

Test Cases

Features: Use Case Dependencies, User Test Cases, Title Test Cases, Item Test Cases, Borrow Test Cases, Return Test Cases, Renew Test Cases, Collect Fee Test Cases

Finished after 3.468 seconds

Runs: 463/463 Errors: 0 Failures: 0

main.java.com.comp4004.test.CucumberSuite [Runner: JUnit 4] (3.213 s)

Failure Trace

- Feature: Borrow Test Cases (1.590 s)
 - Scenario: Tv8 Borrow (0.770 s)
 - Scenario: Tv15 Borrow (0.193 s)
 - Scenario: Ti4 Borrow same copy (0.061 s)
 - Scenario: Ti5 Borrow renewed copy (0.075 s)
 - Scenario: Ti6 Borrow returned copy taken by other user (0.037 s)
 - Scenario: Ti7 Borrow over max limit (0.110 s)
 - Scenario: Ti8 Borrow over max limit after return (0.101 s)
 - Scenario: Ti22 Borrow book when user privilege is revoked (0.027 s)
- Feature: Collect Fee Test Cases (0.088 s)
 - Scenario: Ti17 Collect fee but user privileges still revoked (0.023 s)
 - Scenario: Tv17 Collect fee and clear user revoked status (0.030 s)
- Feature: Item Test Cases (0.350 s)
 - Scenario: Tv5 Add Item (0.006 s)
 - Scenario: Tv6 Add Item (0.004 s)
 - Scenario: Tv7 Add Item (0.031 s)
 - Scenario: Tv9 Remove Item (0.040 s)
 - Scenario: Ti2 Add Item to non-existent title (0.000 s)
 - Scenario: Ti9 Remove Non-existent Item (0.000 s)
 - Scenario: Ti10 Remove Borrowed Item (0.000 s)
 - Scenario: Ti11 Remove borrowed/renewed item (0.013 s)
 - Scenario: Ti21 Remove item from non-existent title (0.000 s)
- Feature: Renew Test Cases (0.287 s)
 - Scenario: Tv13 Renew Loan (0.012 s)
 - Scenario: Tv14 Renew Loan valid max times (0.024 s)
 - Scenario: Tv16 Renew when full (0.052 s)
 - Scenario: Ti16 Renew Returned Item (0.011 s)
 - Scenario: Ti23 Renew book when user privilege is revoked (0.031 s)
 - Scenario: Ti24 Renew book loaned by another user (0.019 s)
- Feature: Return Test Cases (0.238 s)
 - Scenario: Tv18 Return book (0.033 s)
 - Scenario: Tv19 Return book but fee added and user privilege not revoked (0.000 s)
 - Scenario: Tv20 Return book but fee added and user privilege revoked (0.008 s)
 - Scenario: Ti25 Return book returned book (0.009 s)
 - Scenario: Ti26 Return book loaned by another user (0.015 s)
- Feature: Title Test Cases (0.182 s)
 - Scenario: Tv3 Add Title (0.000 s)
 - Scenario: Tv4 Add Title (0.000 s)
 - Scenario: Tv10 Remove title. No copies involved (0.000 s)
 - Scenario: Tv12 Remove Title (0.001 s)
 - Scenario: Ti3 Add Redundant Title (0.000 s)
 - Scenario: Ti12 Remove title that still has a copy (0.000 s)
 - Scenario: Ti13 Remove title that has borrowed copy (0.003 s)
 - Scenario: Ti14 Remove title that has a copy (0.014 s)
 - Scenario: Ti20 Remove non-existent title (0.000 s)
- Feature: Use Case Dependencies (0.069 s)
 - Scenario: S4 (0.069 s)
- Feature: User Test Cases (0.235 s)
 - Scenario: Tv1 Add User (0.000 s)
 - Scenario: Tv2 Add User (0.000 s)
 - Scenario: Tv11 Remove User (0.000 s)
 - Scenario: Ti1 Add Redundant User (0.000 s)
 - Scenario: Ti15 Remove Non-existent User (0.000 s)
 - Scenario: Ti18 Remove user whose privileges are revoked (0.000 s)
 - Scenario: Ti19 Remove user whose has loans (0.125 s)

Extra Test **invalid** paths of use cases

Ti17 Collect fee but user privileges still revoked

Create user u1

Create title t1

Create copies 1 of t1

Have user u1 borrow copy1 of t1

Have user u1 return copy1 of t1 overdue

Collect partial fee for user u1 but not full fee

Attempt to have user u1 borrow copy1 of t1

Ti18 Remove user whose privileges are revoked

Create user u1

Revoke user u1 privileges

Attempt to remove user u1

Ti19 Remove user whose has loans

Create user u1

Create title t1

Create copies 1 of t1

Have user u1 borrow copy1 of t1

Attempt to remove user u1

Ti20 Remove non-existent title

Attempt to remove t1 (i.e. without having created it)

Ti21 Remove item from non-existent title

Attempt to remove copy1 of t1 (i.e. without having created it)

Ti22 Borrow book when user privilege is revoked

Create user u1

Revoke user u1 privileges

Create title t1

Create copies 1 of t1

Attempt to have user u1 borrow copy1 of t1

Ti23 Renew book when user privilege is revoked

Create user u1

Create title t1

Create copies 1 of t1

Have user u1 borrow copy1 of t1

Revoke user u1 privileges

Attempt to have user u1 renew copy1 of t1

Ti24 Renew book loaned by another user

Create user u1 and u2

Create title t1

Create copies 1 of t1

Have user u1 borrow copy1 of t1

Attempt to have user u1 renew copy1 of t1

Ti25 Return book returned book

Create user u1

Create title t1

Create copies 1 of t1

Have user u1 borrow copy1 of t1

Have user u1 return copy1 of t1

Attempt to have user u1 return copy1 of t1 again

Ti26 Return book loaned by another user

Create user u1 and u2

Create title t1

Create copies 1 of t1

Have user u1 borrow copy1 of t1

Attempt to have user u2 return copy1 of t1

Extra Test **valid** paths of use cases

Tv17 Collect fee and clear user revoked status

Create user u1

Create title t1

Create copy 1 of t1

Have user u1 borrow copy1 of t1

Have user u1 return copy1 of t1 overdue

Collect full fee for user u1

Have user u1 borrow copy1 of t1

Tv18 Return book

Create user u1

Create title t1

Create copy 1 of t1

Have user u1 borrow copy1 of t1

Have user u1 return copy1 of t1

Tv19 Return book but fee added, and user privilege not revoked

Create user u1

Create title t1

Create copy 1 of t1

Have user u1 borrow copy1 of t1

Have user u1 return copy1 of t1 late

Ensure fees were applied to user u1

Tv20 Return book but fee added, and user privilege revoked

Create user u1

Create title t1

Create copy 1 of t1

Have user u1 borrow copy1 of t1

Have user u1 return copy1 of t1 late

Ensure fees were applied to user u1 and privileges were revoked