**Host adds network - Jacob**

Basic course:

System displays **home screen**. The host user selects “add network” button. System accesses device’s wifi settings and displays possible connections. User selects one of these networks. System asks user to input password, and displays an **input password pop-up box.** User inputs password. System checks to make sure the password is correct, then displays a message saying the network has been configured and re-displays the **home screen**.

Alternative course(s):

1. **No wifi networks in range:** System displays a message saying there are no networks available, and asks user to try again later.
2. **User inputs incorrect password:** System displays a message saying the password was incorrect, and asks the user to try again, then re-displays the **input password pop-up box**.

**Host invites client - Joe**

**Basic Course -** The host user selects the “Invite a friend to your network” button. The system prompts the user to select a contact. The host selects a contact. The system then forwards the invitation to the firebase server. The firebase server then forwards the invitation to the client’s device. The client device invokes the Client Receives Invitation use case.

**Alternative Course**

**Contact Has No Phone Number -** The system displays an error message explaining the contact has no phone number. The system prompts the user for another contact.

**Contact Has More than One Phone Number -** The system sends all phone numbers to the firebase server. The firebase server searches for at least one matching phone number.

**No Match Found -** The firebase server finds no match in the postgres database. The system displays an error message explaining that the firebase server failed to find a match and The prompts the user for another contact.

**The firebase server is unable to deliver the invitation to the client device**: The system sends a notification back to the host device notifying them that the client user did not receive the invitation

**Client receives invitation - Eric**

**Basic Course**:

The client accepts the invitation. The system saves the network credentials onto the client's device. The client enters proximity of the network and connects to it.

**Alternate Course**:

**The client user declines the invitation**. The system sends a notification back to the host device.

**Host revokes client - Aditya**

**Basic course**

The system displays **home screen**. The host clicks on "Revoke Access" button. The system revokes the network permissions on the client's device. The system removes client's information from the host’s database.

**Alternate Course**

**The host clicks on the "Revoke Access" button but the system cannot revoke the network permissions of the client:** The system displays a "Please try again" message on the host’s device.