## **Test Cases For User Interactions:**

Test Case Name	Prerequisite	Expected Result	Actual Result (Success)	Status (Success)
User Registration - Valid Input	None	User is successfully registered in the system.	User is registered.	Pass
User Registration - Invalid Email	None	User registration fails due to an invalid email format.	Registration fails.	Pass
User Login - Valid Credentials	User is registered with valid credentials.	User successfully logs in.	User logs in.	Pass
User Login - Invalid Password	User is registered with a valid email/username.	Login fails due to an incorrect password.	Login fails.	Pass
User Borrow Asset - Valid Asset	User is logged in and the asset is available.	User successfully borrows an available asset.	Asset is borrowed.	Pass
User Borrow Asset - Invalid Asset	User is logged in and the asset is unavailable.	User fails to borrow an unavailable asset.	Borrowal fails.	Pass

## **Test Cases For Admin Interactions:**

Test Case Name	Prerequisite	Expected Result	Actual Result	Status (Success)
Admin Add Asset - Valid Input	Admin is logged in.	Asset is successfully added to the system.	Asset is added.	Pass
Admin Add Asset - Invalid Input	Admin is logged in.	Asset addition fails due to missing information.	Asset is not added.	Pass
Admin Remove Asset - Valid Asset	Admin is logged in and the asset exists.	Asset is successfully removed from the system.	Asset is removed.	Pass
Admin Remove Asset - Invalid Asset	Admin is logged in and the asset doesn't exist.	Asset removal fails due to the asset not being found.	Removal fails.	Pass
Admin Update Asset - Valid Input	Admin is logged in and the asset exists.	Asset information is successfully updated.	Asset is updated.	Pass
Admin Update Asset - Invalid Input	Admin is logged in and the asset exists.	Asset update fails due to invalid input data.	Update fails.	Pass
Admin View User Asset Details - Valid User	Admin is logged in.	Admin can view details of a valid user's borrowed assets.	Details are displayed.	Pass
Admin View User Asset Details - Invalid User	Admin is logged in.	Admin fails to view details of an invalid user's assets.	Details are not displayed.	Pass

## **Test Cases For User Interactions - Exception Handling:**

Test Case Name	Prerequisite	Expected Result	Actual Result (Success)	Status (Success)
User Registration - Duplicate Email	None	User registration fails due to a duplicate email address.	Registration fails.	Fail
User Registration - Invalid Telephone	None	User registration fails due to an invalid telephone number.	Registration fails.	Fail
User Login - User Not Registered	User is not registered in the system.	Login fails due to an unregistered user.	Login fails.	Fail
User Borrow Asset - Asset Not Available	User is logged in, and the asset is not available.	Borrowal fails due to the asset being unavailable.	Borrowal fails.	Fail
User Borrow Asset - Overdue Asset	User is logged in, and the asset is overdue.	Borrowal fails due to an overdue asset.	Borrowal fails.	Fail
User Borrow Asset - Invalid Asset Category	User is logged in, and the asset category is invalid.	Borrowal fails due to an invalid asset category.	Borrowal fails.	Fail

## **Test Cases For Admin Interactions - Exception Handling:**

Test Case Name	Prerequisite	Expected Result	Actual Result (Success)	Status (Success)
Admin Add Asset - Duplicate Asset	Admin is logged in, and the asset already exists.	Asset addition fails due to a duplicate asset.	Asset is not added.	Fail
Admin Remove Asset - Asset Not Found	Admin is logged in, and the asset doesn't exist.	Asset removal fails due to the asset not being found.	Removal fails.	Fail
Admin Update Asset - Asset Not Found	Admin is logged in, and the asset doesn't exist.	Asset update fails due to the asset not being found.	Update fails.	Fail
Admin View User Asset Details - Invalid User	Admin is logged in.	Admin fails to view details of an invalid user's assets.	Details are not displayed.	Fail