.
* Keep password blank and enter username.
* Enter username and password wrong.

The more you know about the form requirement and the developed page, the more scenarios that you can come up with to test the login screen thoroughly. There are going to be plenty of combinations but that would require more time to test and exhaustive testing is not practical though possible. So you have to choose the test cases which are more important for the product risk. I hope you have found value in this information. Feel free to let me know if you need more information or have any suggestions.

* **Positive Test Case**

1) Verify the Correct username,Correct password - Login Successfully.

* **Negative Test Cases**

1) Verify the Incorrect username,incorrect password- Can't Login

2) Verify the Incorrect username,incorrect password- Can't Login

3) Verify valid username and empty password. -Can't Login

4) Verify empty username and valid password. - Can't Login

5) Verify some password(can be a registered/unregistered)- Can't Login

6) Verify case changed username /password.- Can't Login

7) Verify registered user's login id and password -Can't Login

8) Verify registered username and password.- Can't Login

9) Verify to enter disable(Blocked) email address.- Can't Login

10) Verify to unverified Email address. - Can't Login