

**Project Name**  
**Analysis Document**  
**Version 0.0 - 5/29/2017**

## **1. Introduction**

Study Group Finder is a web-based application that allows students in any university to post and find study group locations. By doing so, students will be able to help each other achieve their academic goals as well as make new acquaintances.

## **2. Object Classification**

### **2.1 Entity Objects**

Beacon- a Beacon created by a Host that Users may join

BeaconList- a list of Beacons

ChatDB- a way for users to communicate through text

Guest- a person who does not own an account

Host- a User that created a Beacon

Profile- a User's profile they can edit

User- a person that created an account with username and password

### **2.2 Boundary Objects**

BeaconCreationView- Where a User can create a Beacon by entering location and course code then becomes a Host to that Beacon

BeaconChatWindowView- a Chat including all Users and Guests in that Beacon

BeaconFailedJoinView- window shown when joining beacon has failed

BeaconListView- shows the BeaconList

EditProfileView- a window where Users can edit their Profile

FilterBeaconView- window where Users can filter Beacons through classes

GuestLoginView- Where the guest can login and become a User or remain a Guest

GuestUserCreationView- Window where guest can create an account with email and password

GuestPageView- The page a Guest sees when entering website

HostView- window that the Host can only see

HostBeaconControlView- beacon controls for the Beacons Host

LogoutView- logout window for Users

ProfileWindow- Displays a Users profile

UserPageView- The page a User would see upon login

UserPrivateChatView- a Chat between two users

### **2.3 Control Objects**

ApplySearchFilters- applies filters to beaconlist

BackToSearch-redirects back to searchwindow after a failed search

ChangeToHost- changes user to host

CreateBeacon- creates the beacon

CloseBeacon-allows Host to close the beacon

DisplayResults- displays results of a search

ExtendBeacon- allows Host to extend the time of their beacon

FailedCreation- notifies Host of failed beacon creation

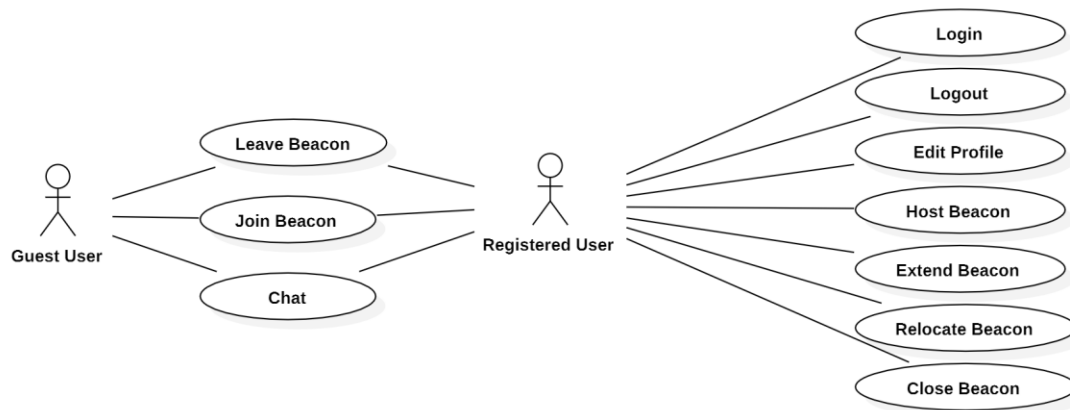
JoinBeacon- coordinates joining a beacon

JoinChat- controller to join a chat  
 LeaveChat- User leaves Chat  
 SendMsg-coordinates sending a message  
 ProfileSearch- filters profiles by User  
 RelocateBeacon- allows Host to relocate a beacon  
 RegisterBeacon-Registers beacon to BeaconList  
 ValidateBeacon- validates beacon creation

### 3.Diagrams

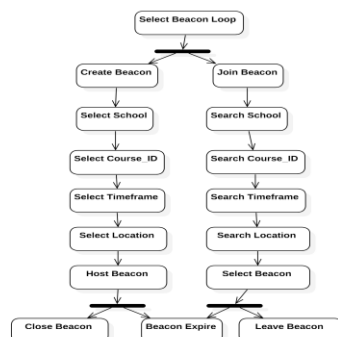
#### Use Case

use\_case\_diagram::UseCaseDiagram

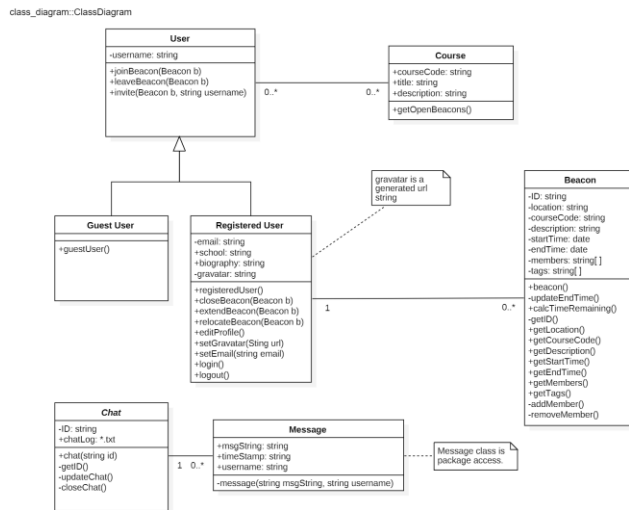


#### State Diagram

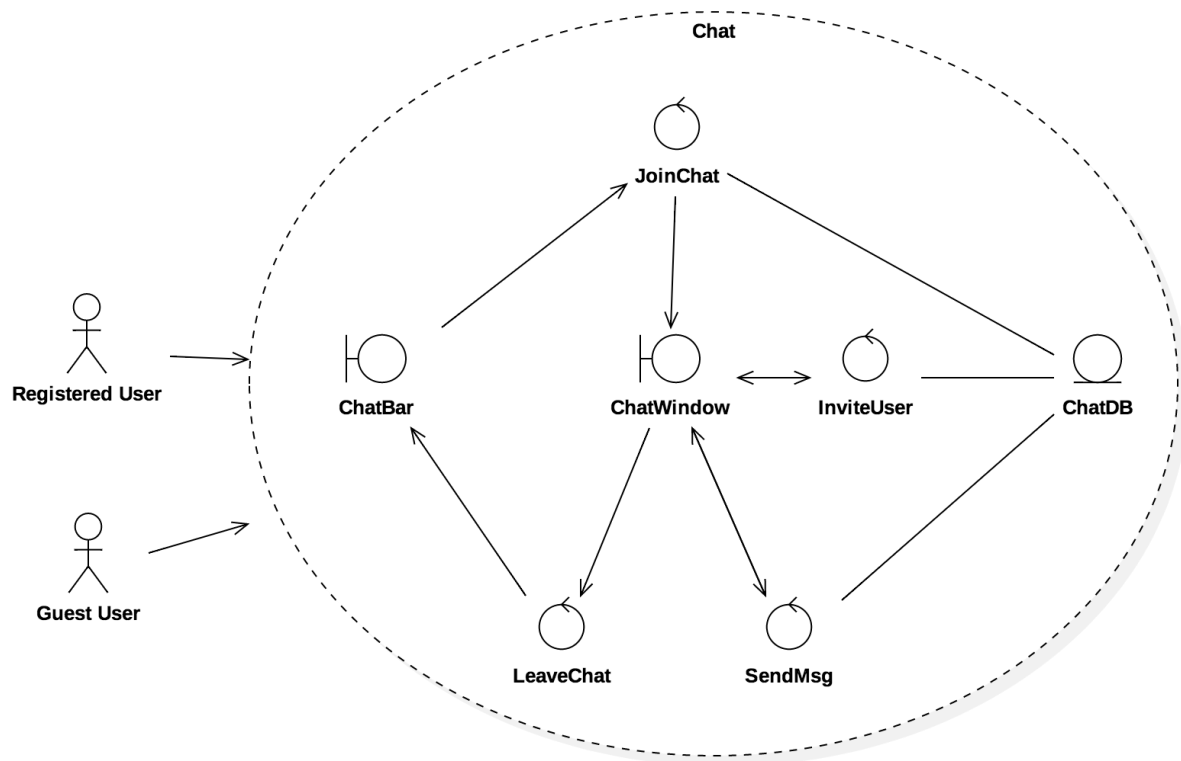
Model: StateMachine1 : ping select loop

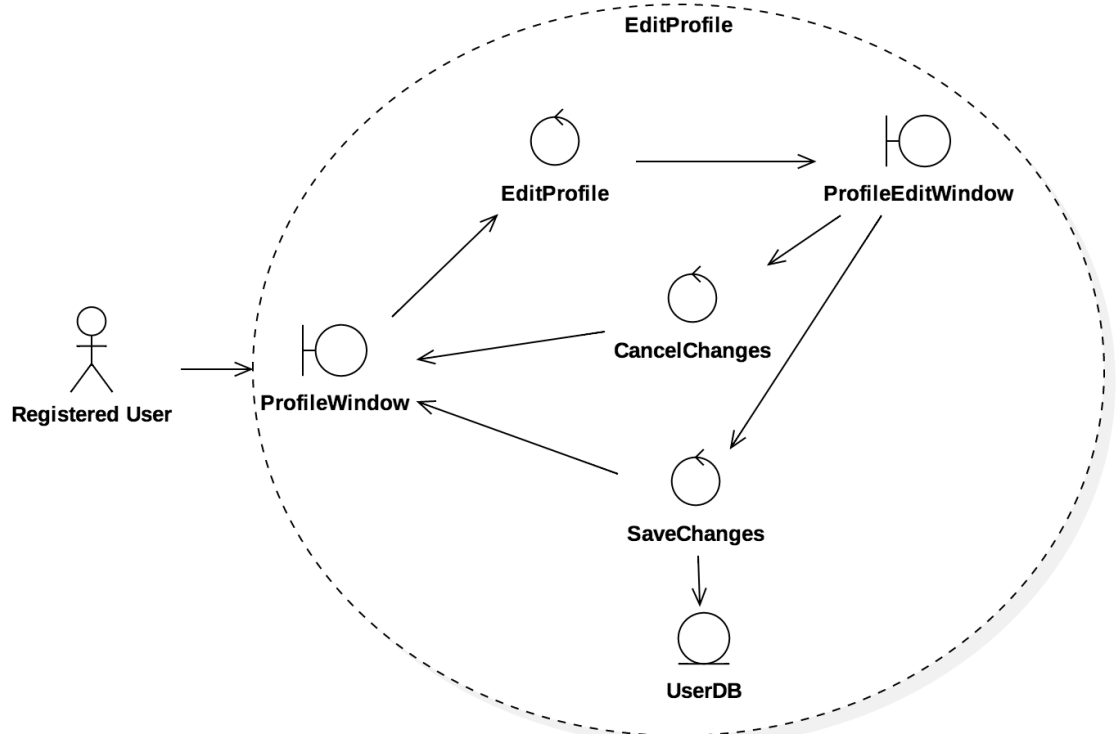
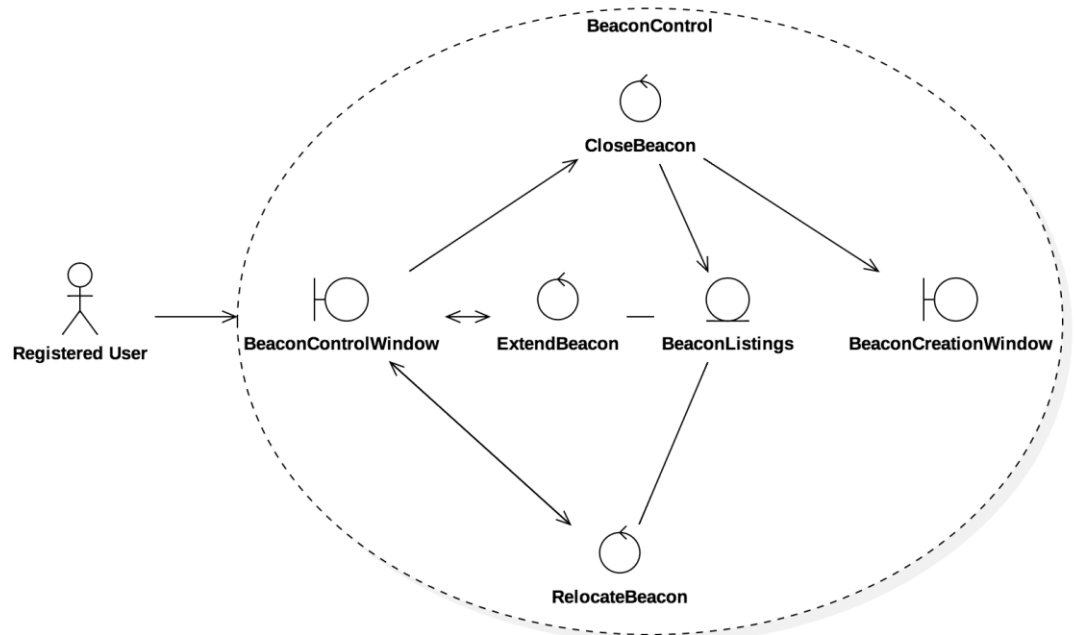
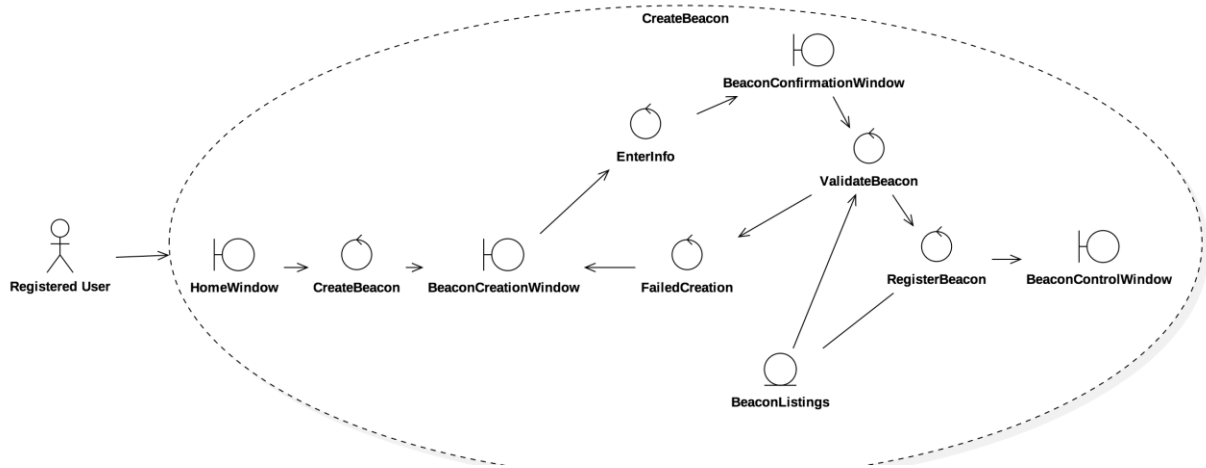


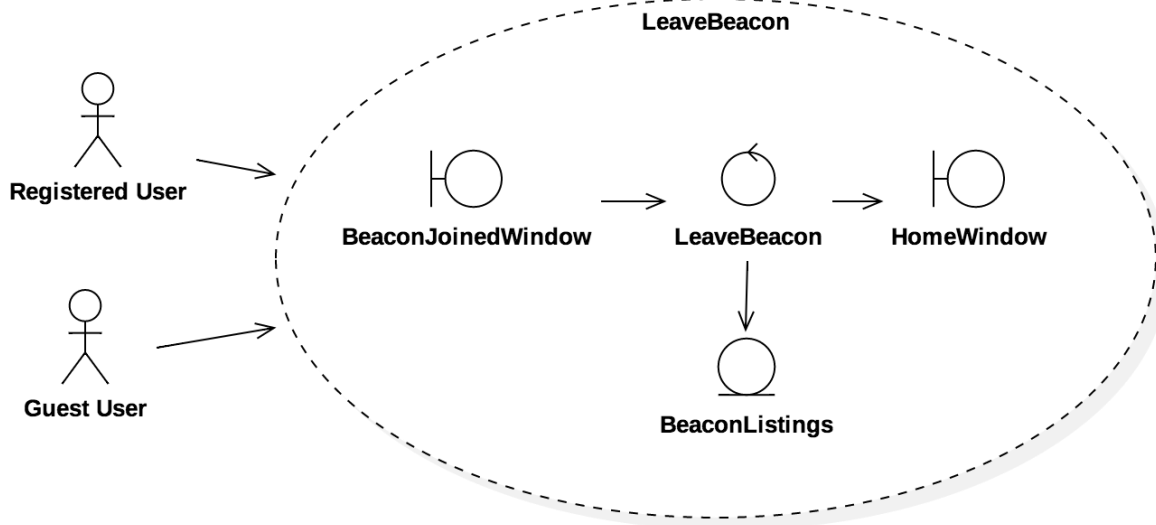
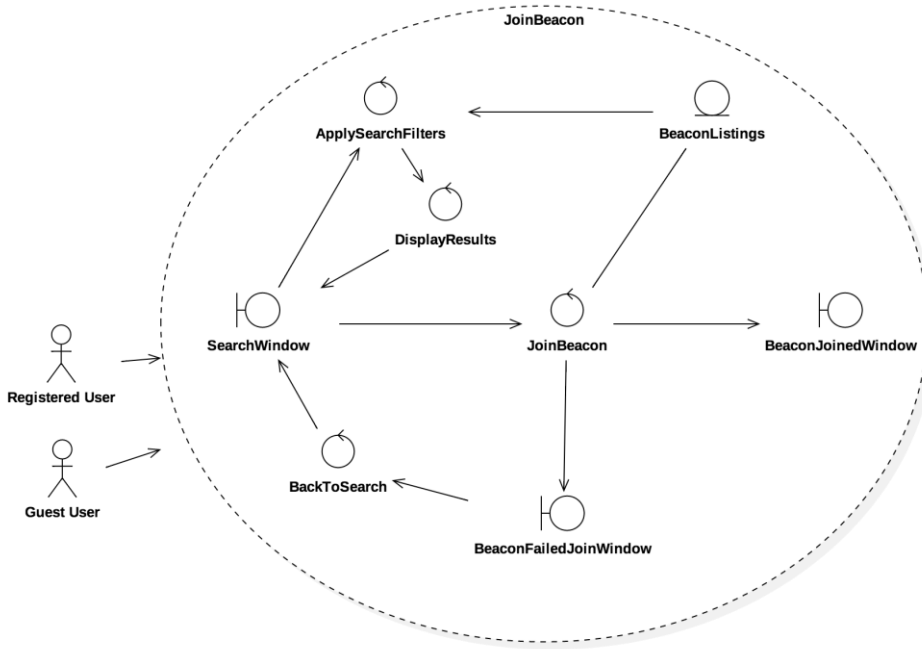
## Class Diagram

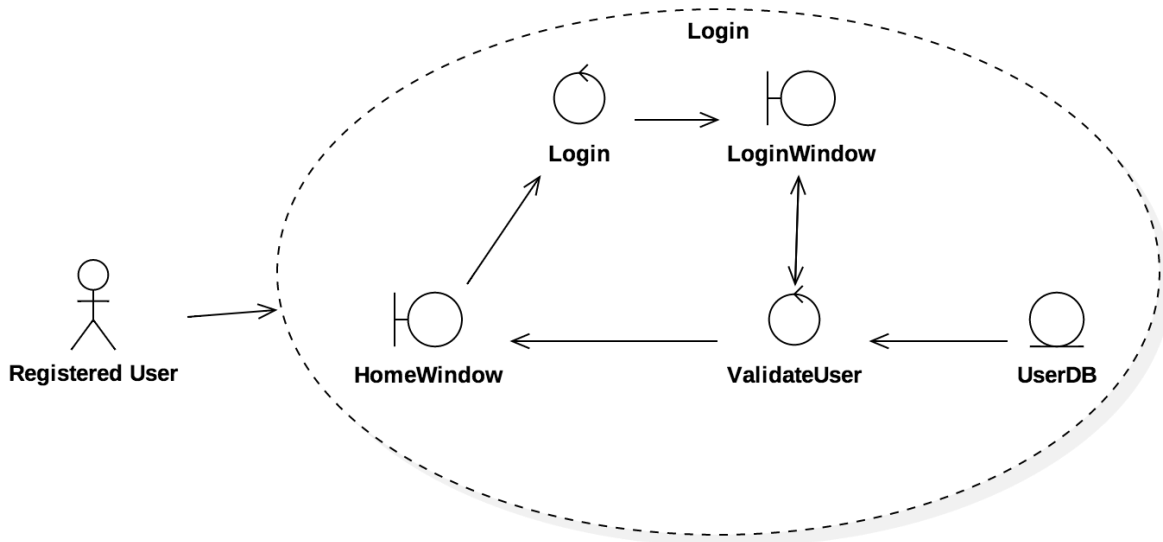
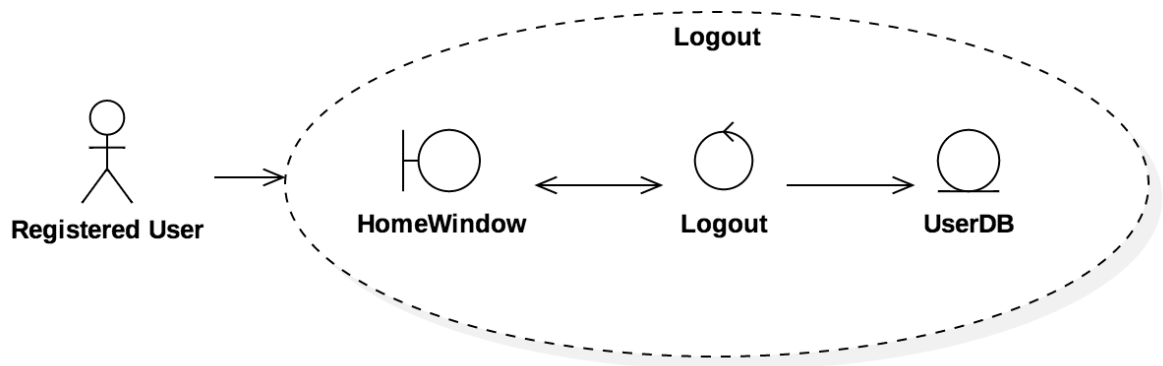


## Robustness Diagrams

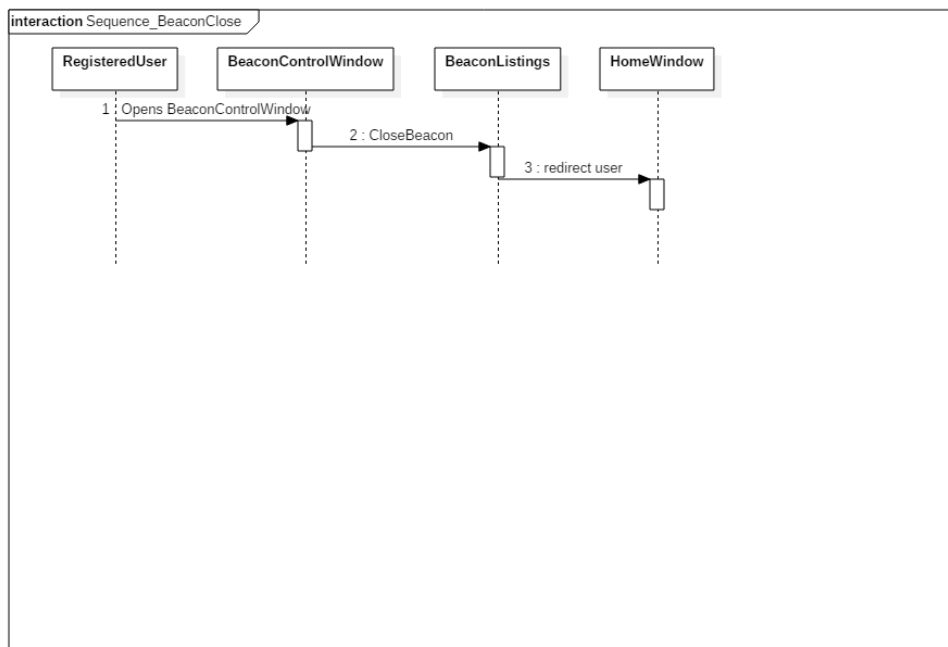


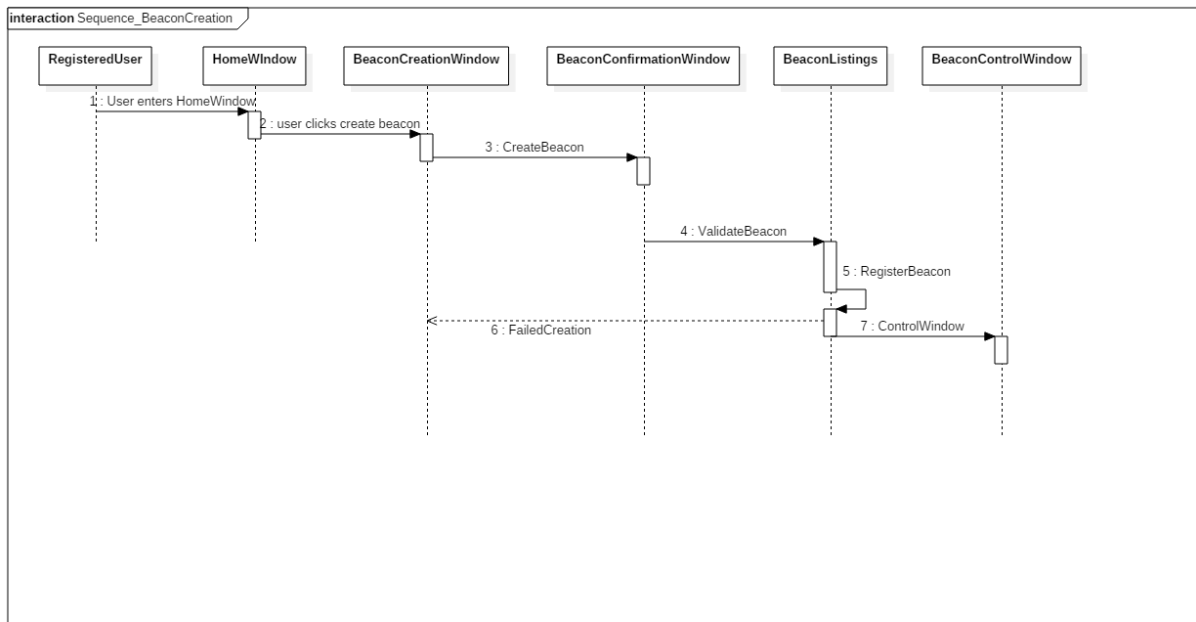
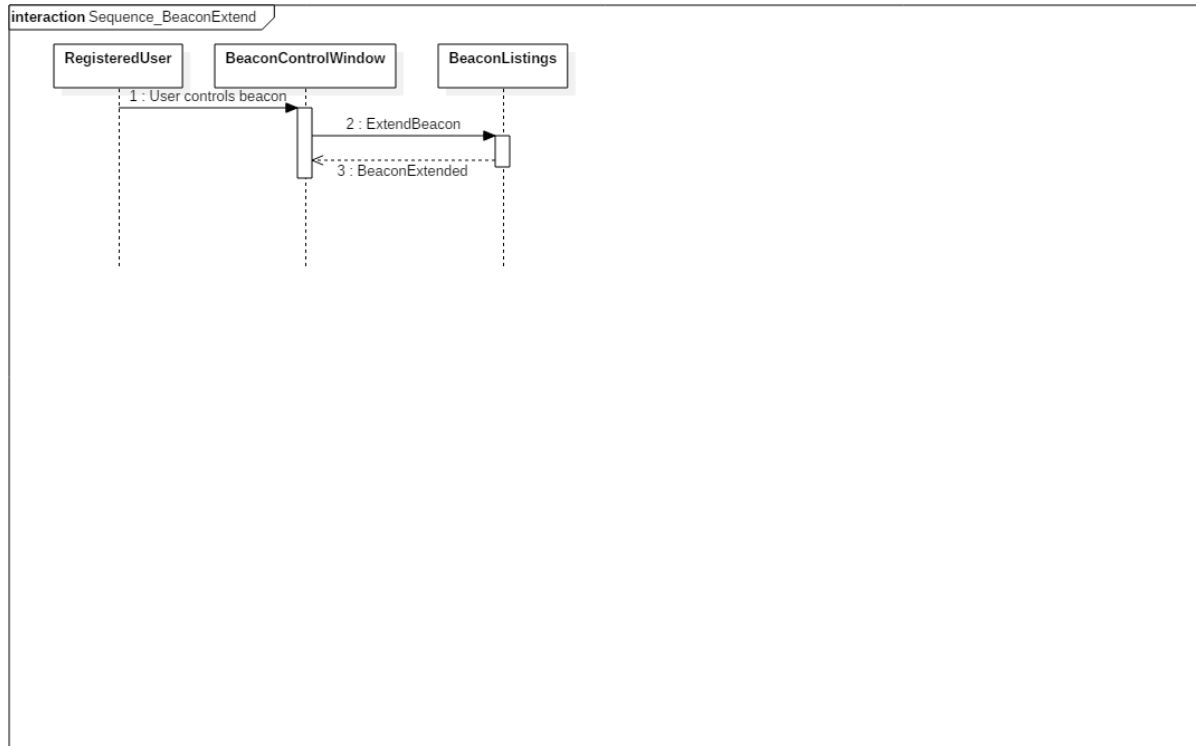




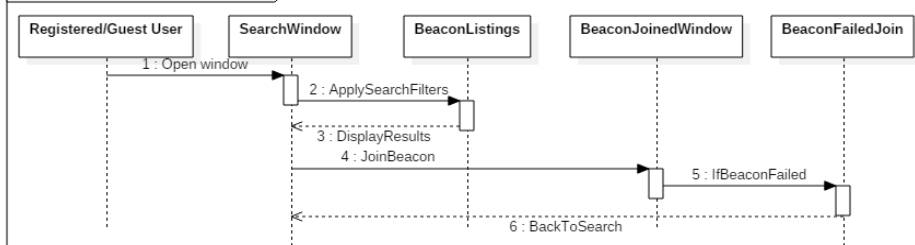


## Sequence Diagrams

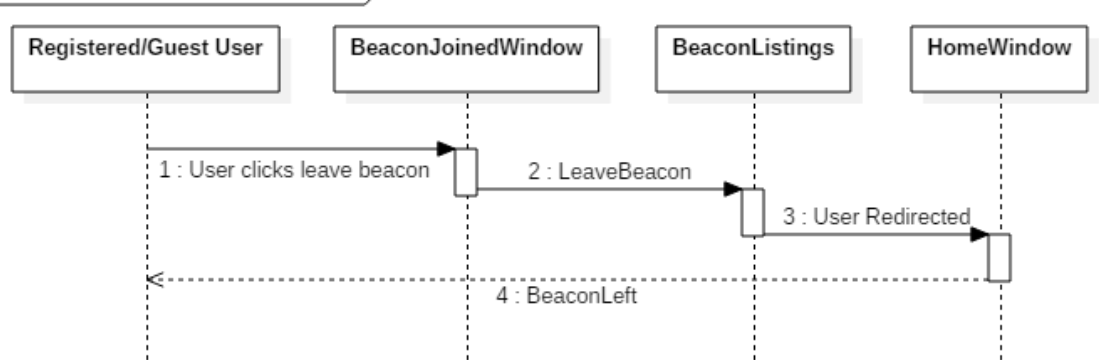




interaction Sequence\_BeaconJoinLeave

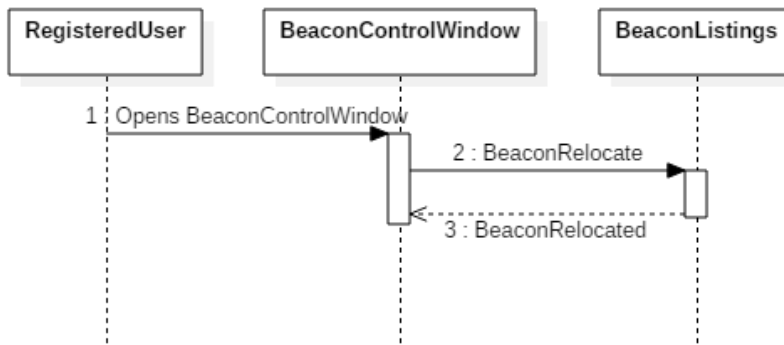


interaction Sequence\_BeaconLeave

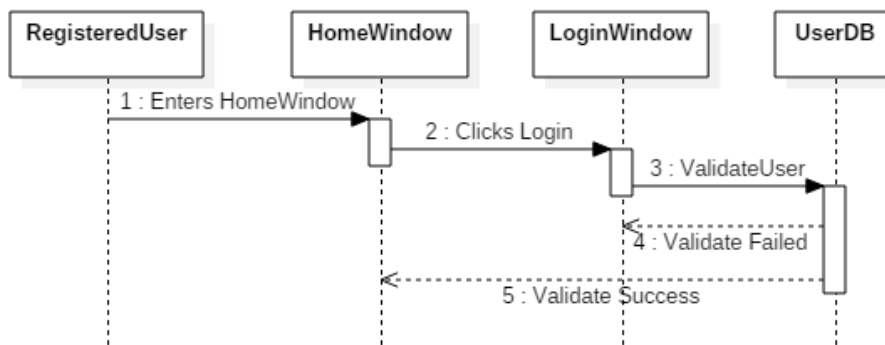




interaction Sequence\_BeaconRelocate



interaction Sequence\_Login



interaction Sequence\_Logout

