Account

- firstName: string
- lastName: string
- username: string
- password: string
- email: string

+ login()
+ logout()
+ editUsername()
+ editBio()
+ resetPw()
+ forgotPw()

Tree

- treeID: int
- branchLevel: string
- rootUserID: int
- userID: int

- getUserID()
- getRootUser()
- getTreeID()
+ addImage()
+ addVideo()
+ addMember()
+ rmMember()
+ updateMemberInfo()
+ listMembers()
+ updateAccessRestrictions()
+ memberSearch()
+ mediaSearch()
+ filterMedia()
+ filterMembers()

Tree Member

- userID: int
- middleName: string
- birthDate: date
- age: int
- homeAddress: string
- phoneNum: double

+ createAccRequest()
+ deleteAcc()
+ editBio()
+ addInstagram()
+ addFaceBook()
+ addLinkedIN()
+ createBaseTree()

Admin

- adminID: int

- getAccRequests()
+ acceptAccRequest()
+ denyAccRequest()

Base Tree

- baseTreeID: int

- getBaseTreeID()
- getBranchLevel()
+ shareTree()
+ makeRestrictedBranch()

Shared Tree

- baseTreeID: int
- sharedUserID: int

- getSharedUserID()
- getAccessRestrictions()
- getBaseTreeID()
+ viewTree()
+ mergeTree()
+ compareBaseTree()
+ chooseMember()
+ defineRelationship()

Family Map

- familyID: int
- userID: int
- userCity: string
- userState: string
- userHomeAddress: string
- userRelation: string

- getUserID()
- getUserCity()
- getUserState()
- getUserHomeAddress()
+ viewMap()
+ chooseFamilyMember()
+ viewMemberInfo()
+ zoomIn()
+ zoomOut()

Chat Page

- familyID: int
- chatSent: bool
- chatReceived: bool
- chatSentTime: time
- chatSentDate: date

- getFamilyID()
- getChatTime()
- getChatDate()
+ listFamilyMembers()
+ chooseFamilyMembers()
+ sendChat()

Memory Gallery

- userID: int
- mediaLimit: int
- currentMediaCount: int
- photoUploadDate: date
- videoUploadDate: date
- voiceMemoDate: date

- getUserID()
- getCurrentMediaCount()
- getPhotoUploadDate()
- getVideoUploadDate()
+ addPhoto()
+ addVoiceMemo()
+ addVideo()
+ viewGallery()
+ addComment()
+ deletePhoto()
+ deleteVideo()
+ deleteVoiceMemo()
+ sharePhotoMemory()
+ shareVideoMemory()
+ shareVoiceMemoMemory()
+ giveAccessPermissions()

Event Board

- eventName: string
- eventWeeklyCount: int
- eventDate: date
- eventMonthlyCount: int
- eventIsInvited: bool
- eventIsPassed: bool
- invitedMemberUserID: int
- eventDescription: string
- eventIsRecurring: bool

- getUserID()
- getEventName()
- getEventDate()
- getEventDesc()
- notifyInvited()
+ createEvent()
+ inviteMember()
+ editEvent()
+ rmEvent()
+ viewEvent()
+ viewInvitations()
+ optInForSMSNotifs()
+ optOutForSMSNotifs()

Pre-Requisite: User has viewed shared tree, and decided to merge from shared tree

Update Tree From Shared Tree

List Family Members
From Shared Tree

Choose the Family
Members from List

Define the
Relationship of the
chosen Members

Compare Shared
Tree and New Base
Tree

Base Tree New
Members are
Incorrect

Base Tree New
Members are Correct

Integrate The
Selected Members

View New Base Tree

Users
- **id**: int (Primary Key)
- **username**: varchar
- **password**: varchar
- **email**: varchar
- **created_at**: timestamp
- **updated_at**: timestamp

Tree Members
- **id**: int (Primary Key)
- **user_id**: int
- **first_name**: varchar
- **last_name**: varchar
- **birthdate**: date
- **location**: varchar
- **phone_number**: varchar
- **created_at**: timestamp
- **updated_at**: timestamp

Family Trees
- **id**: int (Primary Key)
- **user_id**: int
- **tree_name**: varchar
- **created_at**: timestamp
- **updated_at**: timestamp

Messages
- **id**: int (Primary Key)
- **sender_id**: int
- **receiver_id**: int
- **content**: text
- **created_at**: timestamp

Events
- **id**: int (Primary Key)
- **family_tree_id**: int
- **event_name**: varchar
- **event_date**: date
- **created_at**: timestamp
- **updated_at**: timestamp

Shared Trees
- **id**: int (Primary Key)
- **family_tree_id**: int
- **shared_user_id**: int
- **created_at**: timestamp
- **updated_at**: timestamp