



UserList
+ users: List<String> + currentUser: User + allUsernames: List<String>
+ initializeUserList(): void + isValidUsername(username: String): boolean + usernameExists(username: String): boolean + login(username: String): boolean + usersOverLimit(): boolean + addUser(username: String): boolean + deleteUser(username: String): boolean + writeToFile(): void + writeToFile2(): void + readFromFile(): void + readFromFile2(): void

User
+ isAdmin: boolean + isStock: boolean + username: String + albums: List<Album>
+ User(username: String) + getAllAlbumsStr(exceptMe: String): List<String> + isValidAlbum(albumName: String): boolean + albumNameExists(albumName: String): boolean + albumsOverLimit(): boolean + createAlbum(albumName: String): boolean + getAlbumObject(albumName: String): Album + deleteAlbum(albumName: String): boolean + renameAlbum(oldAlbumName: String, newAlbumName: String): boolean + searchByTags(stringTags: List<String>): List<Photo> + searchByDateRange(start: String, end: String): List<Photo> + searchByCaption(caption: String): List<Photo> + searchByFileLocation(fileLocation: String): List<Photo> + createAlbumFromSearch(myPhotos: List<Photo>, albumName: String): boolean + getAlbumPhotoExistsIn(myPhoto: Photo): String

Album
+ name: String + photos: List<Photo>
+ Album(name: String) + calendarToString(date: Calendar): String + getEarliestDate(): String + getLatestDate(): String + isValidCaption(caption: String): boolean + photosOverLimit(): boolean + addPhoto(fileLocation: String, caption: String): boolean + isValidFileLocation(fileLocation: String): boolean + getPhotoObject(id: UUID): Photo + removePhoto(id: UUID): boolean + sortPhotosByCaption(): void + sortPhotosByDate(): void

Photo
+ id: UUID + caption: String + date: Calendar + tags: List<Tag> + fileLocation: String
+ Photo(caption: String, tags: List<Tag>, fileLocation: String) + Photo(caption: String, fileLocation: String) + getDate(): String + getAllTagsStr(): List<String> + tagExists(tagName: String, tagValue: String): boolean + isValidTagValue(tagValue: String): boolean + tagsOverLimit(): boolean + addTag(tagName: String, tagValue: String): boolean + editTag(oldTagName: String, oldTagValue: String, newTagName: String, newTagValue: String): boolean + deleteTag(tagName: String, tagValue: String): boolean + updateCaption(caption: String): boolean + copyPhoto(toAlbumName: String): boolean + movePhoto(fromAlbumName: String, toAlbumName: String): boolean

Tag
+ tagName: String + tagValue: String + photos: List<Photo>
+ Tag(tagName: String, tagValue: String) + removePhotoFromTagList(photo: Photo): boolean

Constant
+ MAX_LENGTH: int + MAX_USERS: int + MAX_ALBUMS: int + MAX_PHOTOS: int + MAX_TAGS: int







