

```

CLASS User
    FUNCTION createProfile()
        PromptUserForProfileDetails()
        ValidateInputs()
        SaveProfileToDatabase()
    END FUNCTION

    FUNCTION editProfile()
        RetrieveExistingUserData()
        PromptUserForChanges()
        UpdateUserRecordInDatabase()
    END FUNCTION

    FUNCTION viewFeed()
        Call Feed.getFeed(UserID)
        DisplayPostsOnFeed()
    END FUNCTION

    FUNCTION searchUsers(query)
        Call Search.searchUsers(query)
        DisplayMatchingUsers()
    END FUNCTION

    FUNCTION searchMusic(query)
        Call Search.searchMusic(query)
        DisplayMatchingSongs()
    END FUNCTION

    FUNCTION postMusic(songData, caption)
        CreatePostWithSongData(songData, caption)
        SavePostToDatabase()
    END FUNCTION

    FUNCTION likePost(postID)
        CreateLikeObject(postID, isLike = TRUE)
        SaveLikeToDatabase()
    END FUNCTION

    FUNCTION dislikePost(postID)
        CreateLikeObject(postID, isLike = FALSE)
        SaveLikeToDatabase()
    END FUNCTION

    FUNCTION commentOnPost(postID, content)

```

```
        CreateCommentObject(postID, content)
        SaveCommentToDatabase()
    END FUNCTION
```

```
FUNCTION sharePost(postID, receiverID)
    CreateShareObject(postID, receiverID)
    SaveShareToDatabase()
END FUNCTION
```

```
FUNCTION deletePost(postID)
    IF UserOwnsPost(postID) THEN
        DeletePostFromDatabase(postID)
    END IF
END FUNCTION
END CLASS
```

```
CLASS Feed
    FUNCTION getFeed(userID)
        RetrievePostsForUser(userID)
        SortPostsByTimestamp()
        ReturnPostList()
    END FUNCTION
END CLASS
```

```
CLASS Search
    FUNCTION searchUsers(query)
        QueryUserDatabase(query)
        ReturnMatchingUserList()
    END FUNCTION

    FUNCTION searchMusic(query)
        QuerySongMetadataDatabase(query)
        ReturnMatchingSongList()
    END FUNCTION
END CLASS
```

```
CLASS Post
    FUNCTION delete()
        DeleteAssociatedLikesCommentsShares()
        DeletePostFromDatabase()
    END FUNCTION

    FUNCTION editCaption(newCaption)
        UpdatePostCaption(newCaption)
```

END FUNCTION

FUNCTION fetchMetadata()

    Call MusicAPI.fetchMetadata(songLink)

    ReturnSongMetadata()

END FUNCTION

END CLASS

CLASS Share

    FUNCTION sharePost()

        NotifyReceiverOfShare()

        LogShareInDatabase()

    END FUNCTION

END CLASS

CLASS SystemAdmin

    FUNCTION manageUserAccounts()

        RetrieveAllUserAccounts()

        ApplyAdminFilters()

        PerformAccountManagementActions()

    END FUNCTION

END CLASS