UML Diagram

Class Diagram

«interface»
View

+void setLoadingFooterVisible(Boolean)
+void displayMessage(String)
+void cancelMessage()
+void addItems(List)

«abstract»
BasePresenter

View view

PagingPresenter<ItemType>

+ PAGE_SIZE
- ItemType lastItem
- boolean hasMorePages
- boolean isLoading

+void loadMoreItems(User user)
#void loadItemsFromService(User, AuthToken)

StoryFragment

- StoryPresenter presenter

StoryPresenter

- StatusService statusService

+void onScrolled(User)
#void loadItemsFromService(User, AuthToken)

«abstract»
BaseService

#void executeTask(Runnable)

Cache

+Cache getInstance()
+AuthToken getCurrUserAuthToken()
+User getCurrUser()

StatusService

+void loadStory(AuthToken, User, int, Status, ResultObserver<Pair<List<Status>, Boolean>>)

GetStoryTask

- AuthToken authToken
- User targetUser
- Status lastItem
- int limit
- Handler messageHandler

+public void run()

«interface»
ResultObserver<ResultType>

+void onResultLoaded(ResultType)
+void handleFailure(String)
+void handleException(Exception)

StatusPageHandler

+void handleMessage(Message msg)
#void handleSuccessMessage(ResultObserver, Boolean>>)

PagingServiceObserver<ItemType>

+void onResultLoaded(Pair, Boolean>)
+void handleFailure(String)
+void handleException(Exception)
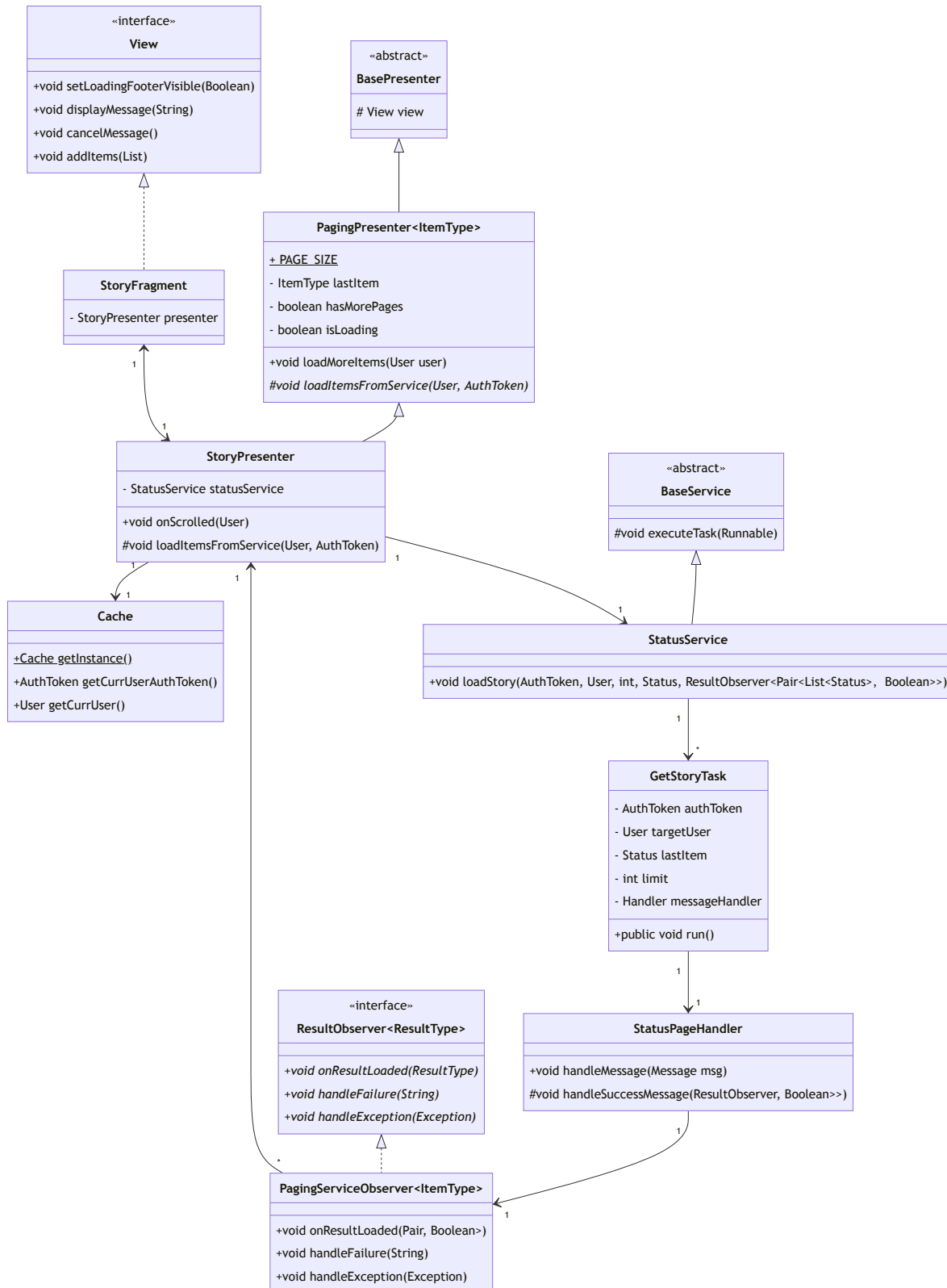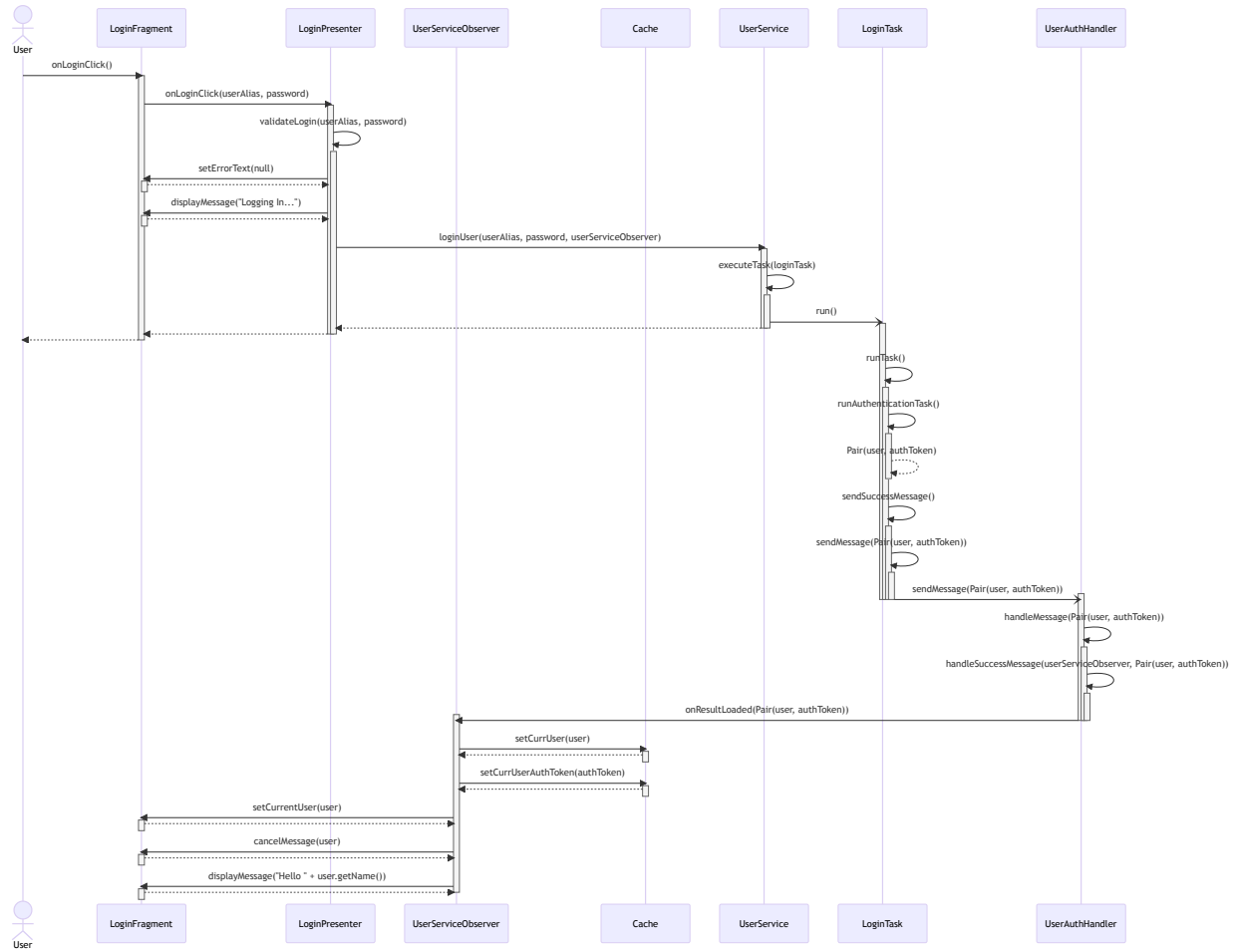
Sequence Diagram

Questions

> Pick one place where you used the observer pattern. Which class was the subject?

`UserService`

> Which class was the observer?

`NavigateToUserObserver`

> Which layer did the subject belong to... (Model, View, or Presenter layer)

The "Model" layer

> ...and which layer did the observer belong to? (Model, View, or Presenter layer)

The "Presenter" layer

> Pick one place where you used generics. What class was it in?

`ResultHandler<ResultType, ObserverType extends ... >`

> What classes can the generic type T be?

`ResultType` is whatever the `ResultHandler` returns; the `ObserverType` is a `ResultObserver<ResultType>`

> Pick one place where you used the template method pattern. Show the template method.

```java
protected void executeTask(Runnable task) {
    ExecutorService executor = Executors.newSingleThreadExecutor();
    executor.execute(task);
}
```

> What class is it in?

BaseService

> Show the step of the algorithm that is deferred to the class's subclass.

```java
public void loginUser(
    String userAlias,
    String password,
    ResultObserver<Pair<User, AuthToken>> observer
) {
    LoginTask loginTask = new LoginTask(
        userAlias,
        password,
        new UserAuthHandler(observer)
    );
    executeTask(loginTask);
}
```

> What class is it in?

UserService