

Test Plan

(1)

Class: TreeGenealogy

Setup:

1. declare file to be read
2. pass file into TreeGenealogy constructor to make the tree

Methods to test:

(TC1) getPeople(): returns Map<String, Person>

method call, parameter: none

actual = first mapping of return

expected = first mapping based on file

error = second mapping based on file

assertTrue("actual", "expected")

assertFalse("actual", "error")

(TC2) getRelations(): returns Map<String, Relationship>

method call, parameter: none

actual = first mapping of return

expected = first mapping based on file

error = second mapping based on file

assertTrue("actual", "expected")

assertFalse("actual", "error")

(TC3) searchFirstName(String firstName): returns List<Person>

method call, parameter: firstName

actual = method return, list size

expected = number of people w/ that name

error = expected - 2

assertTrue("actual", "expected")

assertFalse("actual", "error")

(TC4) searchLastName(String lastName): returns List<Person>

method call, parameter: lastName

actual = method return, list size

expected = number of people w/ that last name

error = expected - 2

assertTrue("actual", "expected")

assertFalse("actual", "error")

(TC5) getRelationship(String rID): returns Relationship

method call, parameter: rID

actual = method return, list of 2 pIDs

expected = correct list of pIDs

error = incorrect list of pIDs

assertTrue("actual", "expected")

assertFalse("actual", "error")

(TC6) getPerson(String pID): returns Person

method call, parameter: pID
actual = method return, firstname+lastname
expected = correct first and last name
error = incorrect first and last name
assertTrue("actual","expected")
assertFalse("actual","error")

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Class: Person

Methods to test:

Setup:

1. declare file to be read
2. pass in file to TreeGenealogy to create tree
3. get first person in tree to use for test cases

(TC1) getLastName(): returns String

method call, by testPerson
actual = result of method call
expected = last name of 1st person in file
error = random string
assertTrue("actual","expected")
assertFalse("actual","error")

(TC2) getFirstName(): returns String

method call, by testPerson
actual = result of method call
expected = first name of 1st person in file
error = random string
assertTrue("actual","expected")
assertFalse("actual","error")

(TC3) getSuffix(): returns String

method call, by testPerson
actual = result of method call
expected = suffix of 1st person in file
error = different suffix
assertTrue("actual","expected")
assertFalse("actual","error")

(TC4) getChildOfR(): returns String

method call, by testPerson
actual = result of method call
expected = rID of 1st person
error = random rID
assertTrue("actual","expected")
assertFalse("actual","error")

(TC5) getRelations(): returns Set<String>

method call, by testPerson
actual = result of method call, size
expected = number of relationships
error = expected + 2
assertTrue("actual", "expected")
assertFalse("actual", "error")

(3)

Class: Relationship

Setup:

1. declare file to be read
2. pass file into TreeGenealogy constructor to create a new tree
3. get first relationship in tree to use for test cases

Methods to test:

(TC1) getRelationshipID(): returns String

method call, by testRelationship
actual = result of method call
expected = rID of 1st relationship in file
error = different rID
assertTrue("actual", "expected")
assertFalse("actual", "error")

(TC2) getFirstParent(): returns Person

method call, by testRelationship
actual = result of method call, pID of first parent
expected = pID of first parent from file
error = different pID
assertTrue("actual", "expected")
assertFalse("actual", "error")

(TC3) getSecondParent(): returns Person

method call, by testRelationship
actual = result of method call, pID of second parent
expected = pID of second parent from file
error = different pID
assertTrue("actual", "expected")
assertFalse("actual", "error")

(TC4) getStartDate(): returns String

method call, by testRelationship
actual = result of method call
expected = start date from file
error = different start date
assertTrue("actual", "expected")
assertFalse("actual", "error")

(TC5) getEndDate(): returns String

method call, by testRelationship

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actual = result of method call
expected = end date from file
error = different end date
assertTrue("actual","expected")
assertFalse("actual","error")
(TC6) getMarriageLocation(): returns String
method call, by testRelationship
actual = result of method call
expected = location from file
error = incorrect location
assertTrue("actual","expected")
assertFalse("actual","error")
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Test Report

(1)

Class: TreeGenealogy

(TC1) getPeople(): Passed

(TC2) getRelations(): Passed

(TC3) searchFirstName(): Passed

(TC4) searchLastName(): Passed

(TC5) getRelationship(): Passed

(TC6) getPerson(): Passed

(2)

Class: Person

(TC1) getLastName(): Passed

(TC2) getFirstName(): Passed

(TC3) getSuffix(): Passed

(TC4) getChildOfR(): Passed

(TC5) getRelations(): Passed

(3)

Class: Relationship

(TC1) getRelationshipID(): Passed

(TC2) getFirstParent(): Passed

(TC3) getSecondParent(): Passed

(TC4) getStartDate(): Passed

(TC5) getEndDate(): Passed

(TC6) getMarriageLocation(): Passed