# Testing and Integration Standards Document

The testing standards document provides detailed information on the format and structure of the testing procedure.

Any queries about the Testing Standards Document should be referred to the Testing and Integration manager.

## Version History

|  |  |
| --- | --- |
| Version | Description |
| 1.0 | Created 02/02/2014 |

## Names

When comes to writing any test method, one must adhere closely the Standard Java Naming Convention as stated in the Coding Standards Document. This is required so as to produce readable and consistent tests.

## Automated Testing

* A test should be derived from the design requirements.
* Only test for one concept per test.
* Minimum test should be done to satisfy the user story.
* Refactoring the tests after passing the acceptance test.

## Manual Testing

* Visual inspection to see if the codes have performed what it should. (e.g. when the PLAY button is pressed, the video starts playing.)
* To check for bugs if multiple buttons or features are executed at the same time.

## Comments

### Header Comments

At the beginning of test class, include the following information:

Programmer’s name

Date created

Description of the test class

Version History with dates and a brief description of modifications made.

## Test Structure

public class AccountManagerTest {

private AccountManager manager;

private StudentAccount account;

@Before

public void setUp() throws Exception {

manager = new AccountManager();

manager.addAccount(“Joe Bloggs”);

manager.addAccount(“Jonas Johnson”);

}

@Test

public void createMultipleAccounts() throws Exception {

account = manager.getAccount(“Joe Bloggs”);

assertEquals(“Joe Bloggs”, account.getAccountID());

account = manager.getAccount(“Jonas Johnson”);

assertEquals(“Jonas Johnson”, account.getAccountID());

}

}

## Debugging

If any of the tests keeps failing, the team responsible for coming up with the test method for that particular component will first have to ensure that the test method is appropriately implemented. After ensuring that the test method is properly implemented, the team has to report to the Testing and Integration manager and the manager will then inform the Software manager that there is a problem with the code provided.

# Integration

When comes to integrating several different modules together, a specified set of test methods is used to ensure that the fundamental features of the product are still functioning accordingly. This is done so as to check and ensure that the integration process does not break any of the fundamental features.

However, after any integration process, the specified set of test methods tends to fail the acceptance test, it means that something has broken while integration that certain modules together. The team responsible for that integration will then have to inform the Testing and Integration manager so as to inform the Software manager to have their team to look into that issue.