

COURSE PROJECT

5th NOV 2021

MILESTONE 1: HIGH LEVEL BREAK DOWN ANALYSIS.

INPUTS:

Two categories of input are expected Family tree and Media archive data.

Family Tree: Data about an individual to record their info like date of birth, gender or any reference material about an individual into the system, with relations to other individuals like partner, child or even any dissolutions.

Media Archive: To store data and media file archive and return a media file identifier.

DATA TRANSFORMATION:

Objects and media files with meta data on an individual and all related information are stored in the data base and retrieved by building and identifying a family tree and identifying relations between them.

Relations such as common ancestors between 2 individuals finding the level of difference between them, degree of cousinship and degree of removal and defining relations using “great grand” or sibling, sibling, nieces and nephews for and ancestors and descendants.

DATA STRUCTURES:

Custom abstract data types needed for efficient processing and using the concept of the tree we can build a relation between individuals and hierarchical relations between them, along with Maps, Array list can be used to store relations and other simple lists in turn.

Maps to store individual's attributes and data, or any reference to them before inserting into the data base.

PROCESSING INSTANCES:

Any identifier object which is created is inserted into the data bases and data is processed and held until then, here data is processed instantaneously after verification, data might be held until verification or until building a tree and identifying information between individuals.

Data can be processed later by retrieving from the data base, based on the user request.

OUTPUT:

Based on user request through the reporting functions we get all the data like the relation between 2 individuals, level of descendants or ancestors of an individual mentioned, all archived media files related to a person in a chronological order of time.

ASSUMPTIONS:

The relations are limited to biological family and follows English genealogy.

Only the files names present in some hard drives are stored in the archive.

DIFFICULTIES:

Building efficient algorithms logics to identify levels of difference and common ancestors between people when in a large data set.

Complicated relation and interconnections should be taught of before hand like 2 individuals having relations to each other.

Having efficient identifiers and tracker for faster processing of data like keeping a track of level of hierarchy know to easily identify information or relation between 2 people.