

#### User

# userld: Integer # firstName: String # lastName: String # email: String

# phoneNumber: String - username: String
- password: String
- password: String
# profilePicture: Image
- registrationDate: Date
# authenticated: bool

+ register(database: Database): void + login(database: Database): Boolean

+ logout(): void + forgotPassword(database: Database): void + viewProfile(): Profile

## Authentication

- + {abstract} register(): bool + {abstract} login(): bool + {abstract} logout(): bool

## Notification

notificationID: intmessage: Stringusers: User[\*]

## **Admin**

- adminId: Integer - adminName: String

+ manageUsers(database: Database): List<User>
+ viewUserStats(database: Database): void
+ sendInvitation(userEmail: String, database: Database): void
+ deleteUser(userId: Integer, database: Database): Boolean

## IsroUser

- isroUserId: IntegerisroUserRole: String
- + uploadVideo(videoInfo: String, database: Database): Video
  + classifyVideo(videoId: Integer, genre: VideoGenre, database: Database): void
  + searchVideo(keyword: String, database: Database): List<Video>
  + viewStats(database: Database): void
  + viewRecommendations(keyword: String, database: Database): List<Video>

## GeneralUser

- generalUserId: Integer

- + searchVideo(keyword: String, database: Database): List<Video> + viewVideoContent(): Video + viewRecommendations(keyword: String, database: Database): List<Video>

## VideoClassification

- classificationId: Integer - video: Video

- userld: int

- selectedGenre: String

+ classifyVideo(videold: Integer, userld: Integer, genre: VideoGenre, database: Database): void + getRecommendedVideos(userld: Integer, database: Database): List<Video>

## Dashboard

- userld: int
- uploadedVideos: List<Video>
- classifiedVideos: List<VideoClassification>
- + viewUploadedVideos(userId: Integer, database: Database): List<Video>
  + viewClassifiedVideos(userId: Integer, database: Database): List<VideoClassification>
  + viewStats(userId: Integer, database: Database): void

# UserManagement

- + {abstract} manageUsers(): List<User>
  + {abstract} sendInvitation(): bool
  + {abstract} deleteUser(): bool

NotificationManagement

+ {abstract} sendNotification(): bool

# VideoManagement

- + {abstract} uploadVideo(): Video + {abstract} editMetadata(): bool + {abstract} deleteVideo(): bool

## Video

- videold: int # title: String # description: String # genre: String # filePath: String - metadata: Metadata

+ play(): void

## Metadata

- title: String
- description: String
- timestamps: String
- duration: int
- tags: List<String>
- keywords: List<String}

+generateMetadata(): Metadata

#### Genre

- genreld: int + name: String

+ addGenre(): bool + editGenre(): bool + deleteGenre(): bool

#### **Database**

+ addUser(user: User): Boolean + getUserByld(userId: Integer): User +addVideo(): bool

+getVideoByld(): Video

+ addAdmin(admin: Admin): Boolean + deleteUser(userld: Integer): Boolean

+ storeVideo(video: Video): Boolean + getClassifications(userId: Integer): List<VideoClassification> + addClassification(classification: VideoClassification): Boolean + searchVideo(keyword: String): List<Video>

# <<Interface>> DataManagement

+ {abstract} synchronizeData(): bool