System and Software Architecture Description (SSAD)

Pic Share App (RA)

Team 1

Logan Chang – Project Manager, Developer

Jason Ard – Assistant Project Manager, Developer

Zhou Jiashun – System Integrator

Yew Hua Chua – Developer

Haihao Lu – Developer

Yunwei Yuan – Developer

Yao Wang – Developer

Weili Zhang – Developer

Lawrence Stratton - Developer

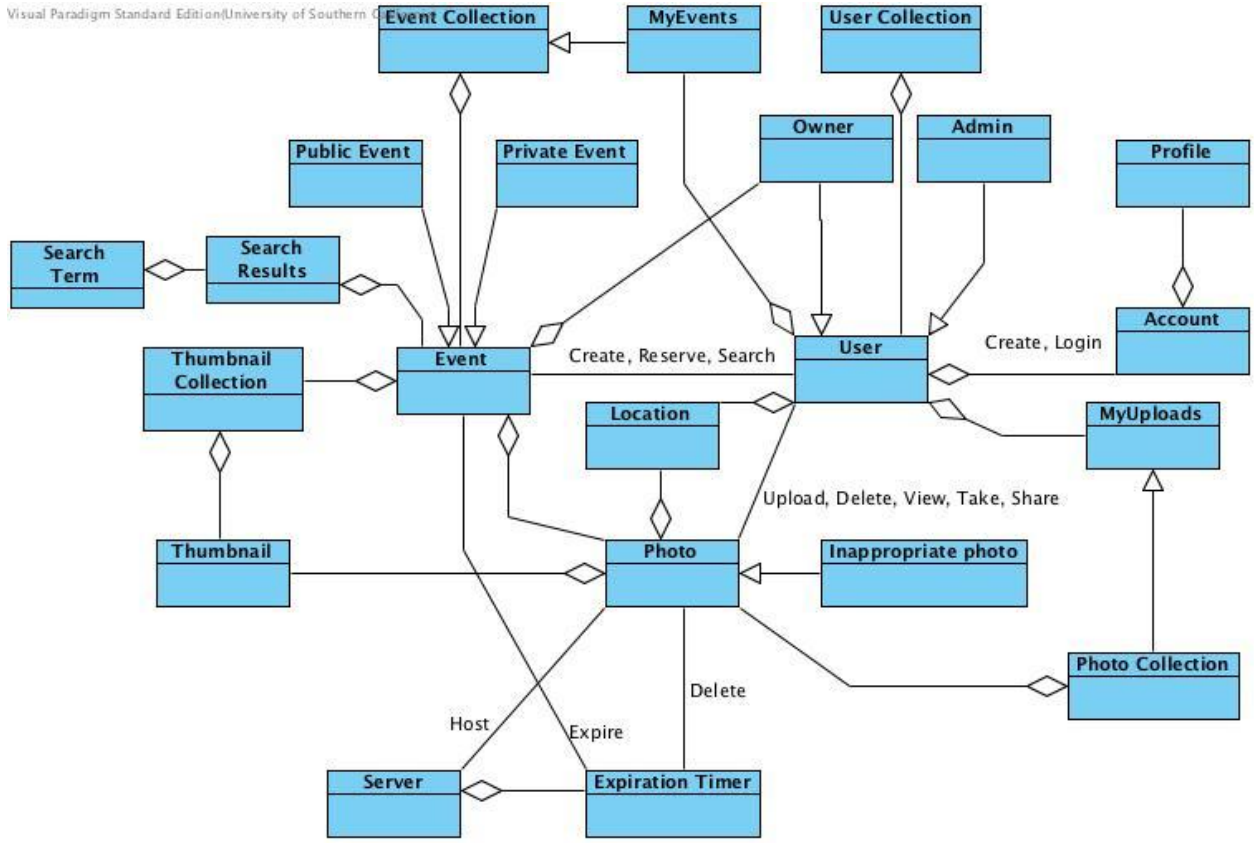
7 December 2015

Table of Contents

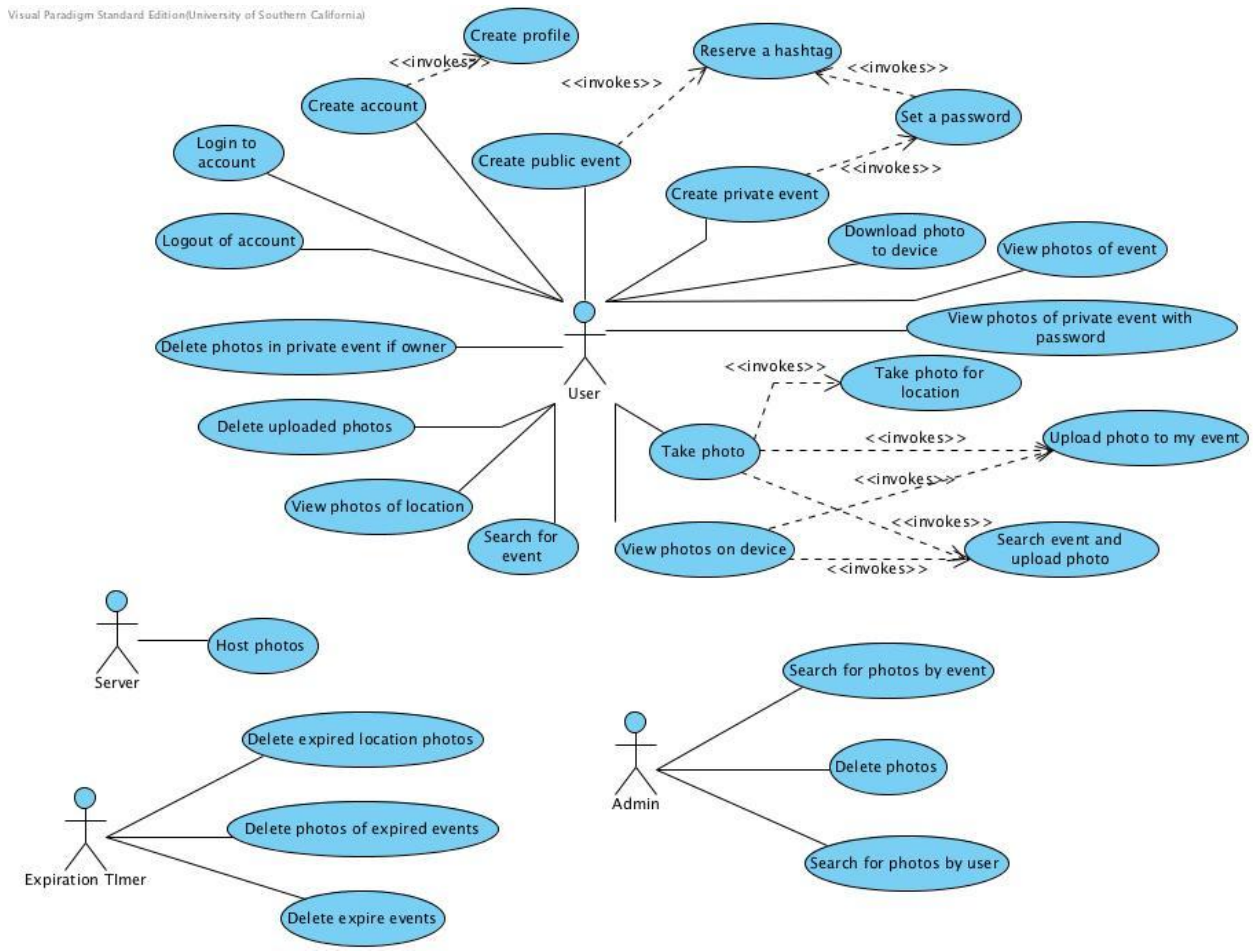
1. Domain Model & Use Case Diagram 3
1.1 Domain Model 3
1.2 Use Case Diagram 4
2. Robustness Diagram 5
2.1 Navigation Robustness Diagram 5
2.2 Event Robustness Diagrams 6
2.3 Photo Management Robustness Diagram 9
2.4 Search Robustness Diagram 14
2.5 Profile Robustness Diagram 15
2.6 System & Administrator Robustness Diagram 17
3. Class diagram 19
4. Sequence Diagrams 20
4.1 Navigation Sequence Diagram 20
4.2 Event Sequence Diagram 20
4.3 Photo Sequence Diagram 24
4.4 Search Sequence Diagram 27
4.5 Profile Sequence Diagram 29
4.6 System & Administrator Sequence Diagram 31

1. Domain Model & Use Case Diagram

1.1 Domain Model



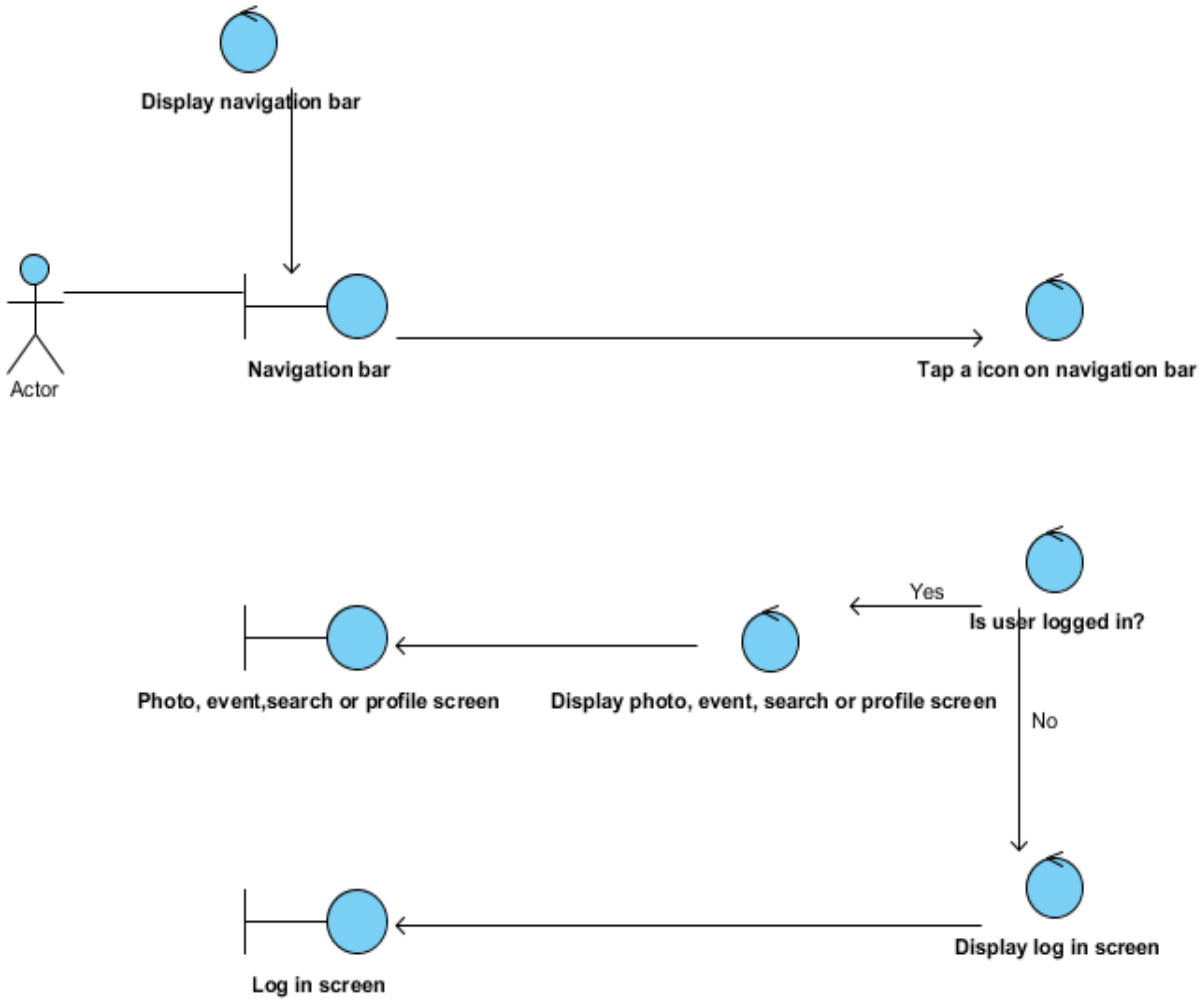
1.2 Use Case Diagram



2. Robustness Diagram

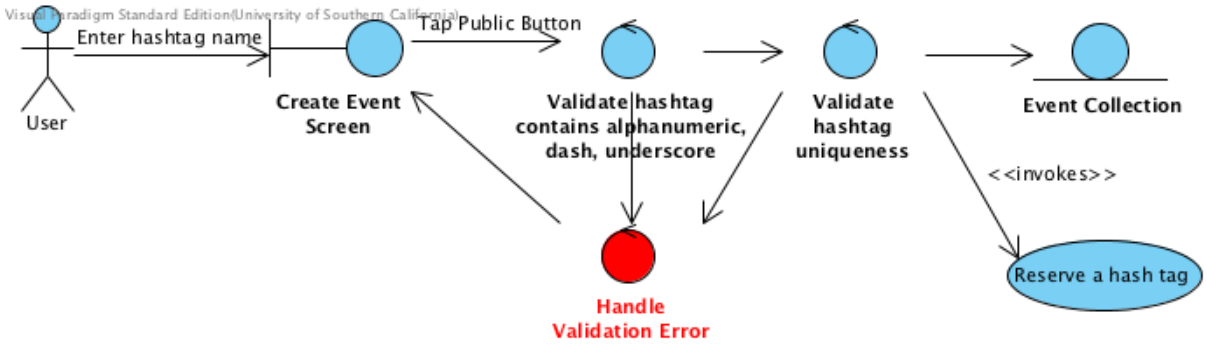
2.1 Navigation Robustness Diagram

Use Case: Navigation

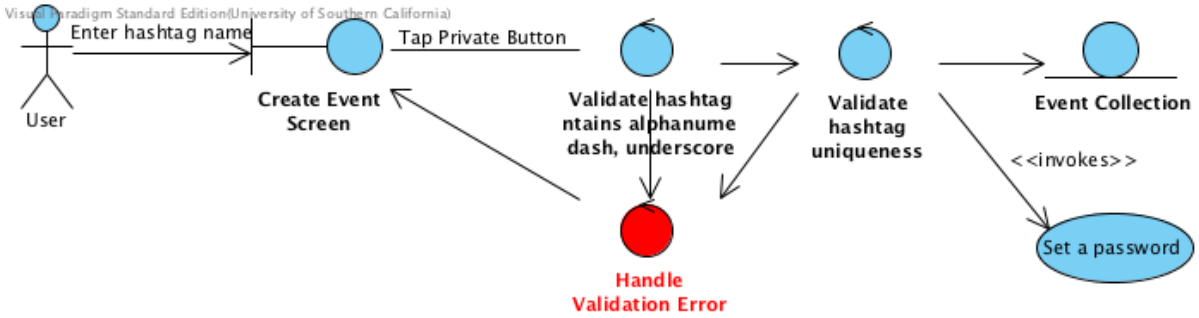


2.2 Event Robustness Diagrams

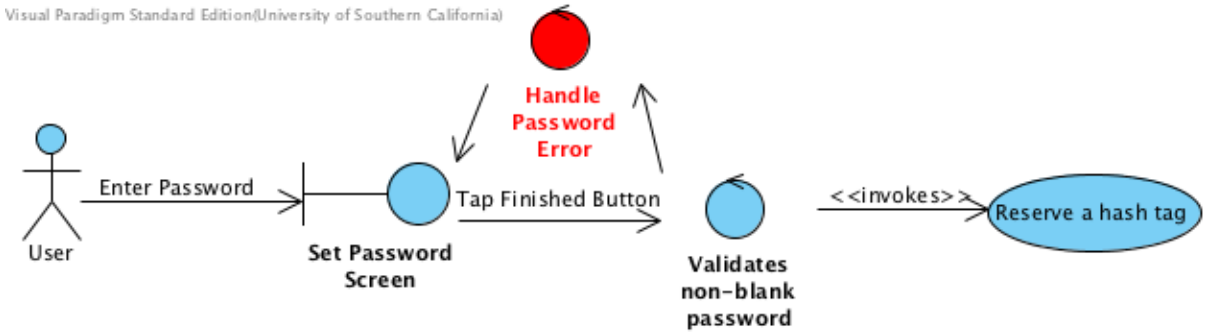
Use Case: Create a public event



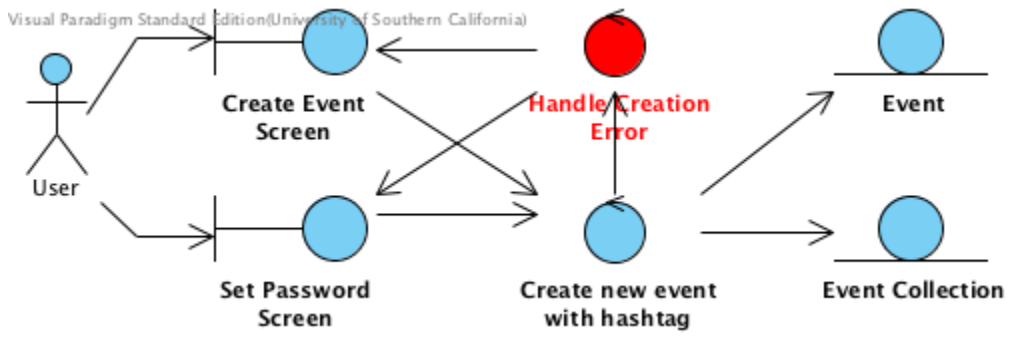
Use Case: Create a Private Event



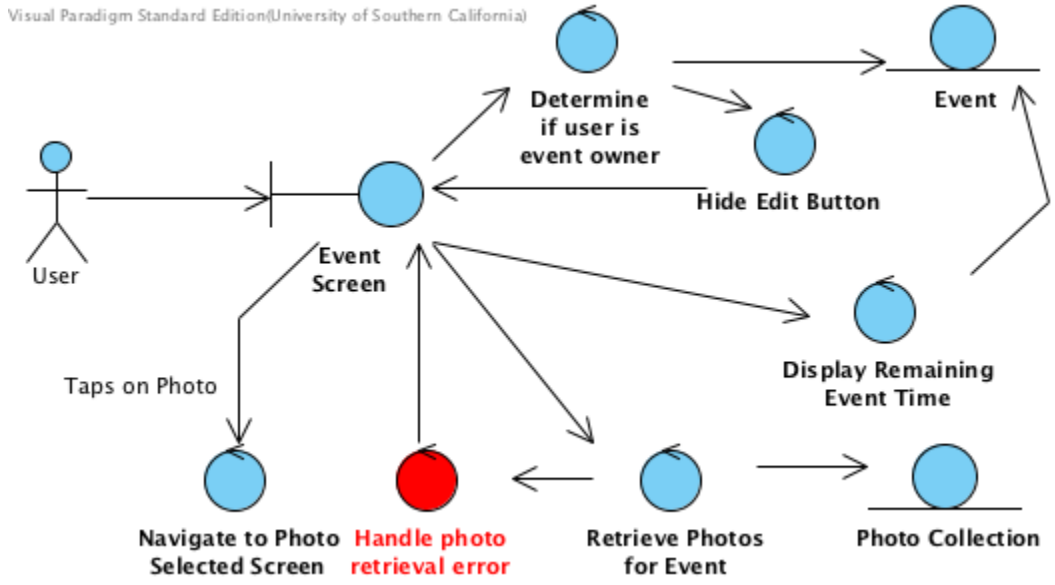
Use Case: Set a Password



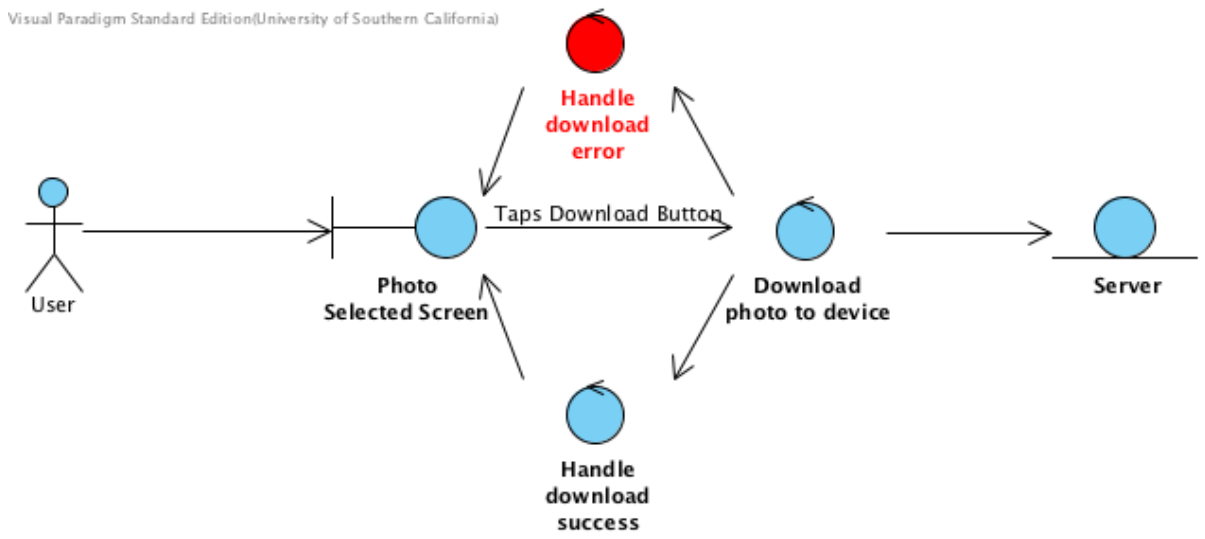
Use Case: Reserve a Hashtag



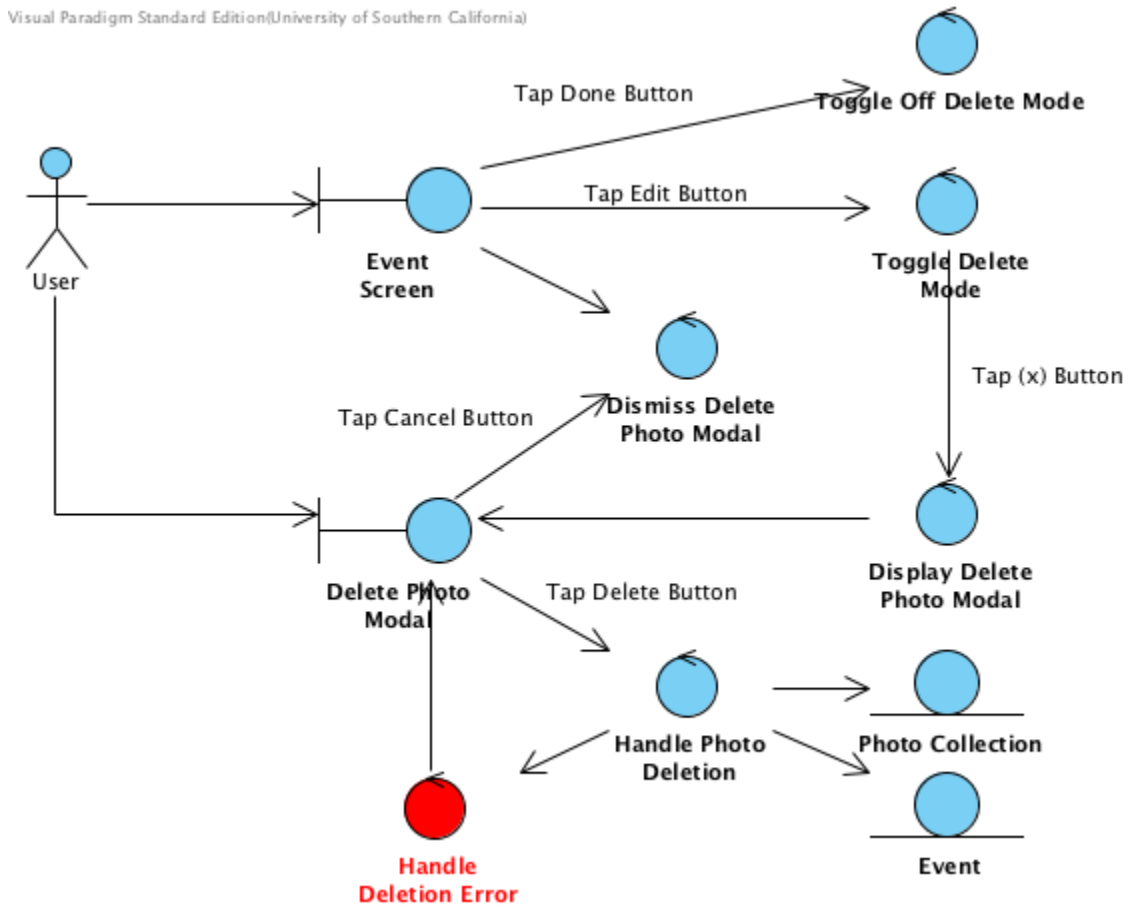
Use Case: View photos of event/View photos of private event with password



Use Case: Download Photos to Device

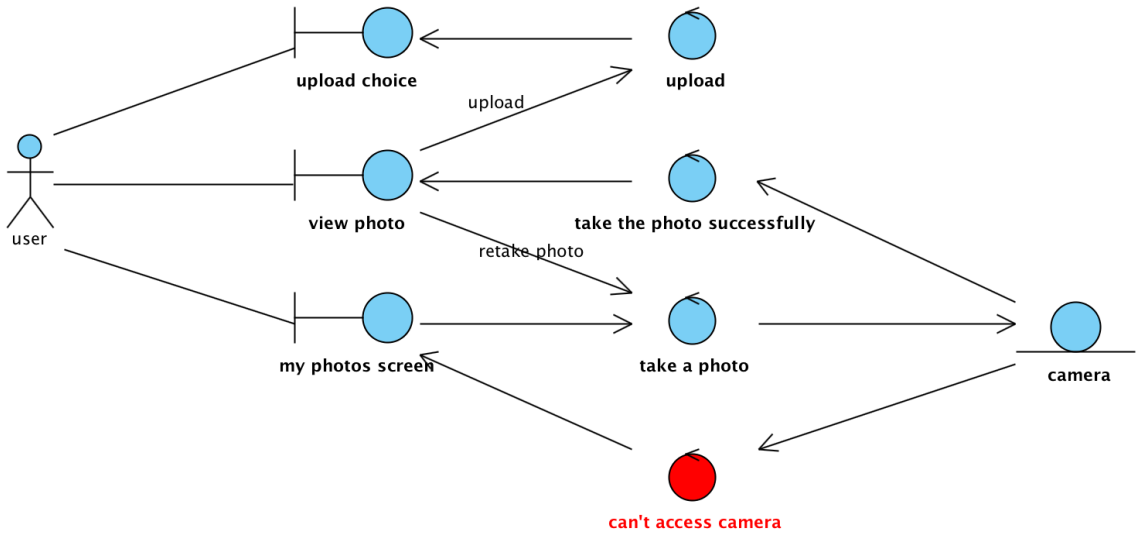


Use Case: Delete Photos in Event if Owner

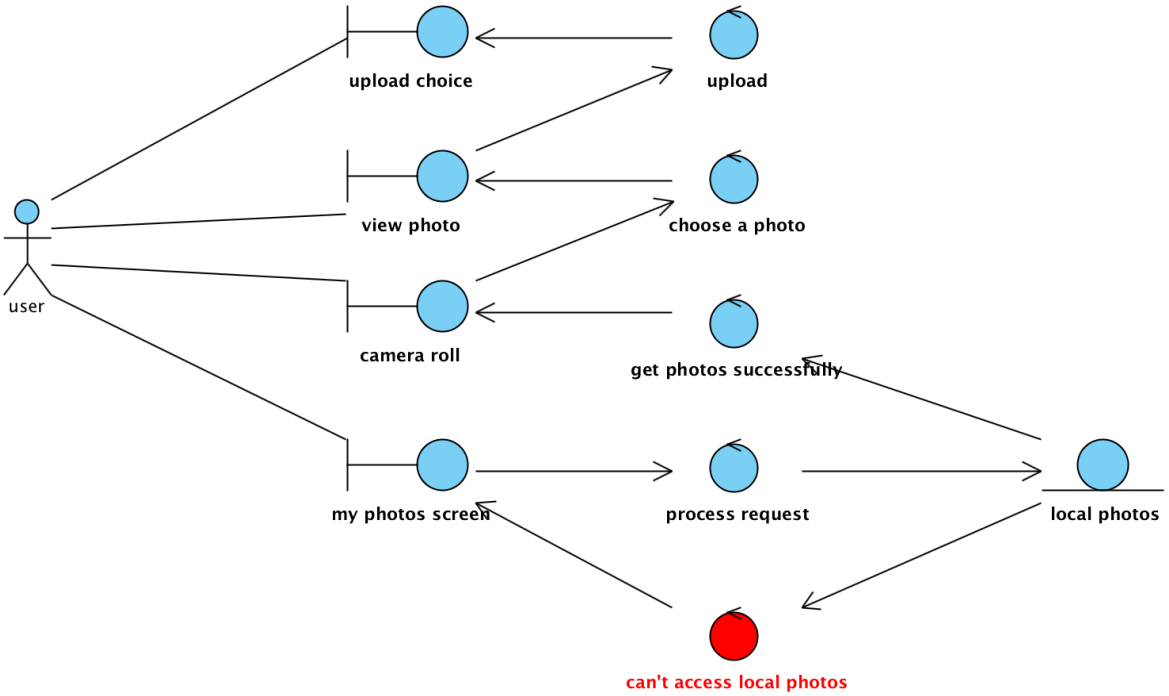


2.3 Photo Management Robustness Diagram

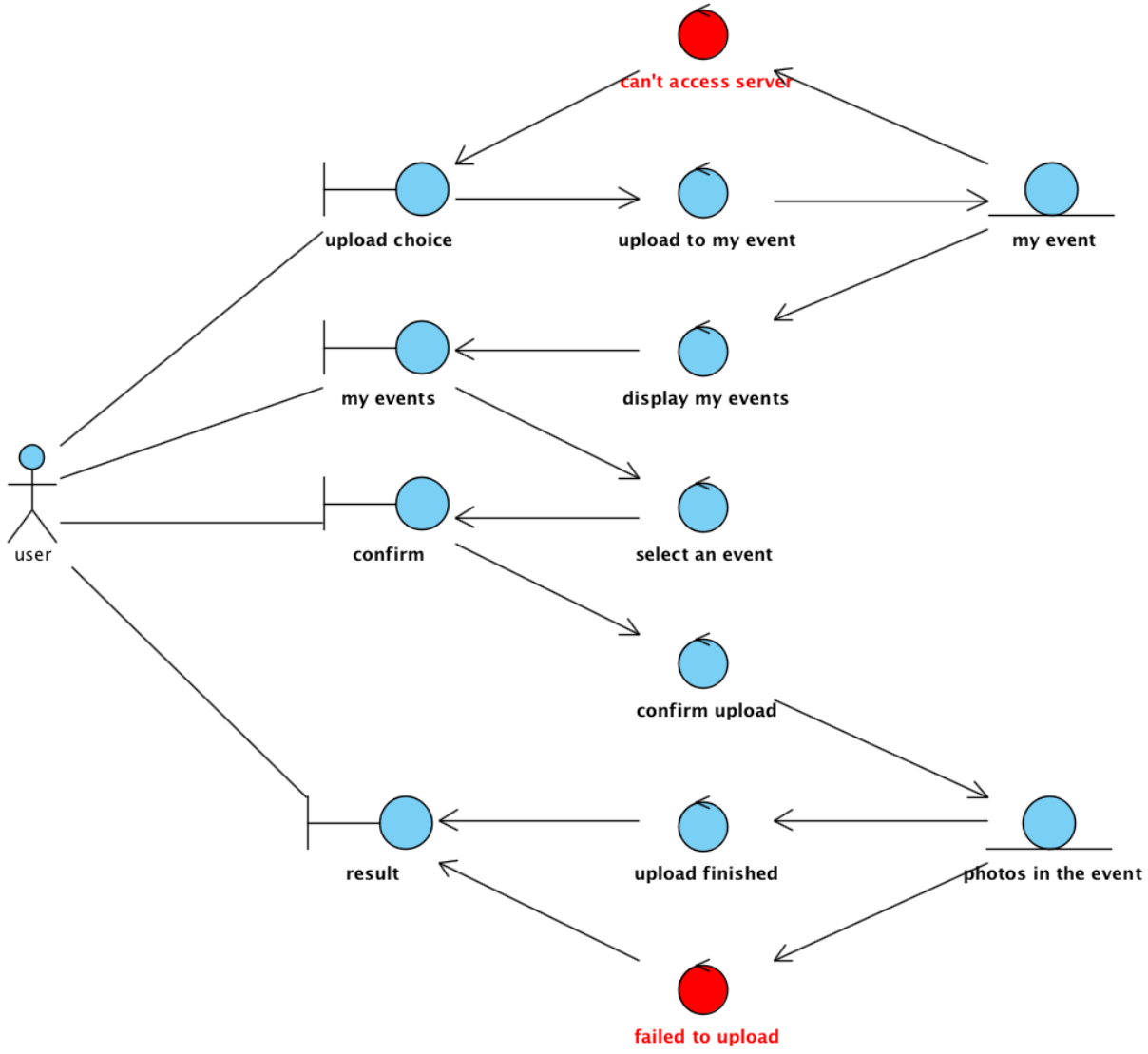
Use Case: Take a photo



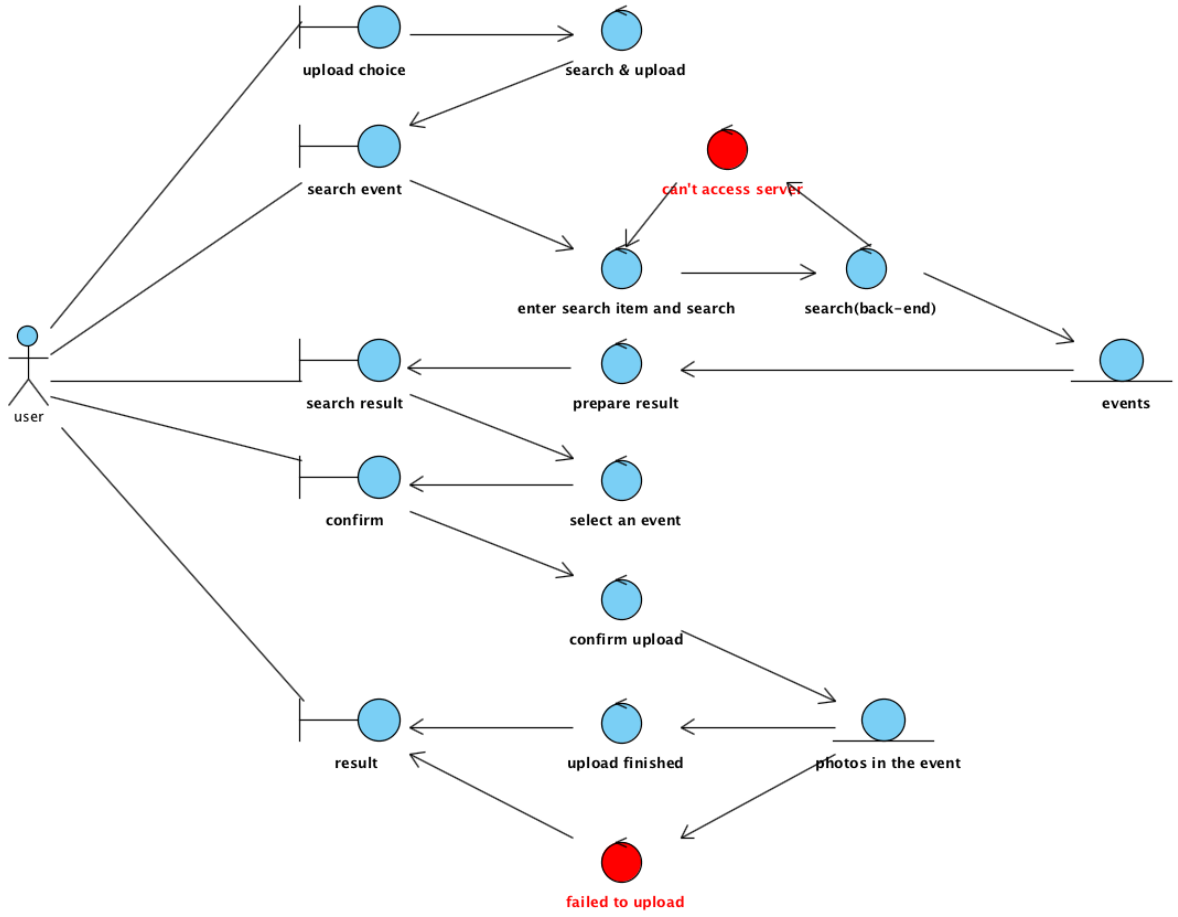
Use Case: View photos on device



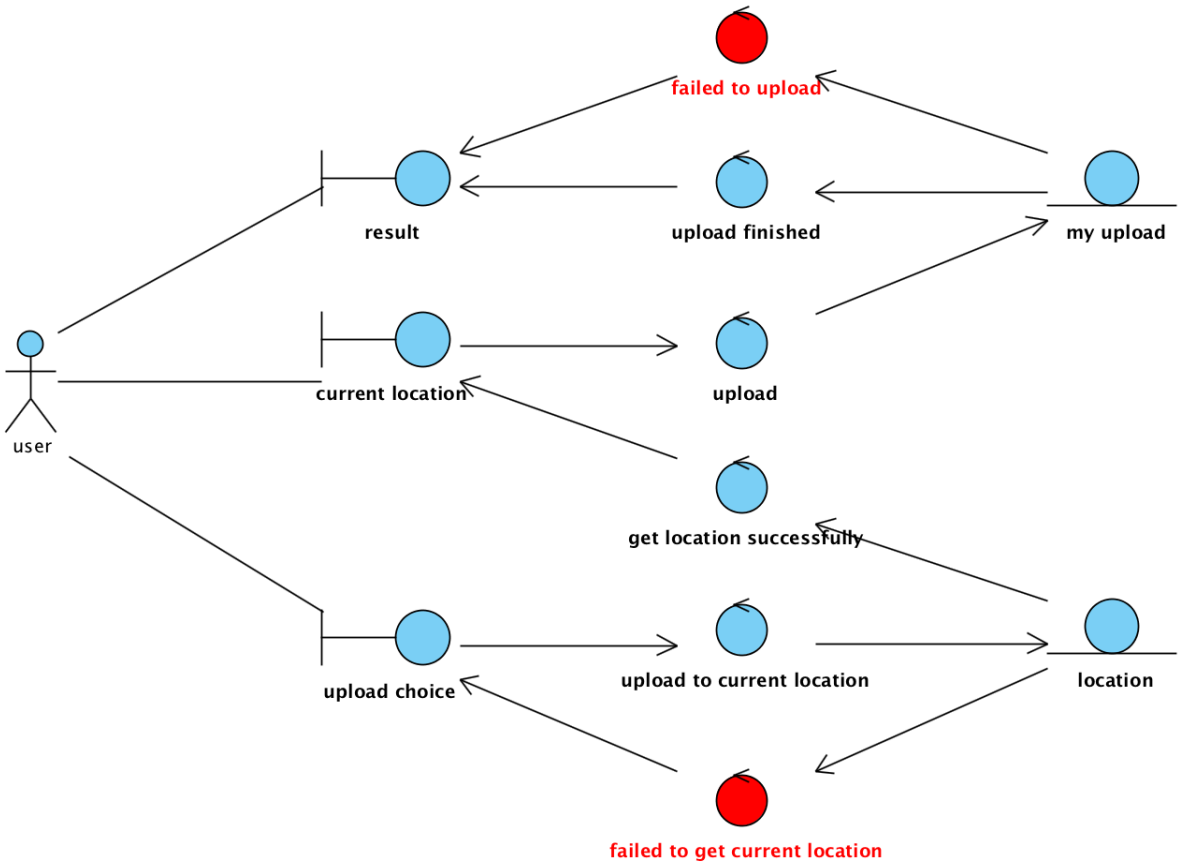
Use Case: Upload photo to my event



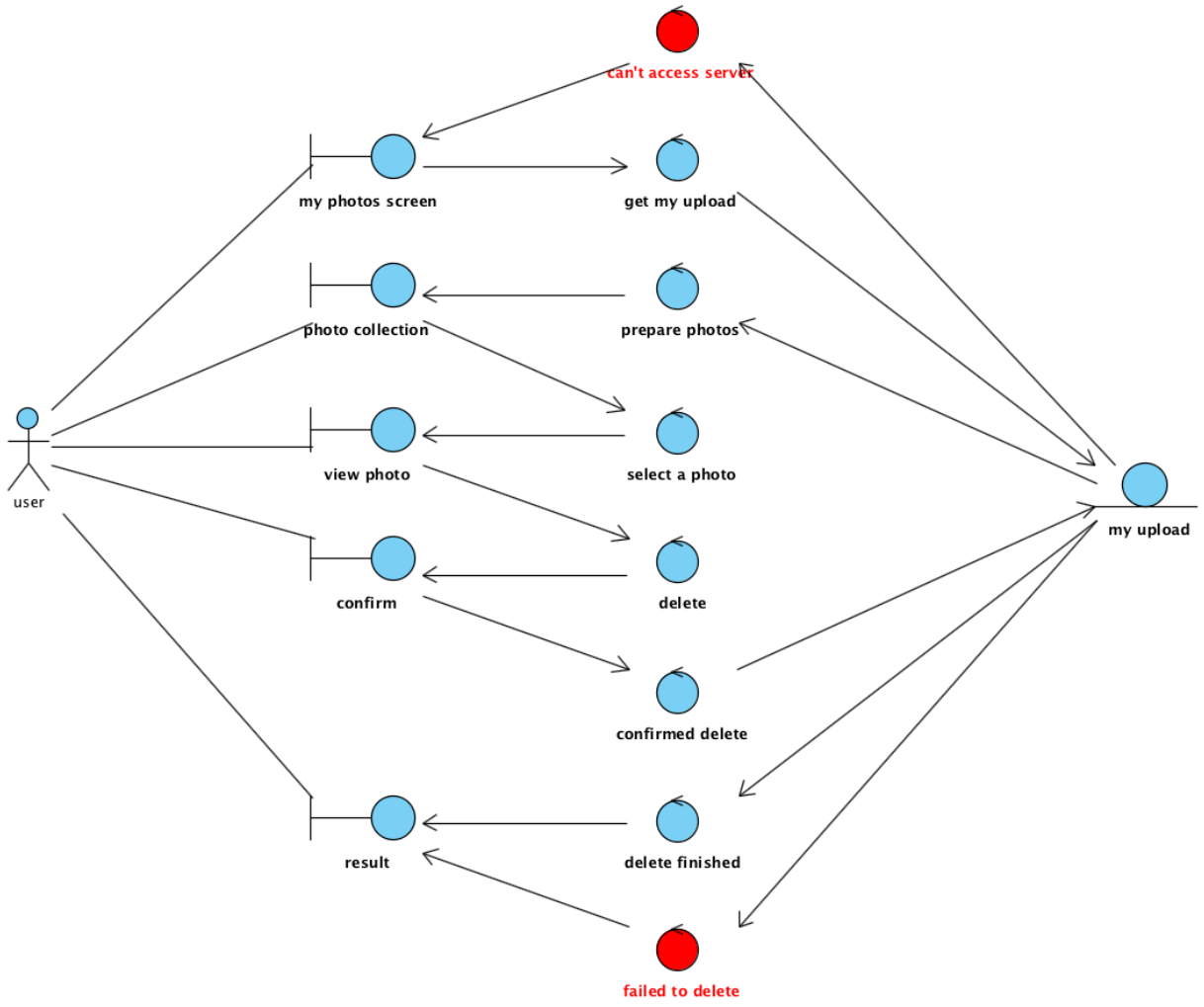
Use Case: Search event and upload photo



Use Case: Take photo for location

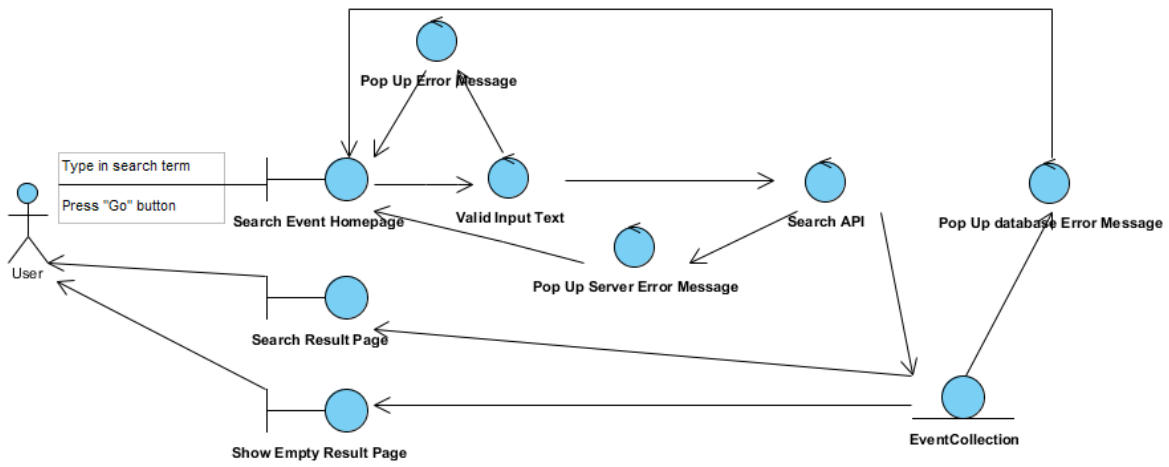


Use Case: Delete uploaded photos

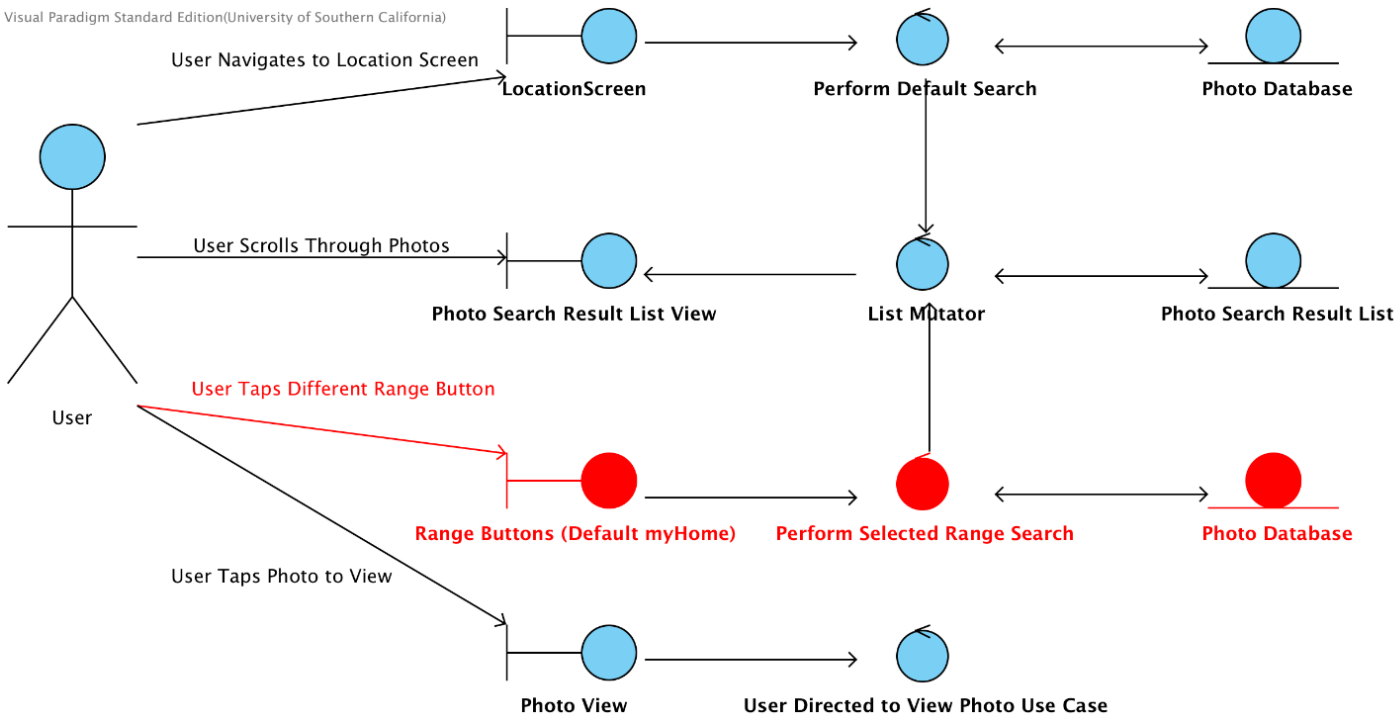


2.4 Search Robustness Diagram

Use Case: Search by event:

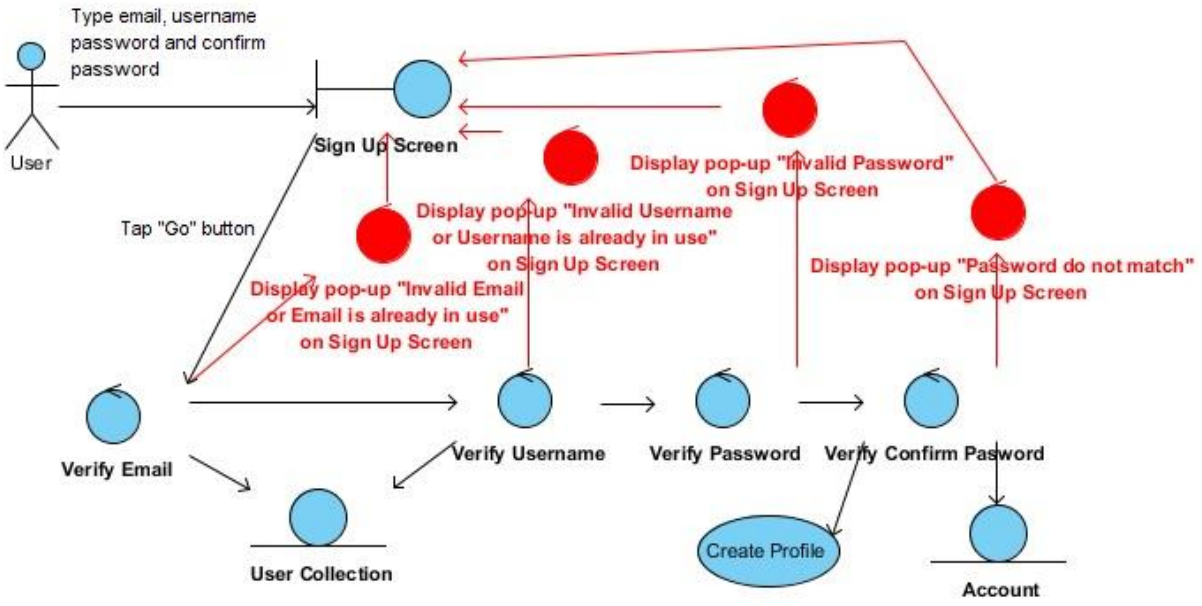


Use Case: Search by Location:

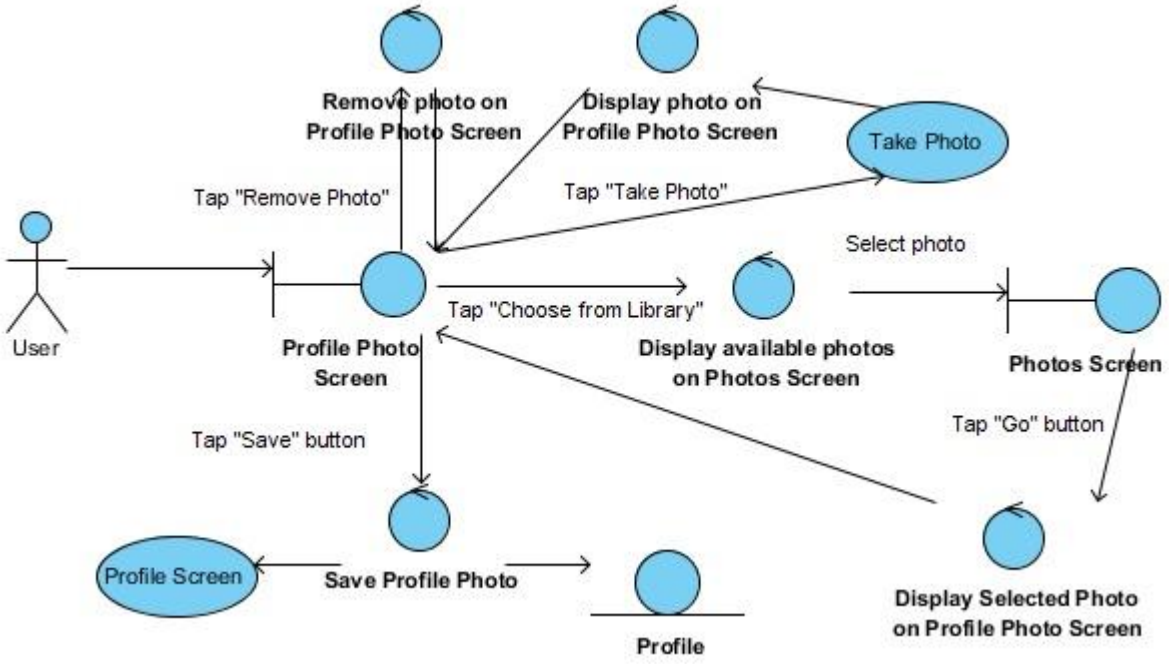


2.5 Profile Robustness Diagram

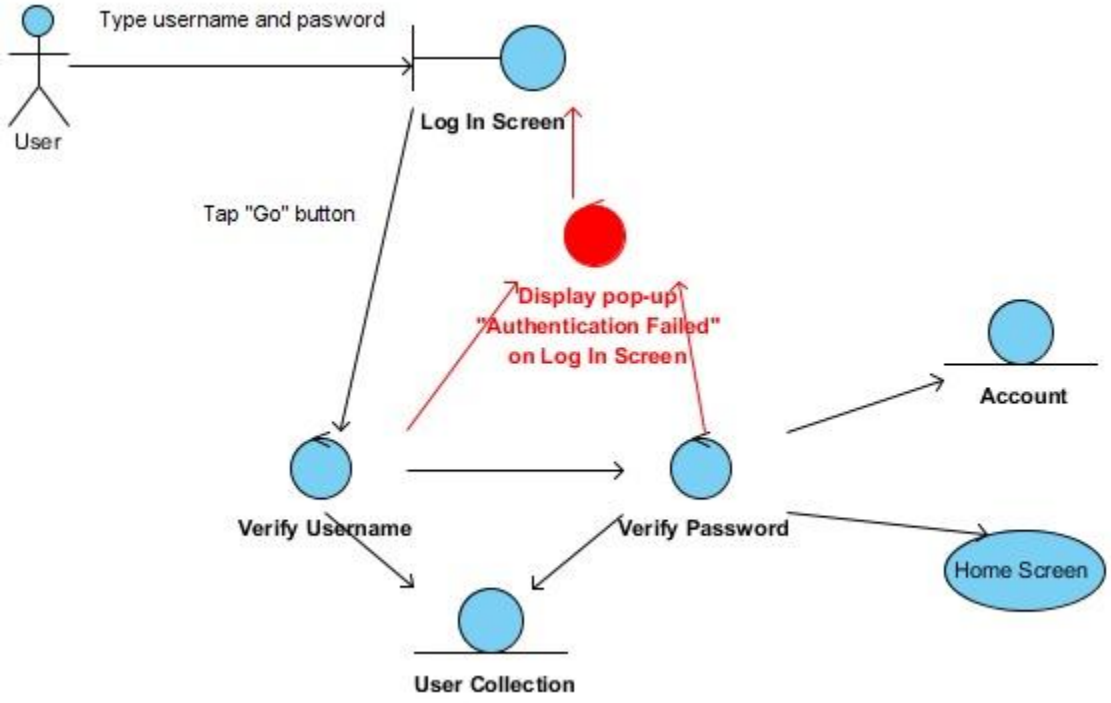
Use Case: Create account



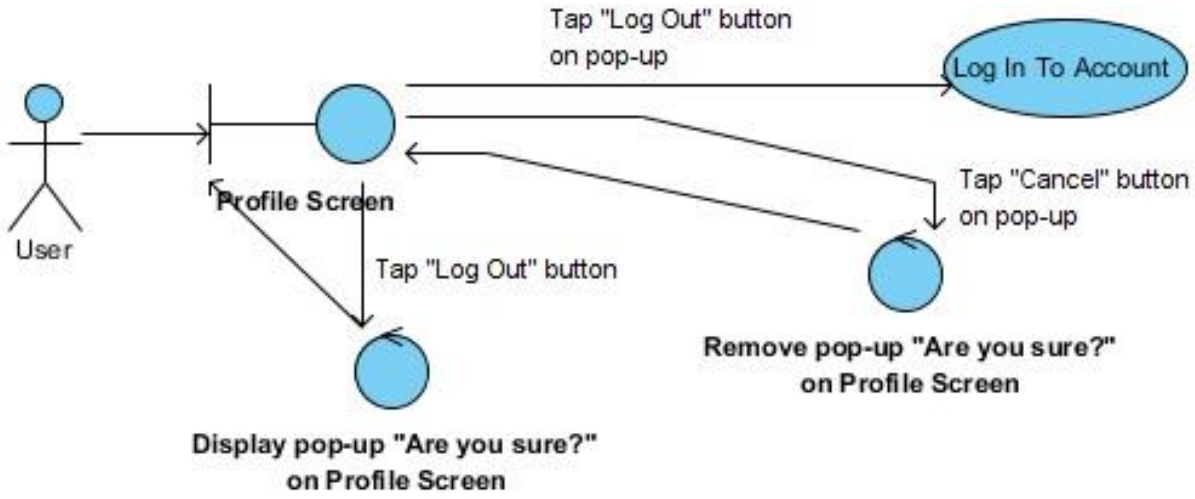
Use Case: Create profile



Use Case: Login to account

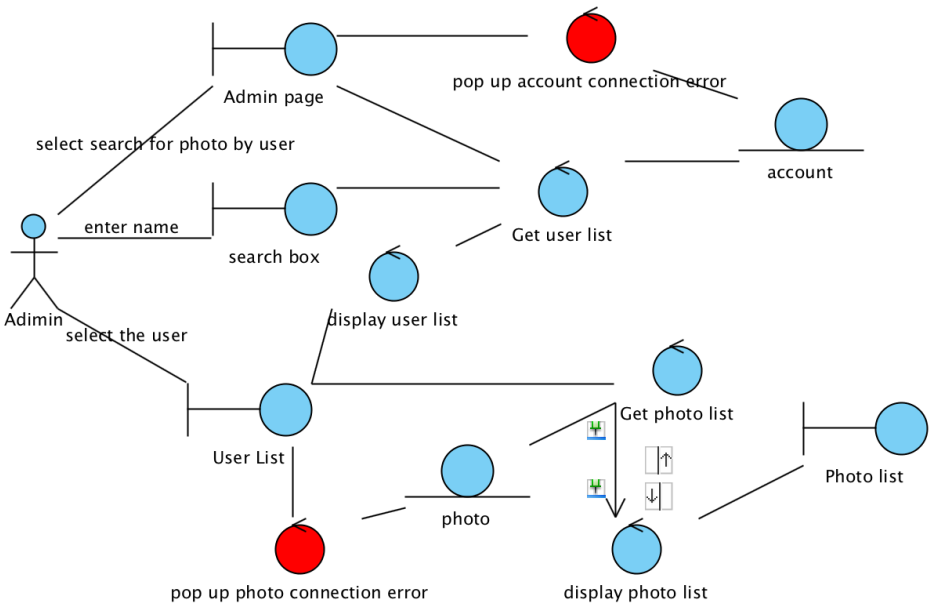


Use Case: Logout of account

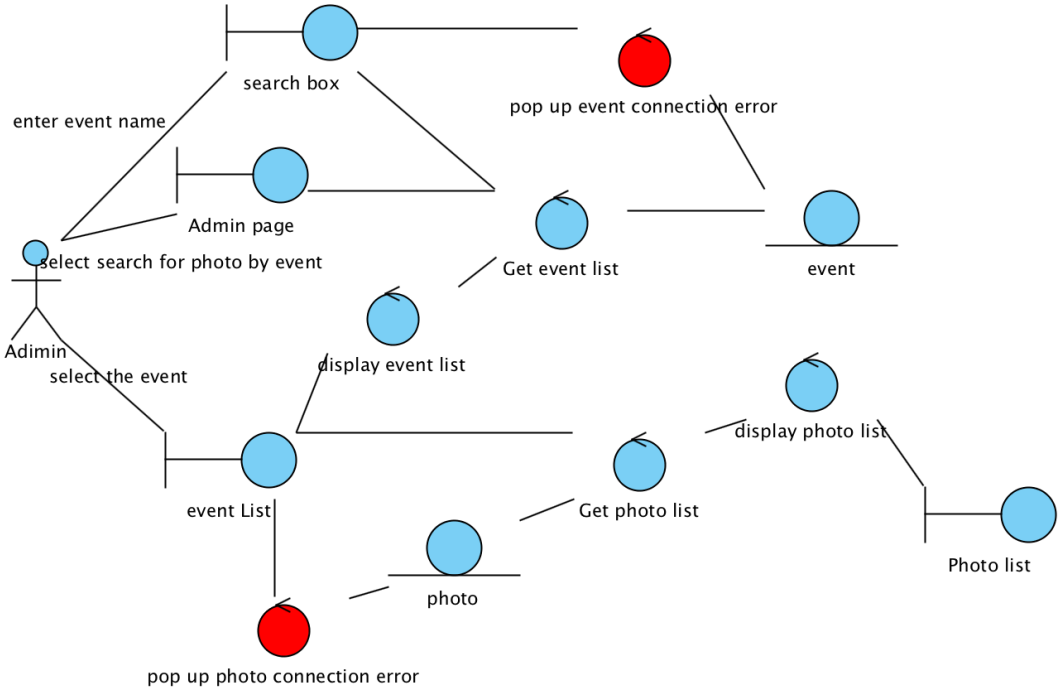


2.6 System & Administrator Robustness Diagram

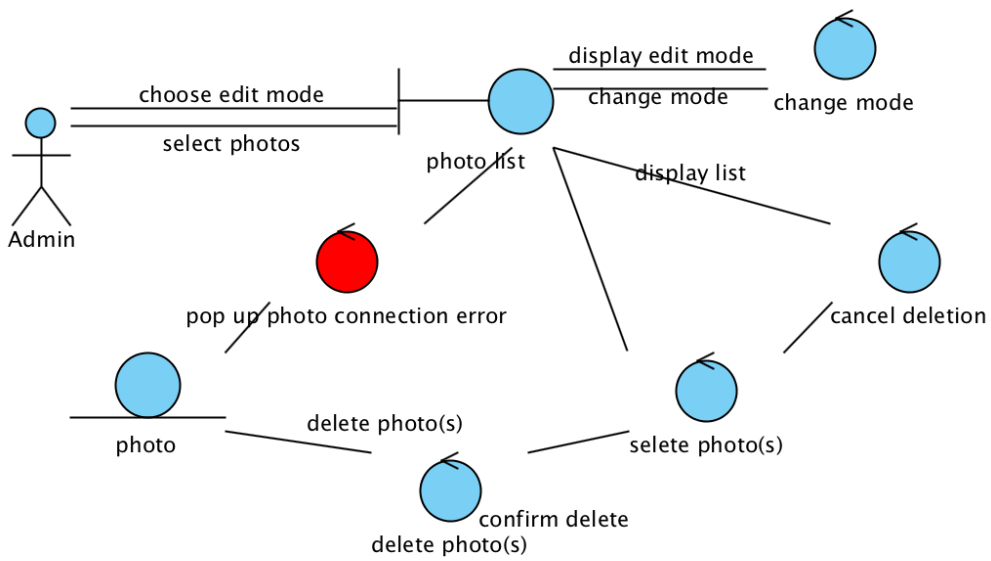
Use Case: Admin searches for photo by user



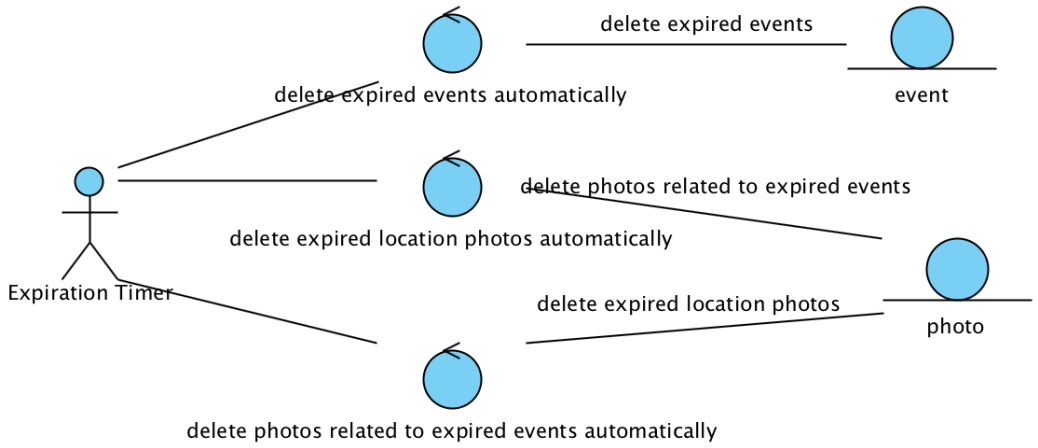
Use Case: Admin searches for photo by event



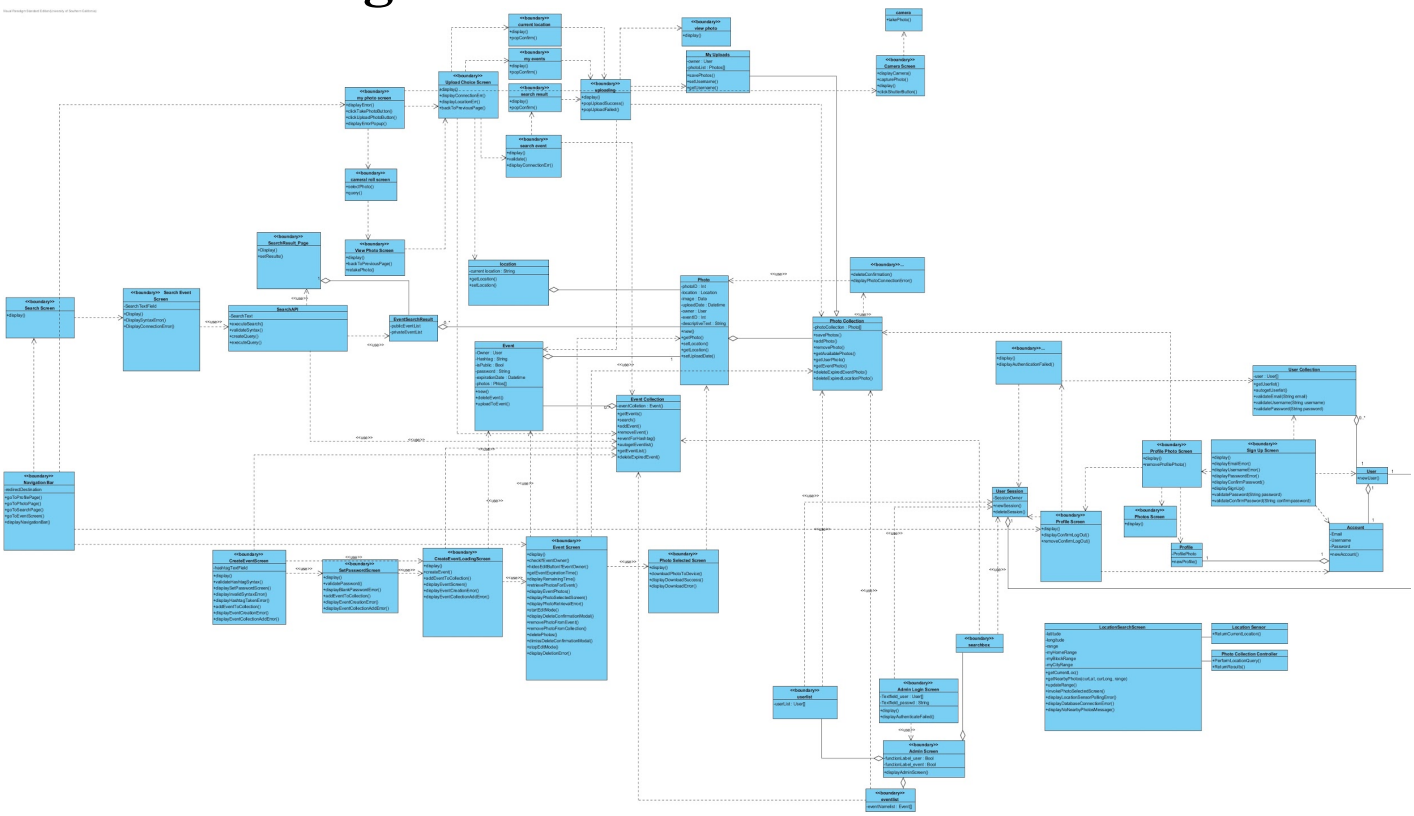
Use Case: Admin deletes photo



Use Case: Automatic deletion



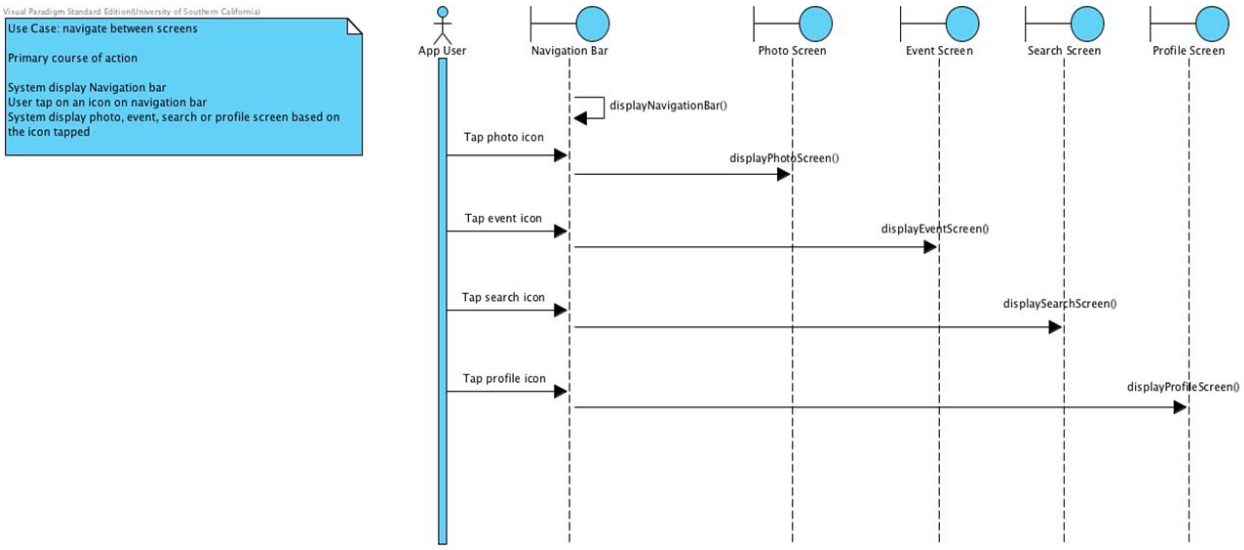
3. Class diagram



4. Sequence Diagrams

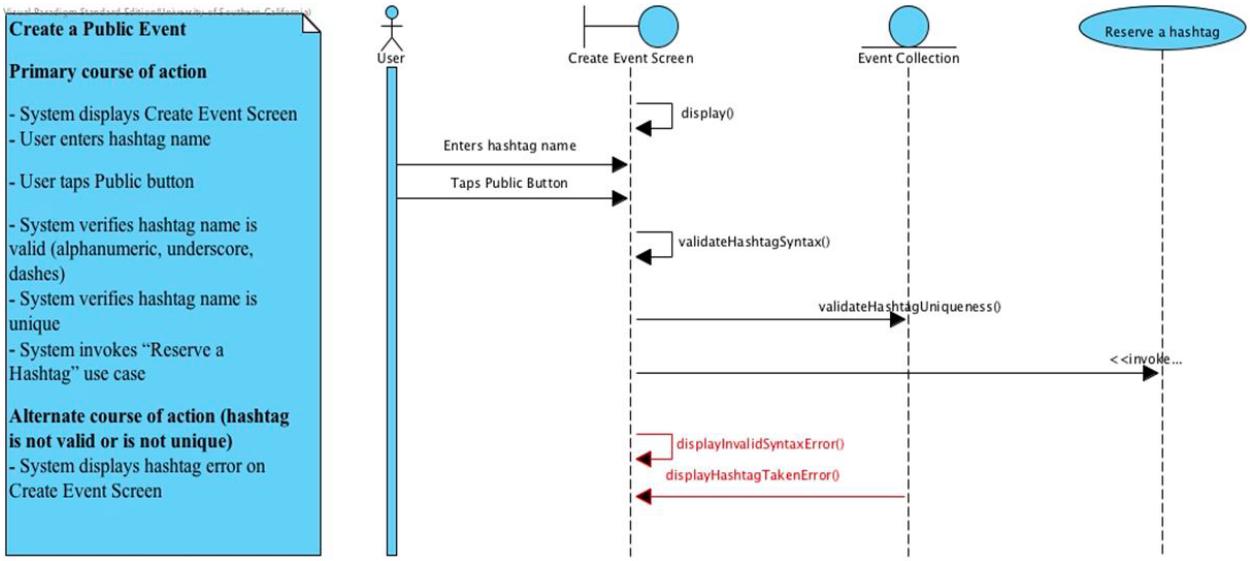
4.1 Navigation Sequence Diagram

Use Case: Navigate between screen

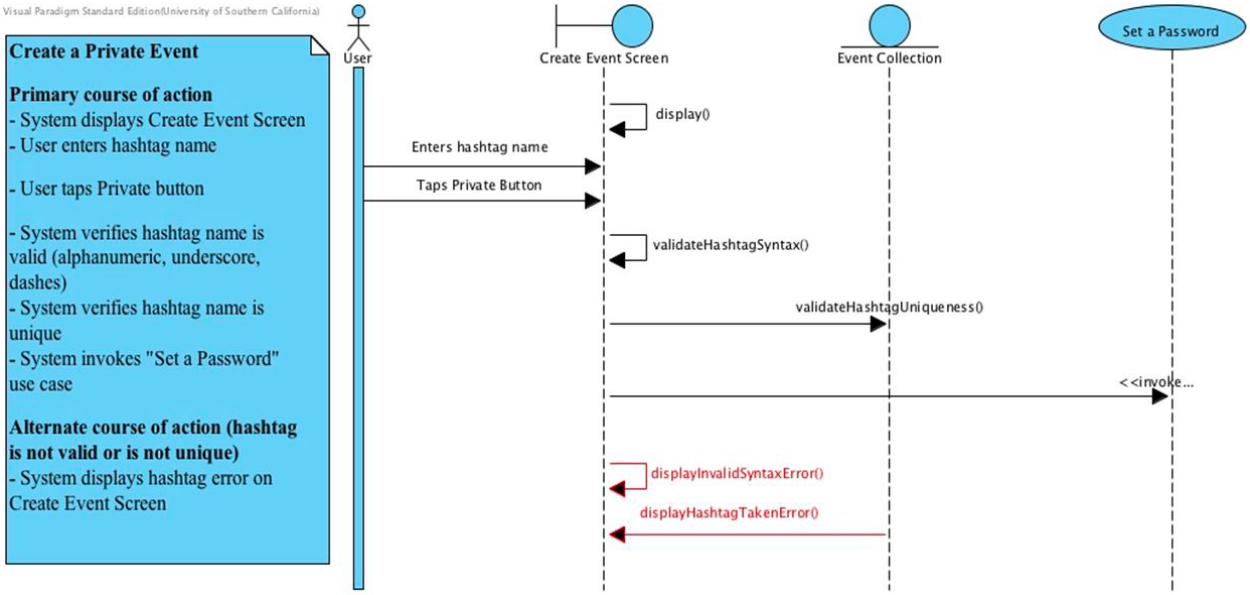


4.2 Event Sequence Diagram

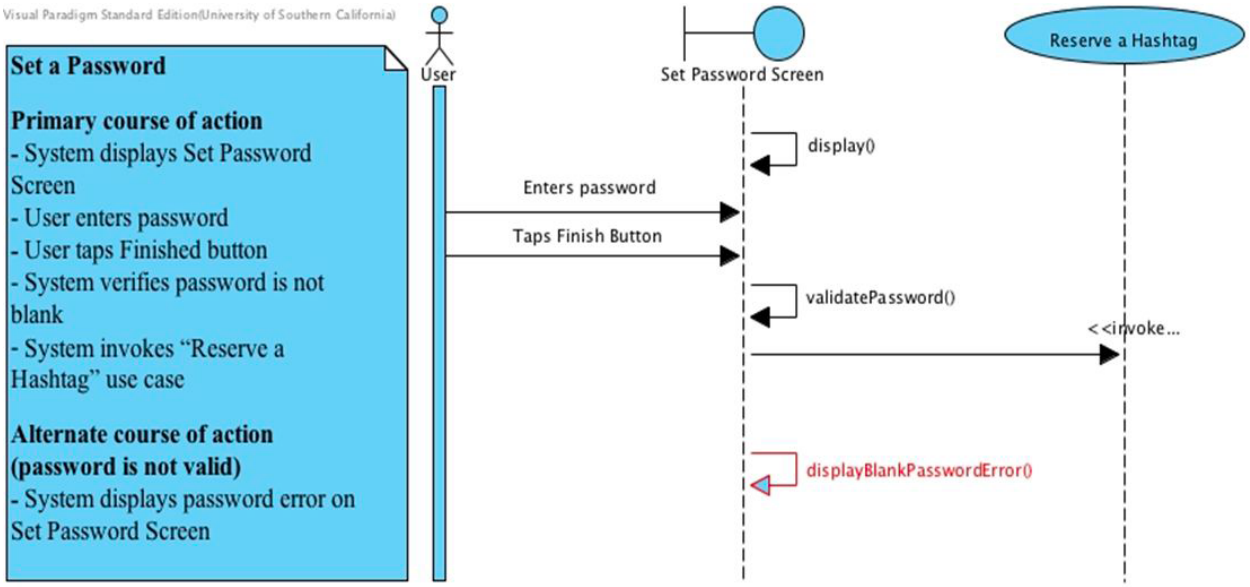
Use Case: Create a pubic event



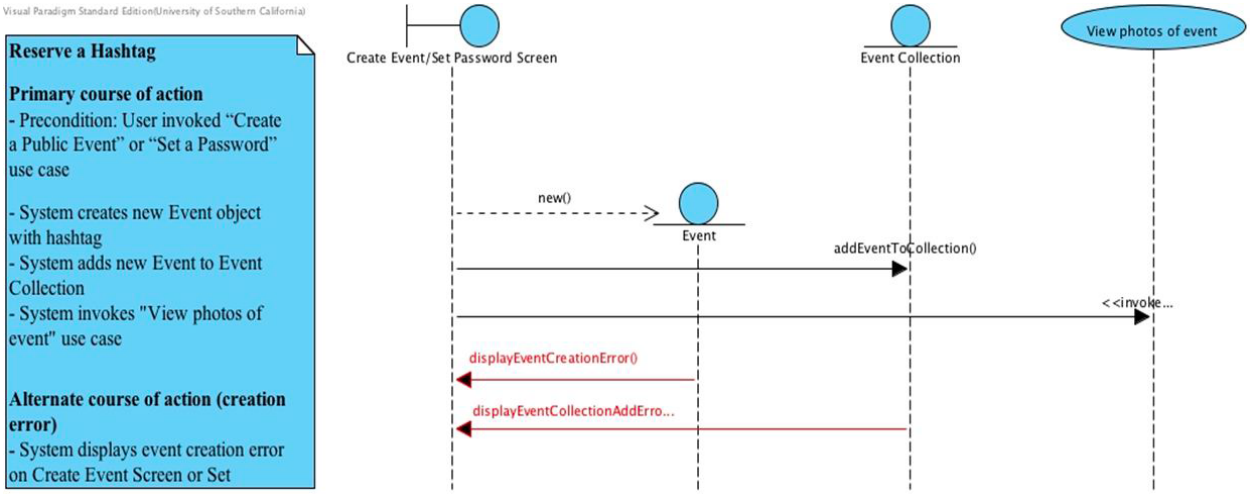
Use Case: Create a private event



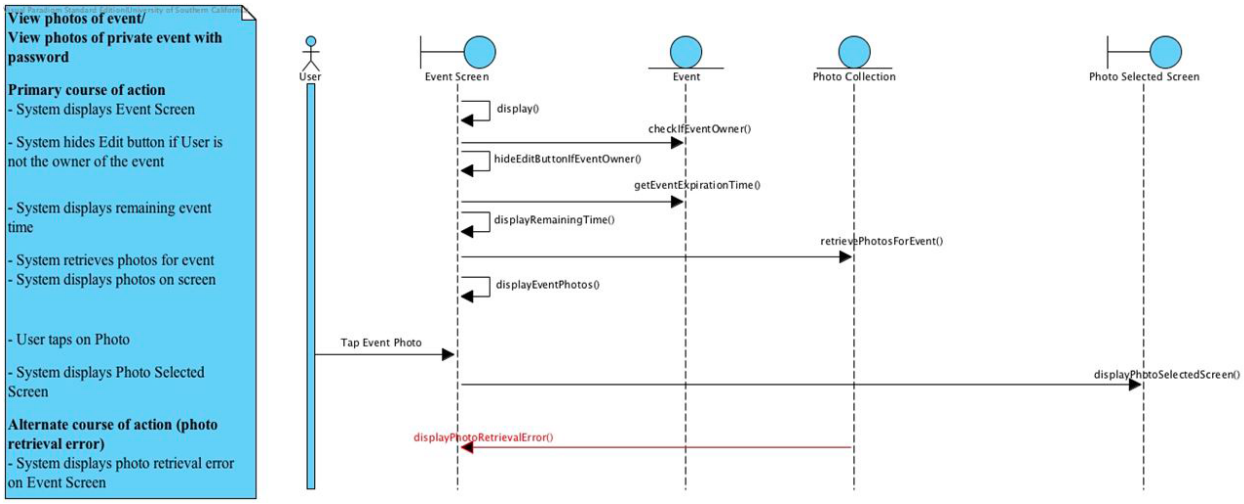
Use Case: Set a password



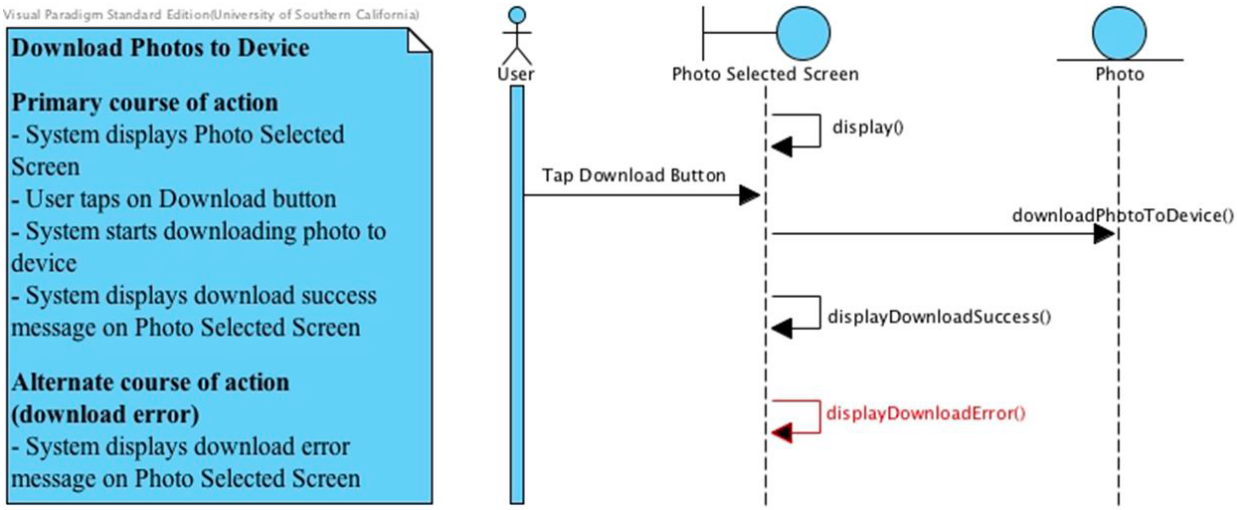
Use Case: Reserve a hashtag



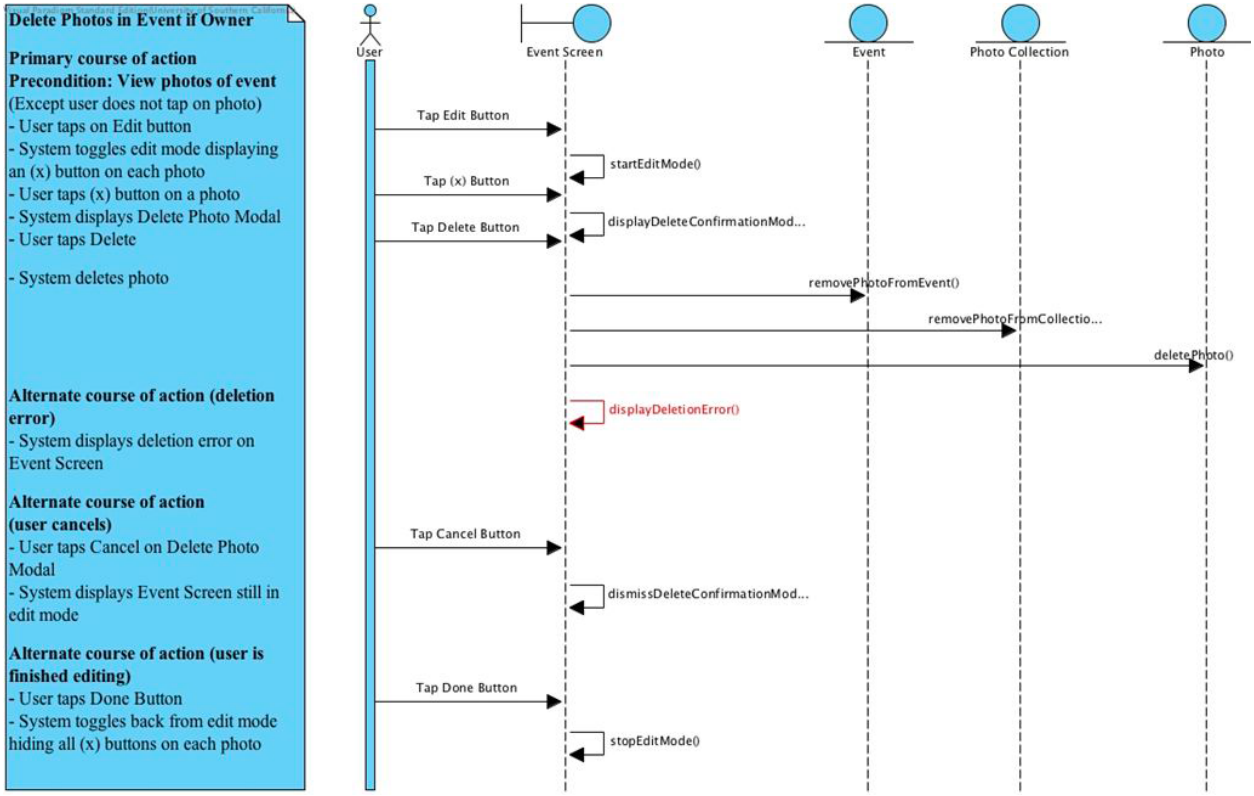
Use Case: View photos of event/View photos of private event with password



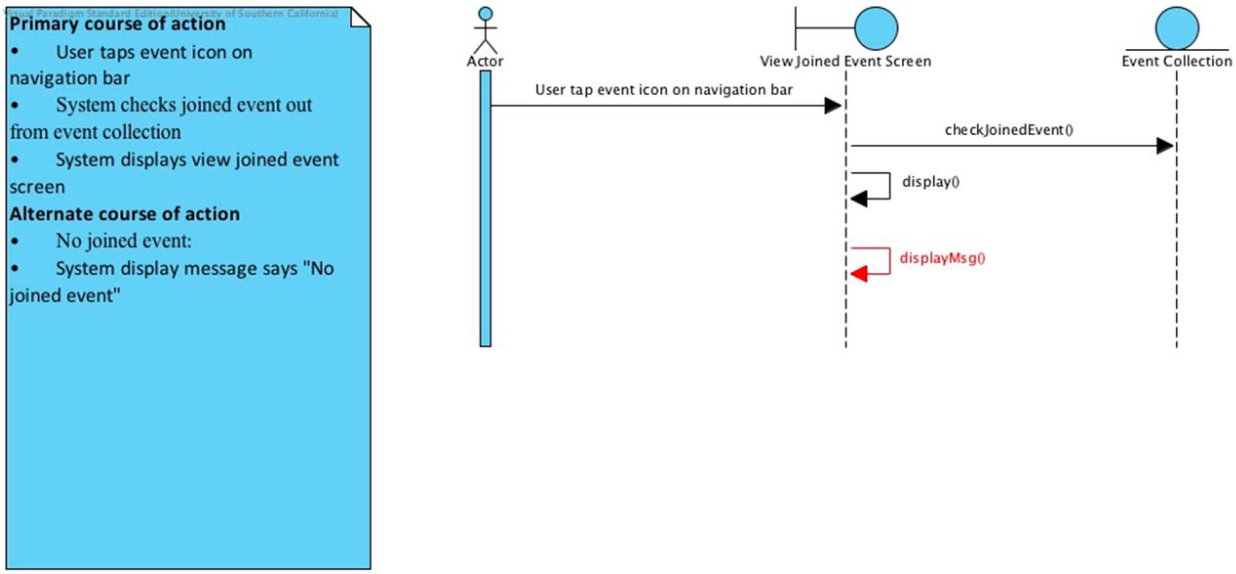
Use Case: Download photos to device



Use Case: Delete photos in event if owner

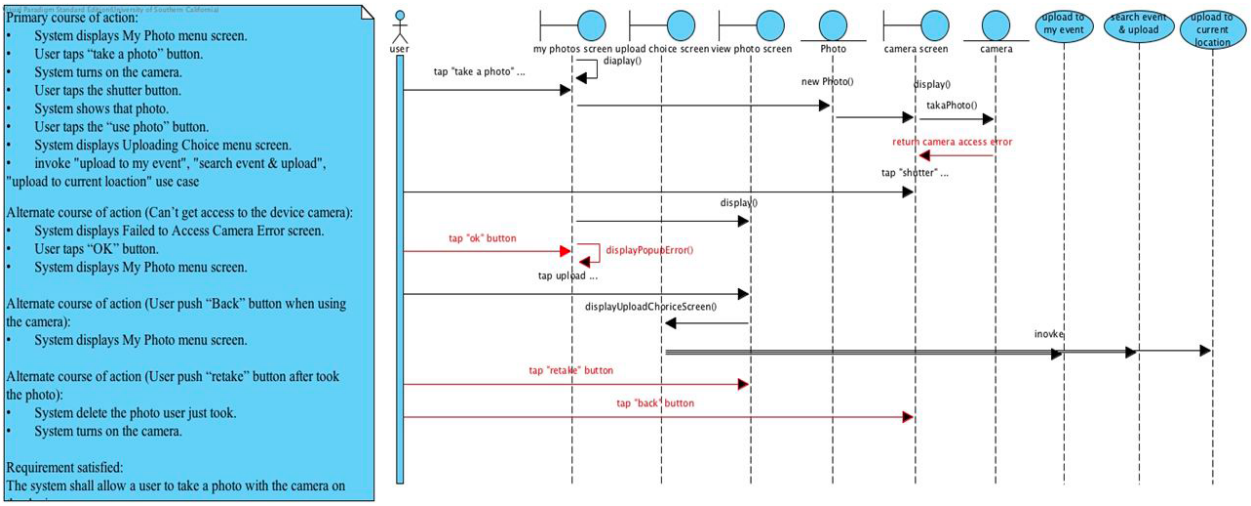


Use Case: View joined events

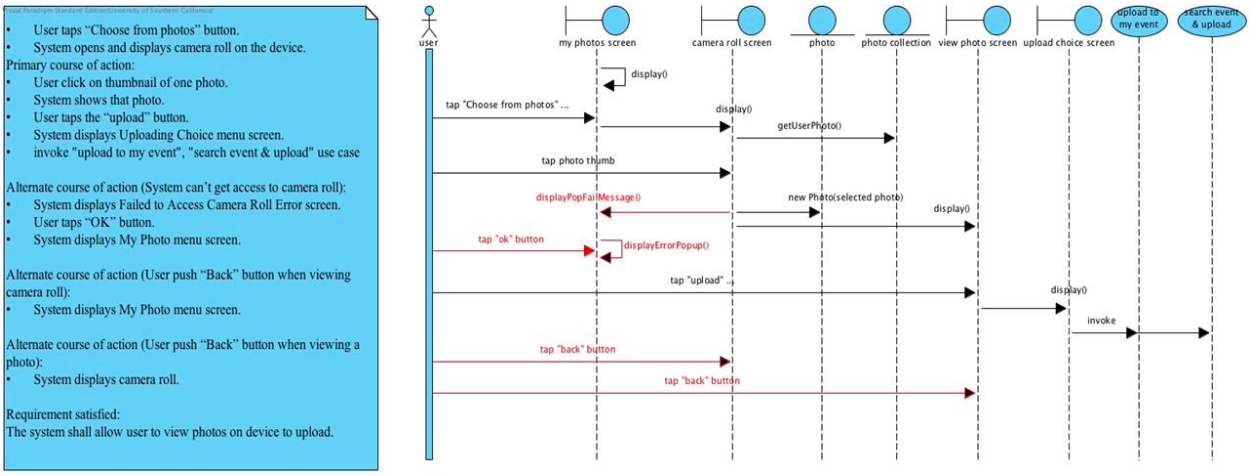


4.3 Photo Sequence Diagram

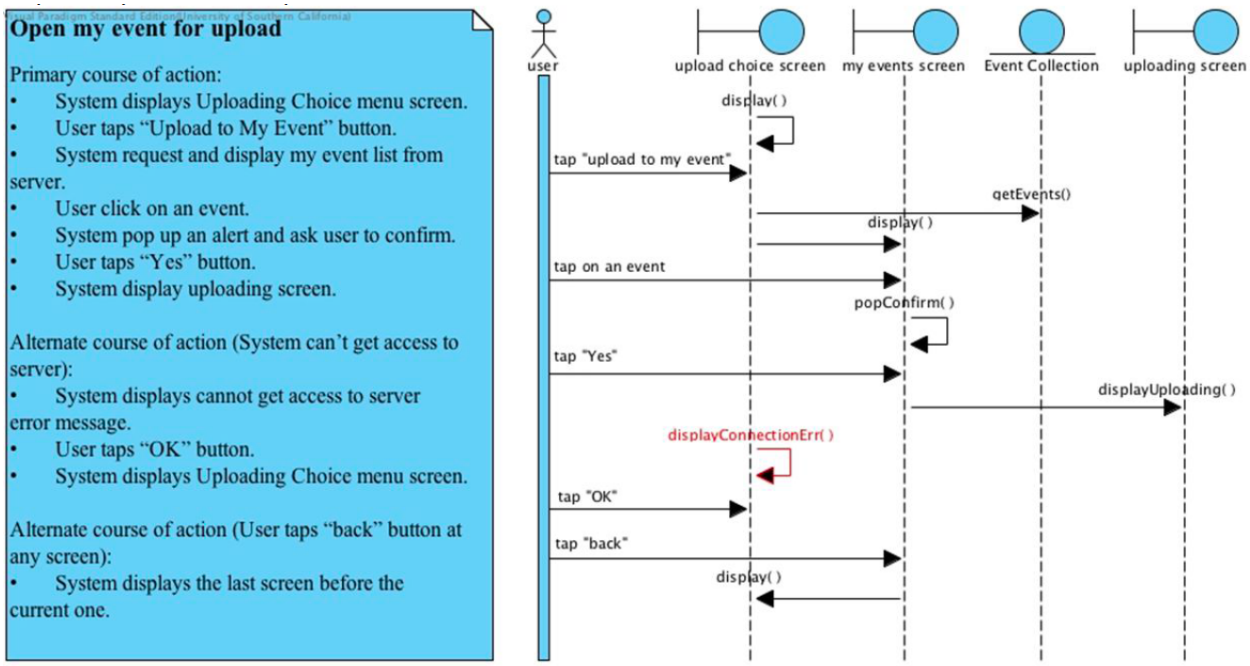
Use Case: Take a photo



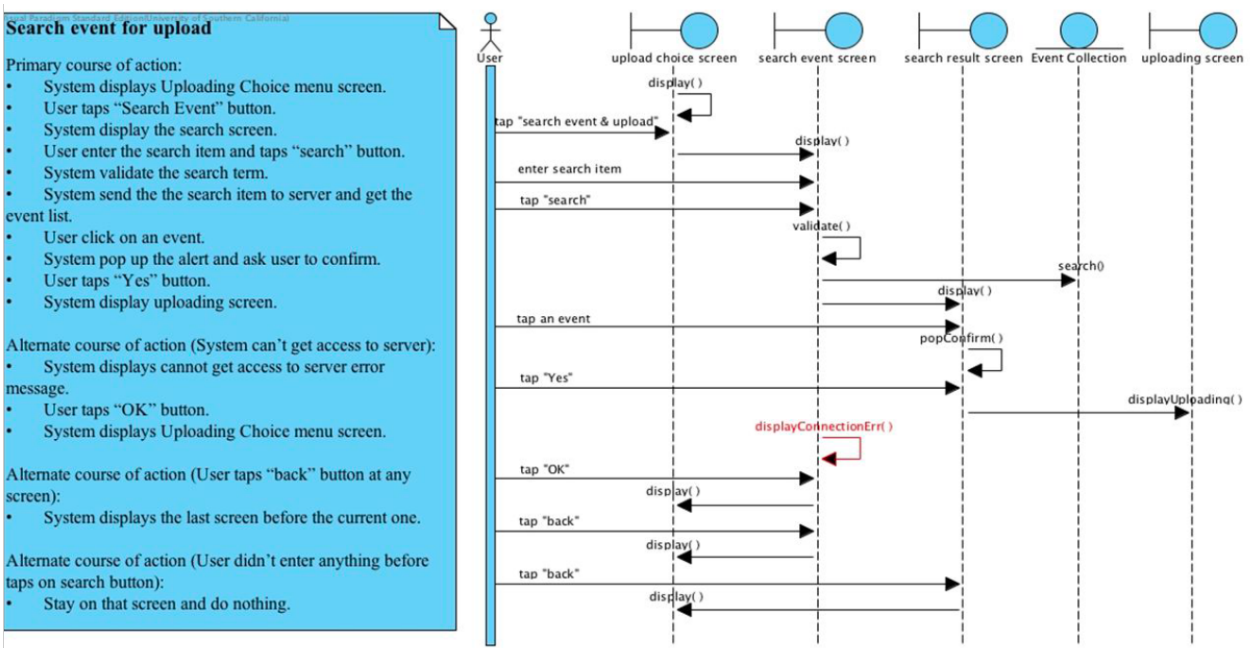
Use Case: View photos on devices



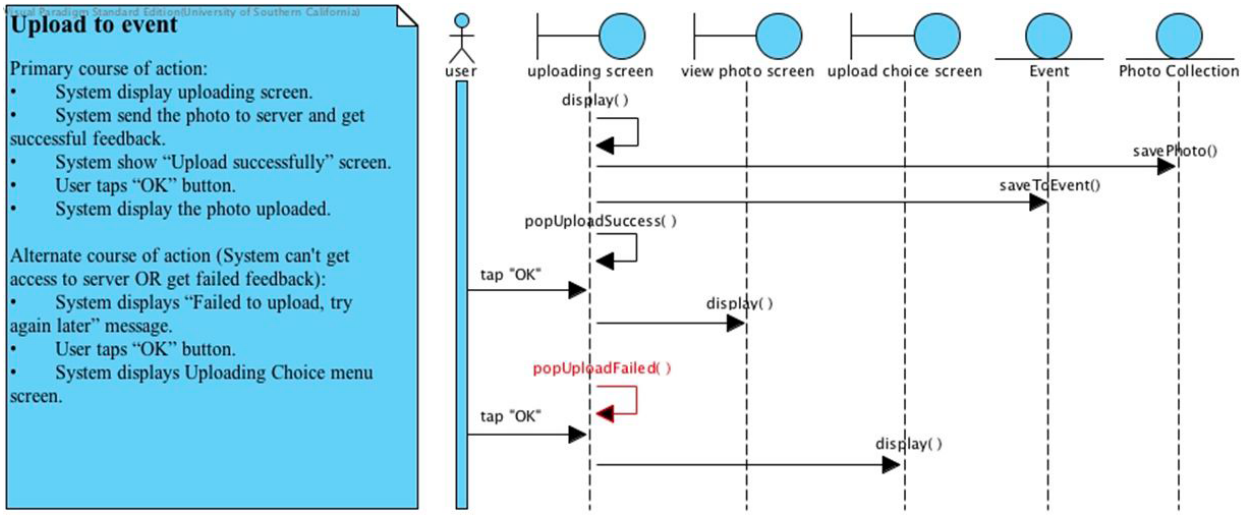
Use Case: Open my event for upload



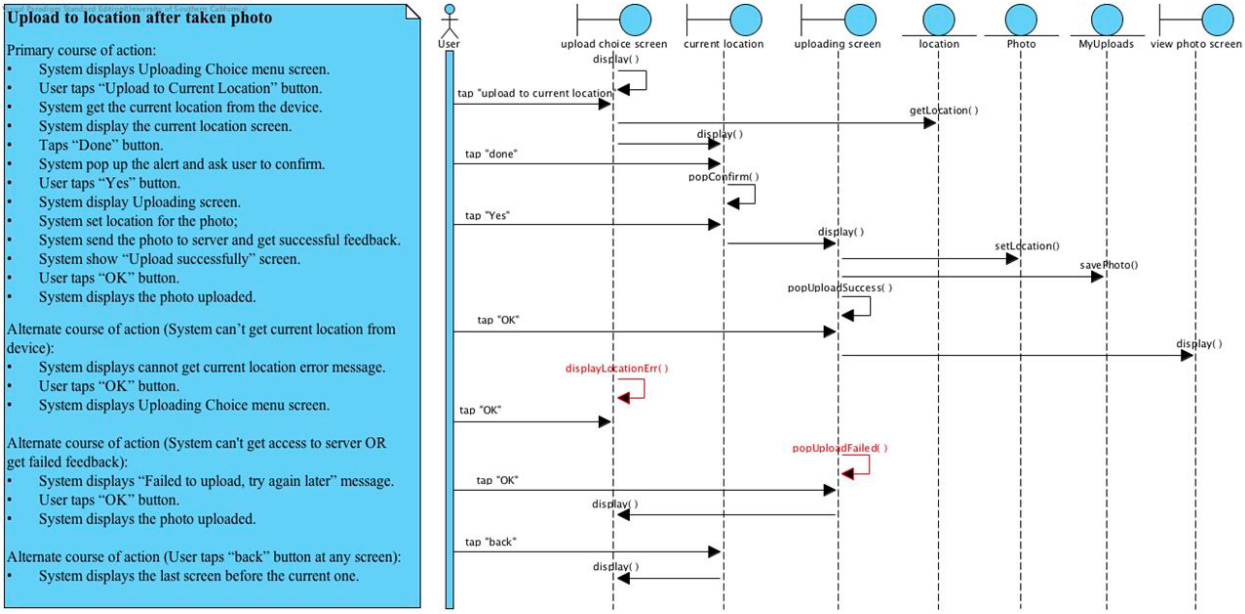
Use Case: Search event for upload



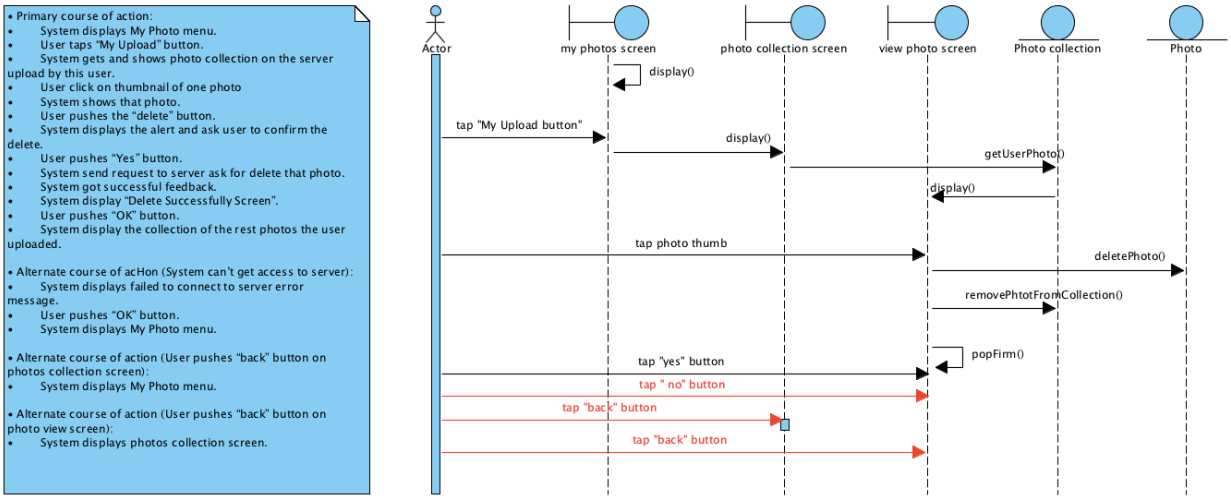
Use Case: Upload to event



Use Case: Upload to location after taking photo

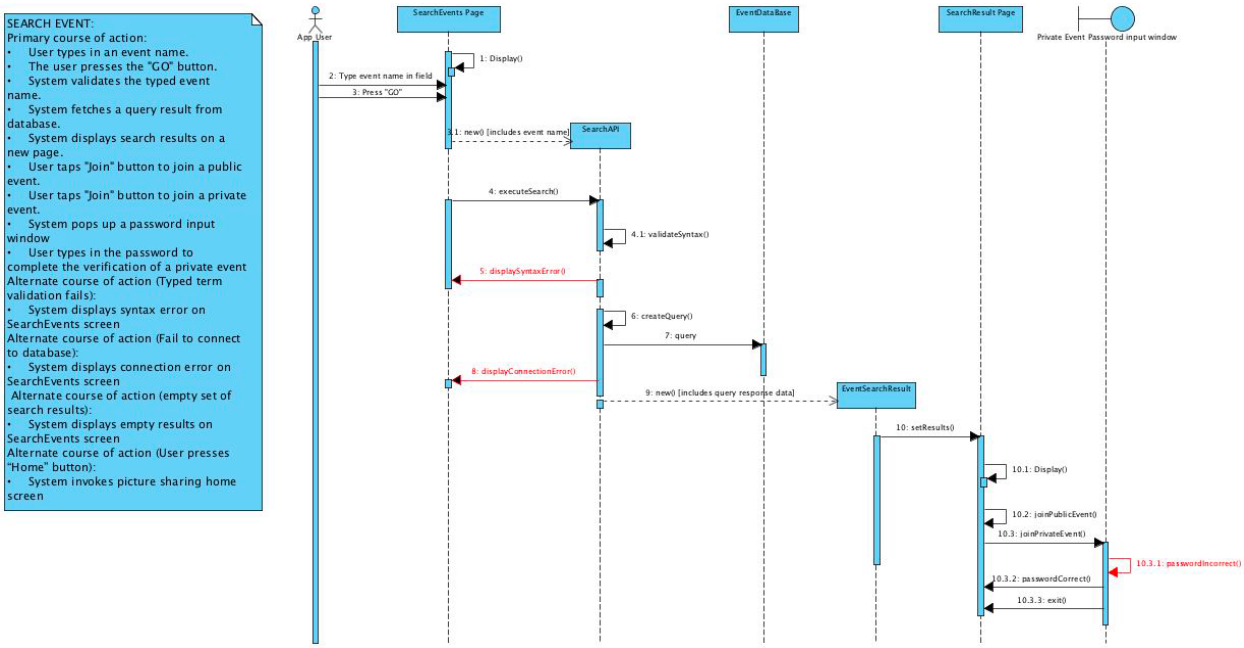


Use Case: Delete uploaded photos

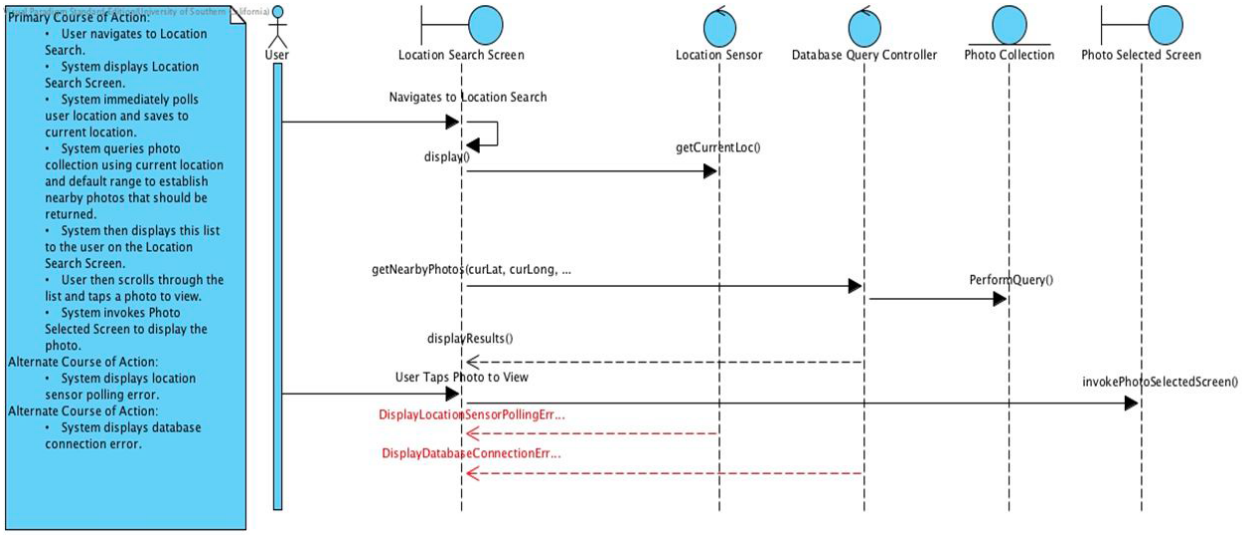


4.4 Search Sequence Diagram

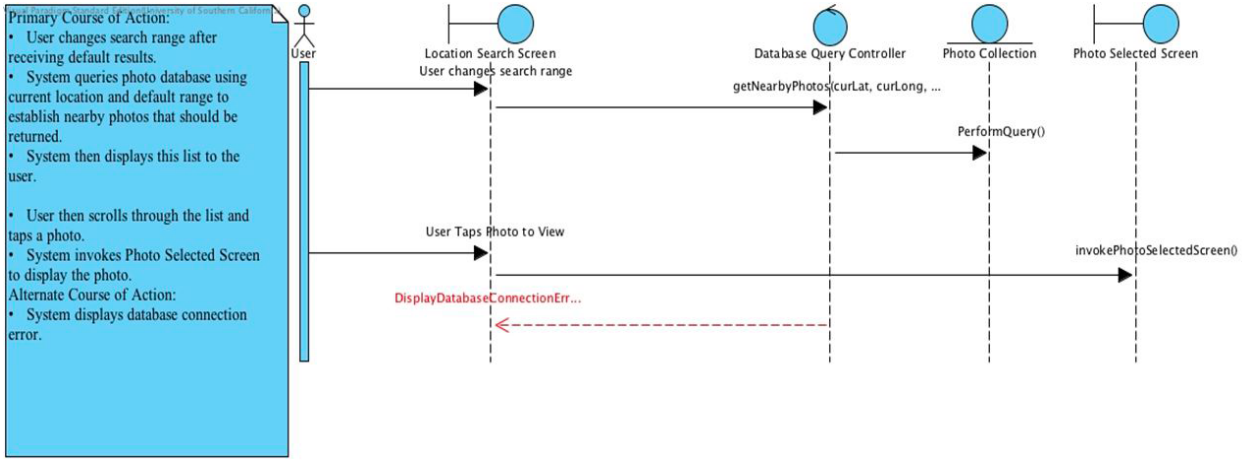
Use Case: Search event



Use Case: Search photos by location - Primary course of action

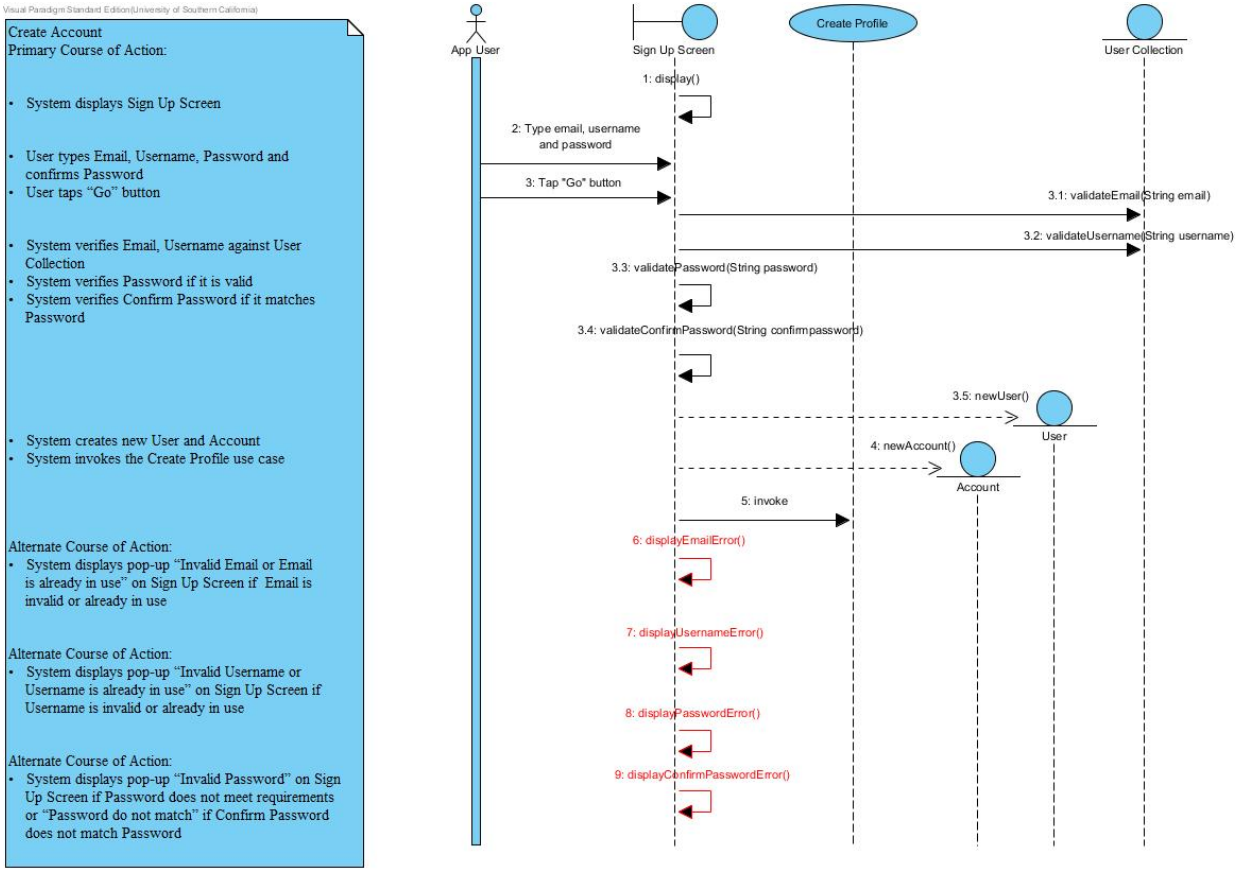


Use Case: Search photos by location - Alternate course of action



4.5 Profile Sequence Diagram

Use Case: Create account

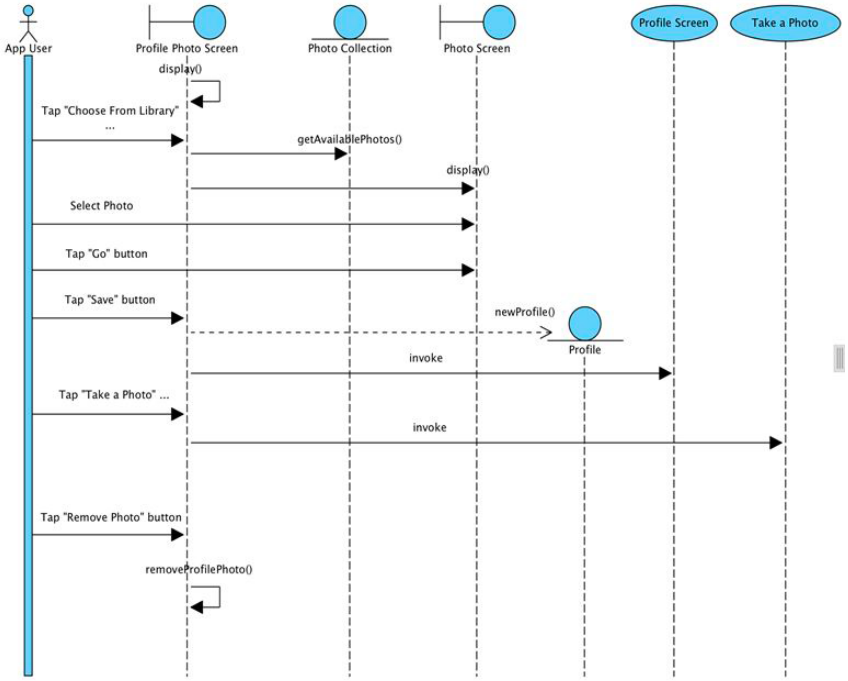


Use Case: Create profile

Create Profile
Primary Course of Action:
- System displays Profile Photo Screen
- User taps "Choose from Library" button
- System retrieves available photos from Photo Collection
- System displays available photos on Photos Screen
- User selects photo and taps "Go" button
- System displays selected Photo on Profile Photo Screen
- User taps "Save" button
- System creates Profile
- System invokes the Profile Screen use case

Alternate Course of Action:
- User taps "Take a Photo" button
- System invokes Take a Photo use case
- System displays photo on Profile Photo Screen
- User taps "Save" button
- System creates Profile
- System invokes the Profile Screen use case

Alternate Course of Action:
- User taps "Remove Photo" button
- System displays default photo on Profile Photo Screen
- User taps "Save" button
- System creates Profile
- System invokes the Profile Screen use case

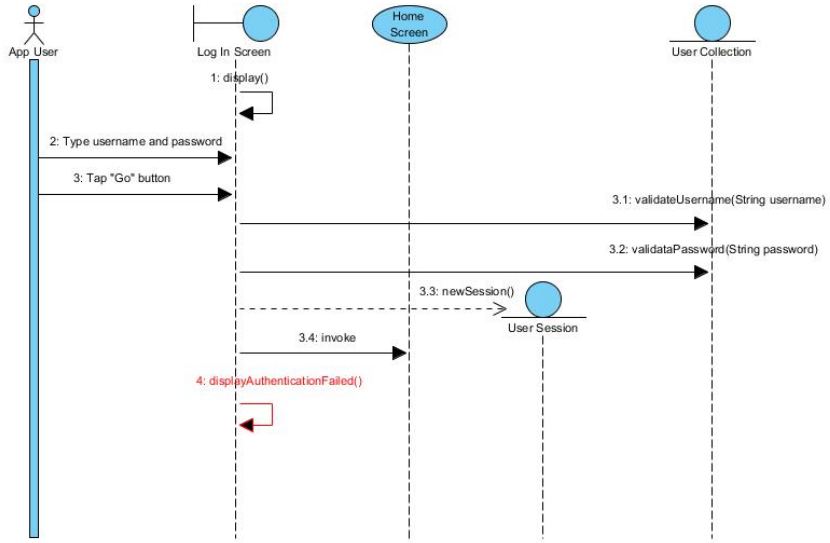


Use Case: Login to account

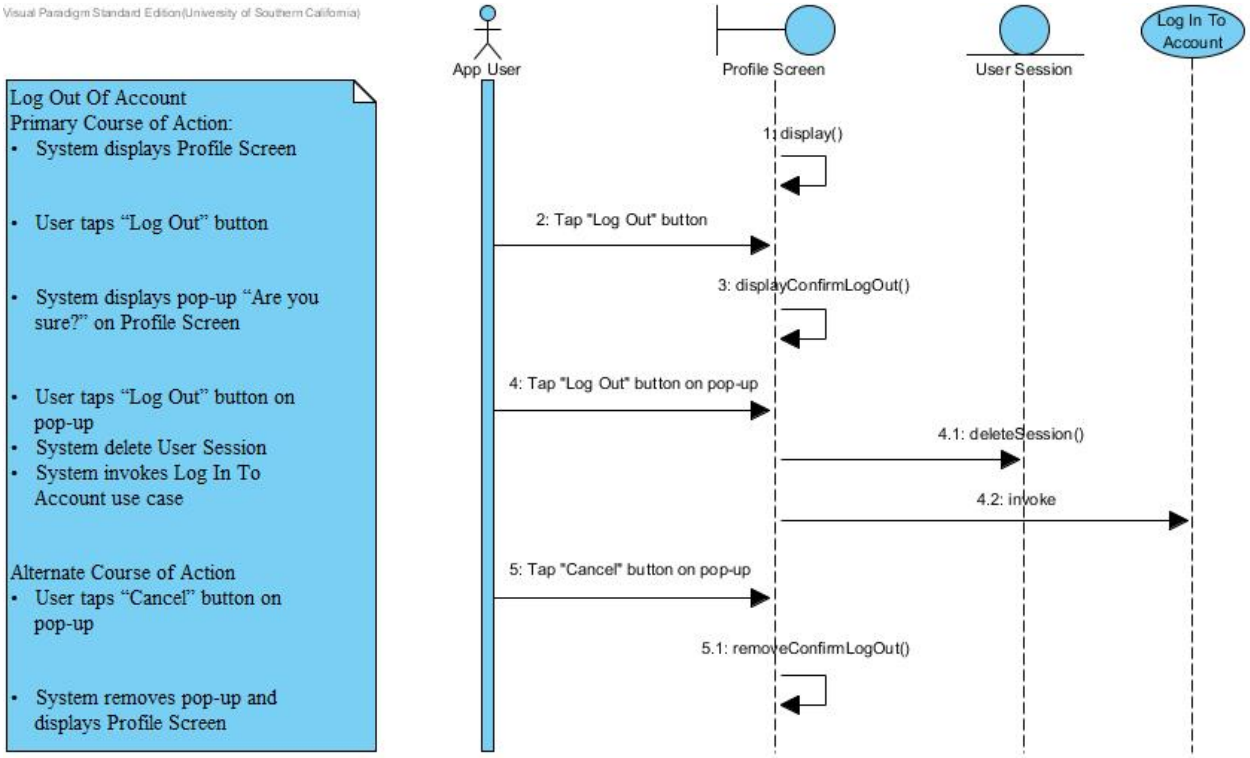
Visual Paradigm Standard Edition(University of Southern California)

Log In To Account
Primary Course of Action:
- System displays Log In Screen
- User types Username and Password
- User taps "Go" button
- System verifies Username and Password against User Collection
- System creates User Session
- System invokes the Home Screen use case

Alternate Course of Action:
- System displays pop-up "Authentication Failed" on Log In Screen if Username is invalid or Password is incorrect

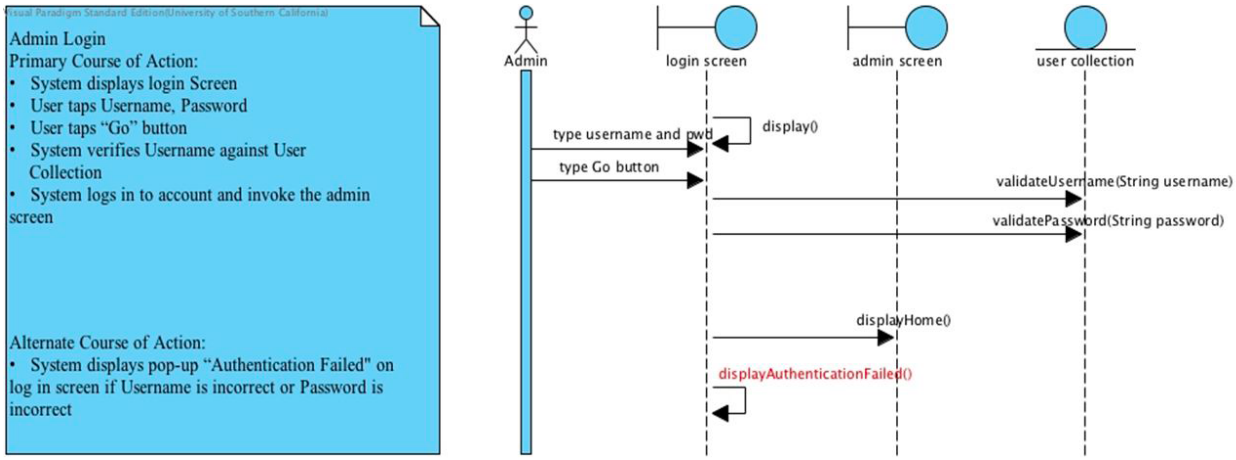


Use Case: Logout of account

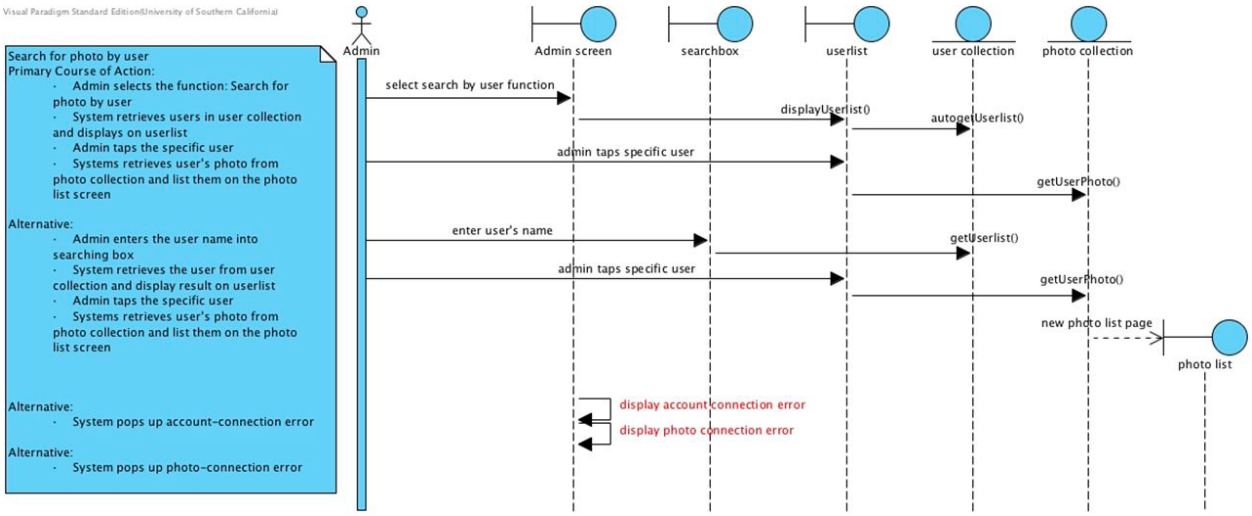


4.6 System & Administrator Sequence Diagram

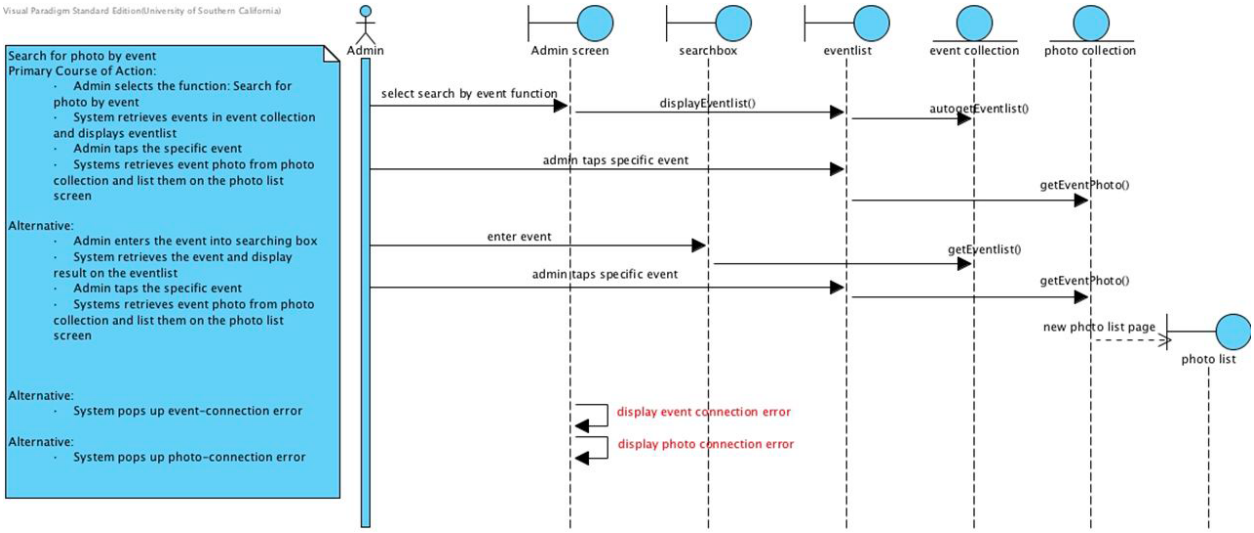
Use Case: Admin login



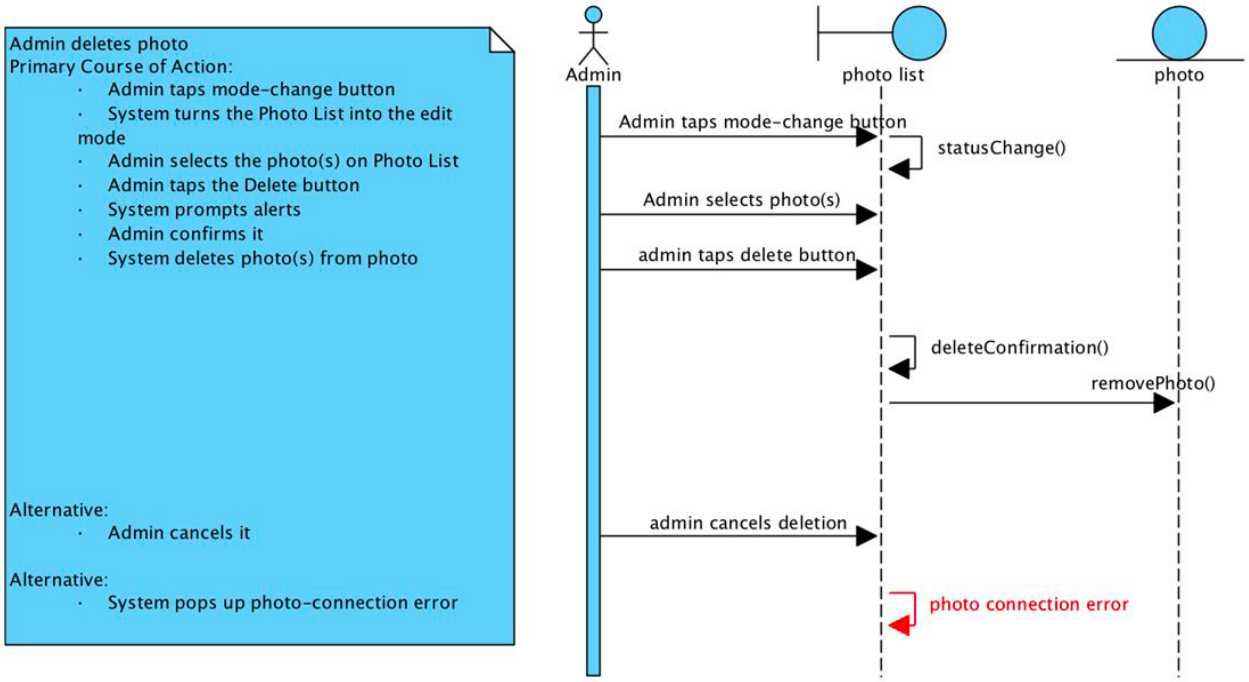
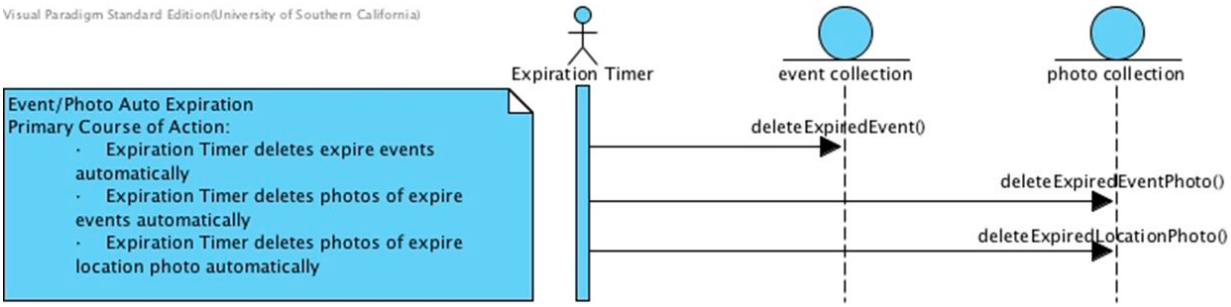
Use Case: Search for photo by user



Use Case: Search for photo by event



Use Case: Admin delete photo



Use Case: Auto-expiration