

```
class User:
    def createProfile():
        # Prompt user to enter profile details
        # Validate inputs
        # Save to database
        pass

    def editProfile():
        # Retrieve existing user data
        # Prompt user for changes
        # Update user record
        pass

    def viewFeed():
        # Call Feed.getFeed with userID
        # Return list of Posts
        pass

    def searchUsers(query):
        # Call Search.searchUsers with query
        # Return matching users
        pass

    def searchMusic(query):
        # Call Search.searchMusic with query
        # Return matching music metadata
        pass

    def postMusic(songData, caption):
        # Create new Post object with userID, songData, caption
        # Save post to database
        pass

    def likePost(postID):
        # Create new Like object with isLike = True
        # Save to database
        pass

    def dislikePost(postID):
        # Create new Like object with isLike = False
        # Save to database
        pass

    def commentOnPost(postID, content):
```

```
# Create new Comment object
# Save to database
pass
```

```
def sharePost(postID, receiverID):
    # Create new Share object with senderID, receiverID
    # Save to database
    pass
```

```
def deletePost(postID):
    # Verify user owns the post
    # Delete post from database
    pass
```

```
class Feed:
    def getFeed(userID):
        # Query database for posts by followed users or preferences
        # Return post list
        pass
```

```
class Search:
    def searchUsers(query):
        # Search user table for matching usernames or bios
        # Return list
        pass

    def searchMusic(query):
        # Search song metadata for title or artist matches
        # Return results
        pass
```

```
class Post:
    def delete():
        # Remove post and related likes/comments/shares
        pass

    def editCaption(newCaption):
        # Update the caption in the post record
        pass

    def fetchMetadata():
```

```
# Call MusicAPI.fetchMetadata with songLink
# Return SongMetadata object
pass
```

```
class Share:
    def sharePost():
        # Notify receiver
        # Log in share table
        pass
```

```
class SystemAdmin:
    def manageUserAccounts():
        # View, update, or delete user records
        # Apply filters and restrictions
        pass
```