8.2 Testing Types

8.2.1. Function Testing

Testing of the application should focus on any target requirements that can be traced directly to use cases (or business functions), and business logic. The goals of these tests are to verify proper data acceptance, processing, and retrieval, and the appropriate implementation of the business logic. This type of testing is based upon black box techniques, that is, verifying the application (and its internal processes) by interacting with the application via the GUI and analyzing the output (results). Identified below is an outline of the testing recommended for each application:

**Test Objective**:

* Ensure proper application navigation, data entry, processing, and retrieval.

**Technique:**

* Execute each use case, use case flow, or function, using valid and invalid data, to verify the following:
* The expected results occur when valid data is used.
* The appropriate error / warning messages are displayed when invalid data is used.

**Completion Criteria**:

* All planned tests have been executed.
* All identified defects have been addressed.
* There are very few known medium or low-priority defects that don't affect the usage of the product.

3.2.2 User Interface Testing

User Interface testing verifies a user’s interaction with the software. The goal of UI Testing is to ensure that the User Interface provides the user with the appropriate access and navigation through the Courses. In addition, UI Testing ensures that the objects within the UI function as expected and conform to corporate or industry standards.

**Test Objective:** Verify the following:

* Navigation through the application properly reflects business functions and requirements, including window to window, field to field, and use of access methods (tab keys, mouse movements, accelerator keys)
* Window objects and characteristics, such as menus, size, position, state, and focus conform to standards.

**Technique:**

* Create / modify tests for each window to verify proper navigation and object states for each application window and objects.

**Completion Criteria:**

Each window successfully verified to remain consistent within acceptable standard