Software Development Concepts (CSCI 3901)

Final Project Milestone 2

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Blackbox Testing

PersonIdentity addPerson (String name)

- name as null string or empty string
- name as alphanumeric value
- name as one character string
- name as two or more than two-character string
- Duplicate name
- Call recordChild (), recordPartnering(), recordDissolution() before addperson()

Boolean recordAttributes (PersonIdentity person, Map attributes)

- Attribute name as empty string or null string
- Person as null object
- name as one character string
- name as two or more than two-character string
- Duplicate attribute name
- Call recordAttributes() before add addPerson()

Boolean recordReference(PersonIdentity person, String reference)

- Reference as empty string or null string
- Person as null object
- Duplicate reference
- Call recordReference() before add addPerson()

Boolean recordNote(PersonIdentity person, String note)

- Empty or null string as note
- Person as null object
- Person does not exist

Boolean recordChild (PersonIdentity parent, PersonIdentity child)

- Null object passed as parent and/or child
- Parent already exists
- Child already exits
- Parent has one child exist
- Parent has more than one child exist
- Parent has no child exist
- Child has already one parent
- Child has two parents
- Call record recordChild before addPerson()

Boolean recordPartnering (PersonIdentity partner1, PersonIdentity partner2)

- Null object passed as partner1 and/or partner2
- Partner1 already exist
- Partner2 already exist
- Partner1 is already partner with partner2
- Partner1 has already dissolute with partner2
- Partner1 is ancestors or descendent of partner2

Boolean recordDissolution (PersonIdentity partner1, PersonIdentity partner2)

- Null object passed as partner1 and/or partner2
- Partner1 already exist
- Partner2 already exist
- Partner1 is already partner with partner2
- Partner1 has already dissolute with partner2
- Partner1 is ancestors or descendent of partner2

FileIdentifier addMediaFile (String fileLocation)

- null or empty string passed as fileLocation
- duplicate filename

Boolean recordMediaAttributes(FileIdentifier fileIdentifier, Map attributes)

- Null or empty string passed as fileIdentifier
- fileIdentifier does not exist
- null object passed as attributes
- fileIdentifier already has attributes

Boolean peopleInMedia(FileIdentifier fileIdentifier, List people)

- Null or empty string passed as fileIdentifier
- fileIdentifier does not exist
- null object passed as people
- one or more people element does not exist

Boolean tagMedia(FileIdentifier, fileIdentifier, String tag)

- Null or empty string passed as fileIdentifier
- Null or empty string passed as tag
- Duplicate tag
- fileIdentifier not exist
- call tagMedia() before addMediaFile()

PersonIdentity findPerson(String name)

- Null or empty string passed as name
- Name as one character length name
- Name as two or more-character length name
- Person does not exist in family tree
- Call findPerson() before addPerson()

FileIdentifier findMediaFile (String name)

- Null or empty string passed as name
- Name as one character length name
- Name as two or more-character length name
- Media does not exist in media archive
- Call findMediaFile() before addMediaFile()

String findName(PersonIdentity id)

- Id as null object
- personIdentity does not exist

String findMediaFile (FileIdentifier field)

- FileIdentifier as null object
- Filemedia does not exist

BiologicalRelation findRelation (PersonIdentity person1, PesonIdentity person2)

- Null object passed as person1 and/or person2
- Person1 and/or Person2 does not exist in family tree
- Person1 and Person2 are same object

Set descendents(PersonIdentity person, Integer generations) and
Set ancestores(PersonIdentity person, Integer generations)

- Person as null object
- Negative number as generations
- Zero as generations
- Positive number as generations
- Person does not exist in family tree
- Generations is grater than length of the tree

List notesAndReferences(PersonIdentity person)

- Person as null object
- Person does not exist
- Peron has zero notes and references

Set findMediaByTag(String tag , String startDate, String endDate)
Set findMediaByLocation(String location, String startDate, String endDate)

List findIndividualsMedia(Set people, String startDate, String endDate)

- Empty String or null string passed as tag
- One character string passed as tag
- Two or more than two-character length string passed as tag
- Empty string or null string passed as location
- One character string passed as location
- Two or more than two-character length string passed as location
- Alphanumeric value passed as location
- Null object passed as people
- startDate and endDate as alphanumeric value
- startDate and endDate as numeric value
- startDate and endDate grater than 1 and less than 28,30 or 31
- startDate is less then endDate
- startDate is greater than endDate
- startDate is equals to endDate
- startDate and/or endDate only consist of month and year
- startDate and/or endDate only consist of date
- startDate and/or endDate only consist month or year
- tag does not exist in fileIdentifier
- location does not exist in fileIdentifier
- person does not exist in fileIdentifier

List findBiologicalFamilyMedia(PersonIdentity person)

- Null object as person
- Person does not exist in family tree
- There are no media related to person
- Person has no children
- Person has one immediate child
- Person has two immediate children

Plan of feature development

Task	**Date**
will design class structure and algorithm	November 15th 2021
will work on external documentation, data structure, code design and whitebox testing	November 17th 2021
will work on managing the family tree	November 20th 2021
will work on testing of managing the family tree	November 23rd 2021
will work on manage the media archive	November 26th 2021
will work on testing of managing the media archive	November 27th 2021
will work on reporting function	November 30th 2021
will work on testing of reporting function	December 3rd 2021
will work on unit testing of project	December 5th 2021