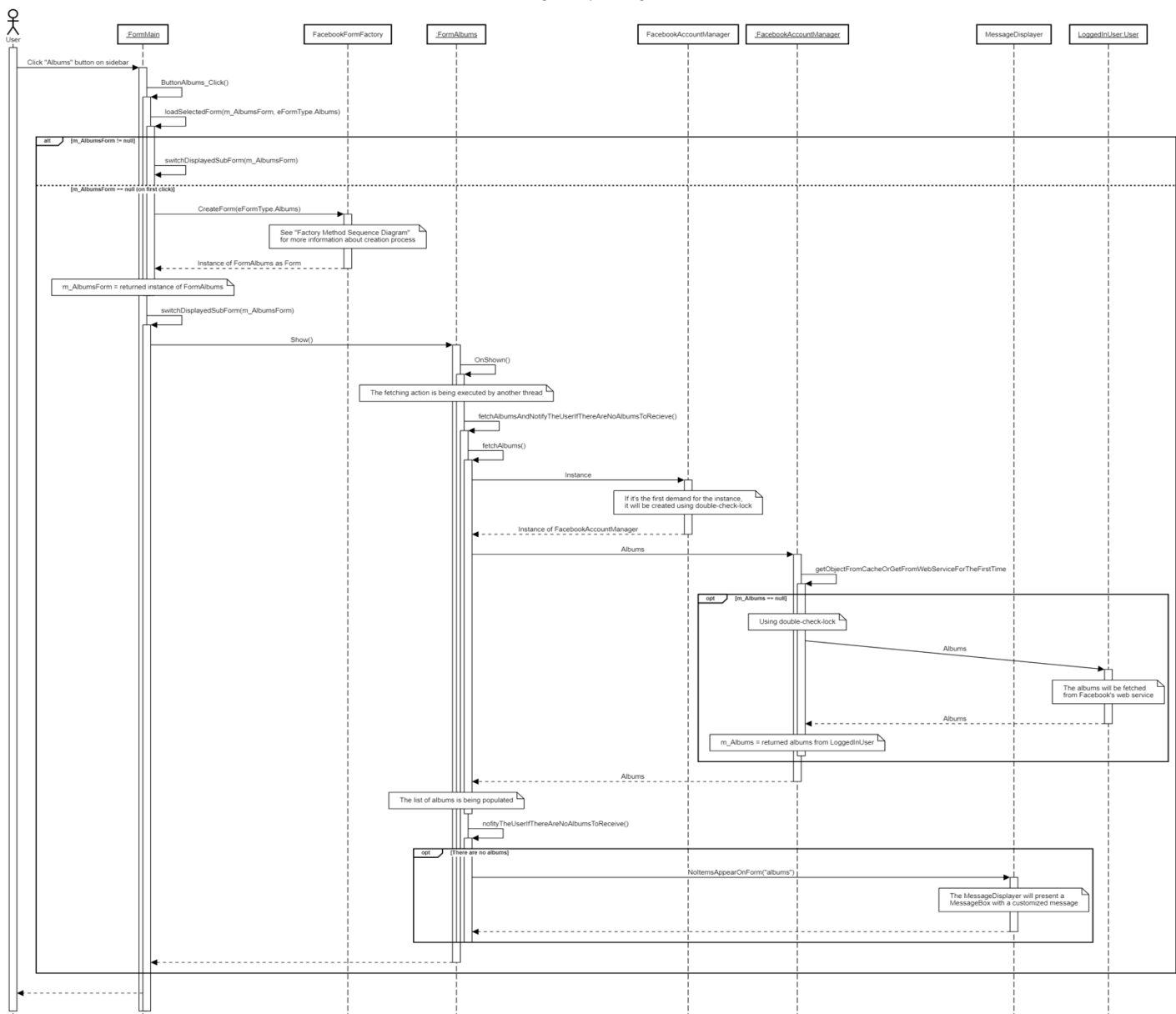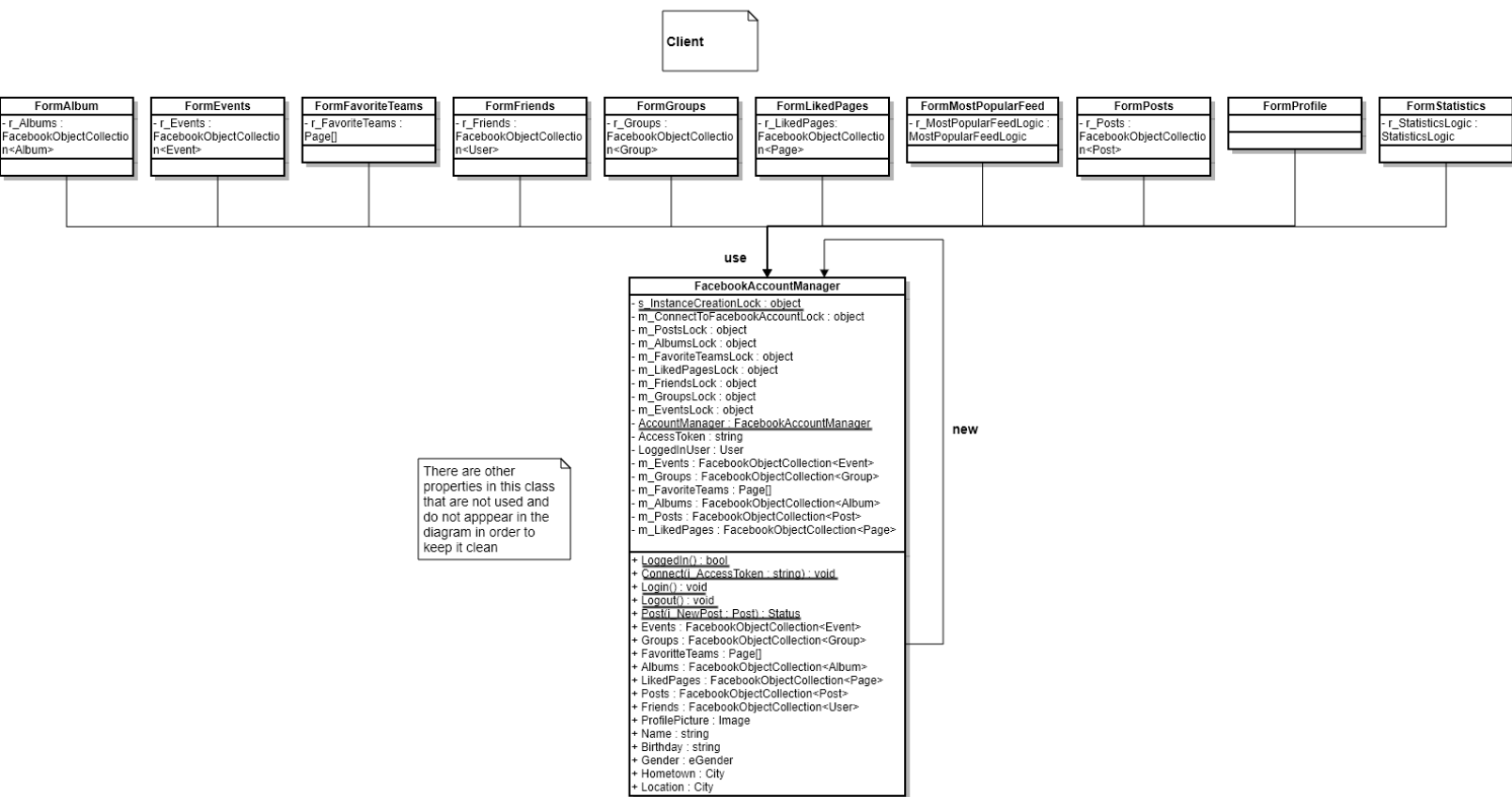# Design Pattern Used:

─Singleton:

The FacebookAccountManager class is used as a singleton. Use use of this class can be seen in the following classes: FormMain, FormAlbums, FormEvents, FormFavoriteTeams, FormFriends, FormGroups, FormLikedPages, FormPosts, FormProfile, , StatisticsLogic

- **Sequence Diagram:**

Singleton Sequence Diagram

- **Class Diagram:**

_Factory Method:

The FacebookFormFactory class is responsible for creating various forms within the application using the CreateForm method. This method takes the requested form type from a finite set of form types (Enum). The class that utilizes this FacebookFormFactory is FormMain, which requests the FacebookFormFactory to create the different forms initially based on the request.

- **Sequence Diagram:**

FactoryMethod Sequence Diagram
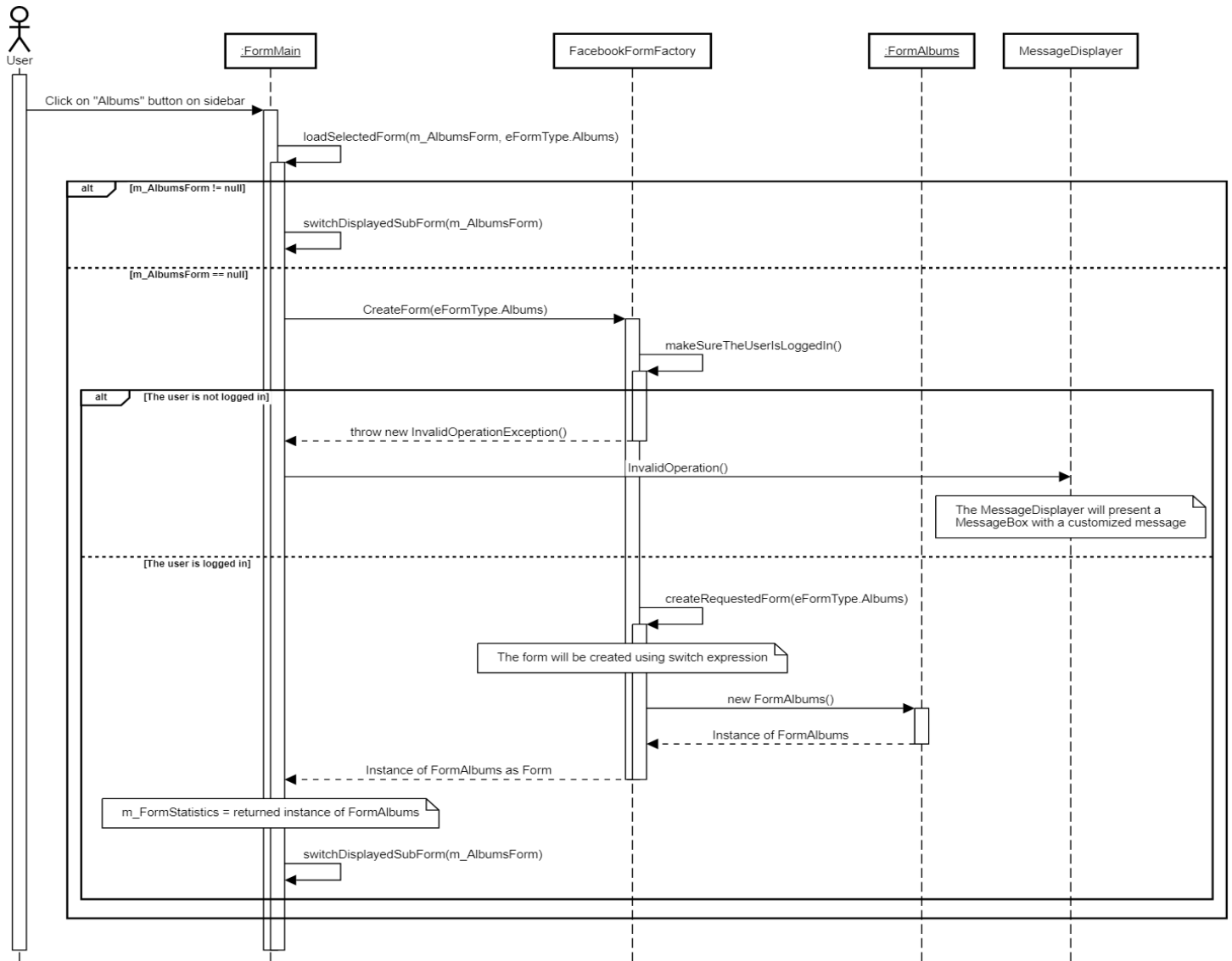
- ## Class Diagram:
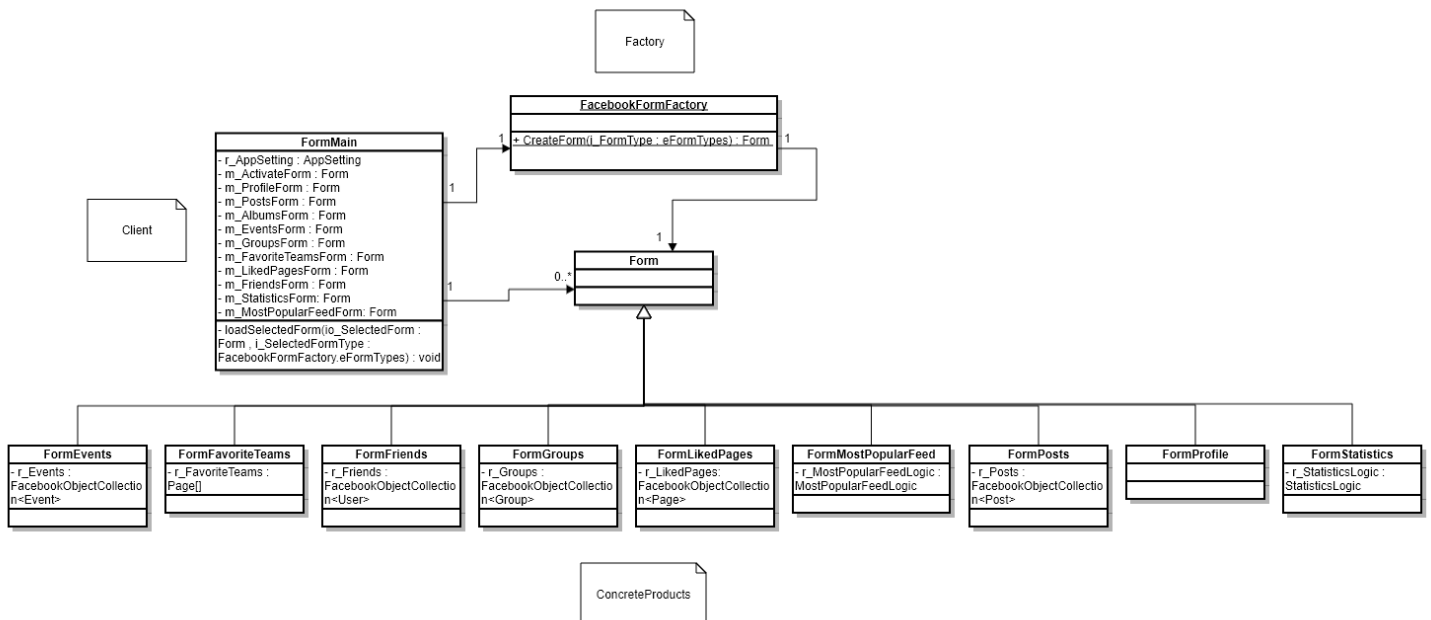
-Caching Proxy:

The FacebookAccountManager class serves as a Caching Proxy. This class is utilized by the following classes: FormMain, FormAlbums, FormEvents, FormFavoriteTeams, FormFriends, FormGroups, FormLikedPages, FormPosts, FormProfile, MostPopularFeedLogic, StatisticsLogic
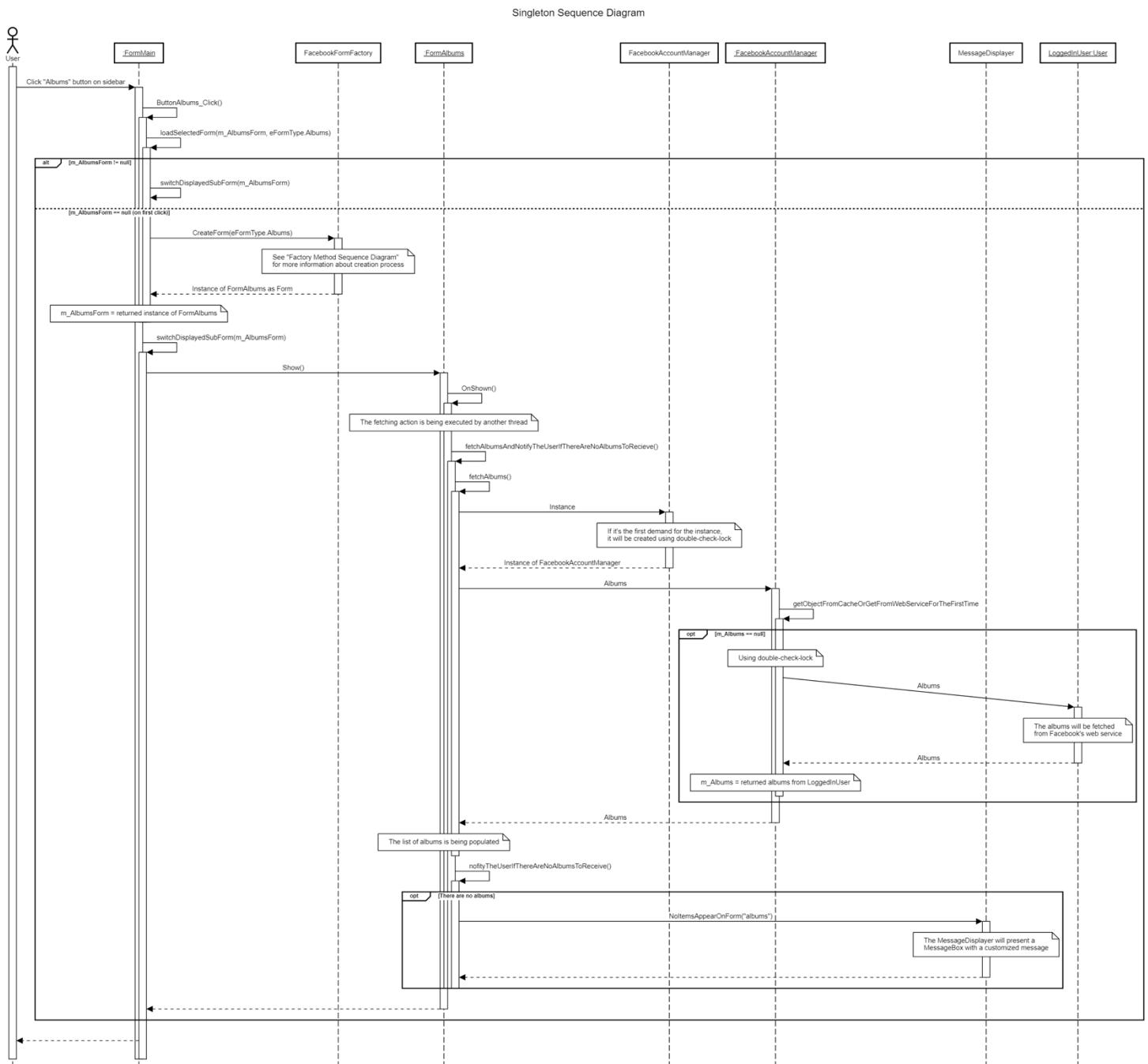
- **Sequence Diagram:**

- **Class Diagram:**

Client

FormAlbum	FormEvents	FormFavoriteTeams	FormFriends	FormGroups	FormLikedPages	FormMostPopularFeed	FormPosts	FormProfile	FormStatistics
- r_Albums : FacebookObjectCollectio n<Album>	- r_Events : FacebookObjectCollectio n<Event>	- r_FavoriteTeams : Page[]	- r_Friends : FacebookObjectCollectio n<User>	- r_Groups : FacebookObjectCollectio n<Group>	- r_LikedPages: FacebookObjectCollectio n<Page>	- r_MostPopularFeedLogic : MostPopularFeedLogic	- r_Posts : FacebookObjectCollectio n<Post>		- r_StatisticsLogic : StatisticsLogic

use

FacebookAccountManager

- s_InstanceCreationLock : object
- m_ConnectToFacebookAccountLock : object
- m_PostsLock : object
- m_AlbumsLock : object
- m_FavoriteTeamsLock : object
- m_LikedPagesLock : object
- m_FriendsLock : object
- m_GroupsLock : object
- m_EventsLock : object
- AccountManager : FacebookAccountManager
- AccessToken : string
- LoggedInUser : User
- m_Events : FacebookObjectCollection<Event>
- m_Groups : FacebookObjectCollection<Group>
- m_FavoriteTeams : Page[]
- m_Albums : FacebookObjectCollection<Album>
- m_Posts : FacebookObjectCollection<Post>
- m_LikedPages : FacebookObjectCollection<Page>

+ LoggedIn() : bool
+ Connect(i_AccessToken : string) : void
+ Login() : void
+ Logout() : void
+ Post(i_NewPost : Post) : Status
+ Events : FacebookObjectCollection<Event>
+ Groups : FacebookObjectCollection<Group>
+ FavoriteTeams : Page[]
+ Albums : FacebookObjectCollection<Album>
+ LikedPages : FacebookObjectCollection<Page>
+ Posts : FacebookObjectCollection<Post>
+ Friends : FacebookObjectCollection<User>
+ ProfilePicture : Image
+ Name : string
+ Birthday : string
+ Gender : eGender
+ Hometown : City
+ Location : City

There are other properties in this class that are not used and do not apppear in the diagram in order to keep it clean

Proxy

1

FacebookWrapper

RealSubject

0..*	0..*	0..*	0..*	0..*	0..*
Album	Event	Page	User	Group	Post