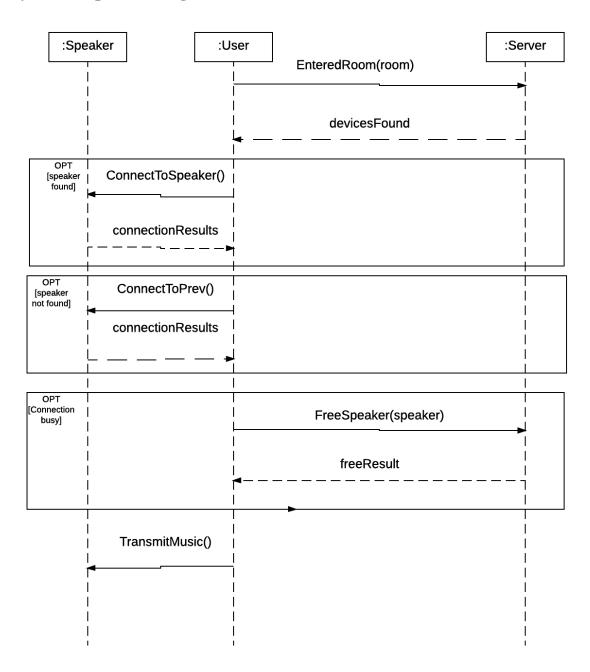
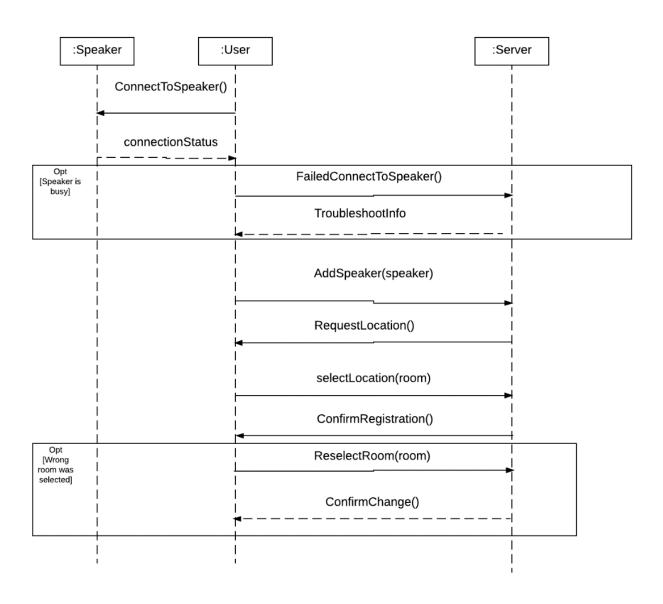
# **Use Cases:**

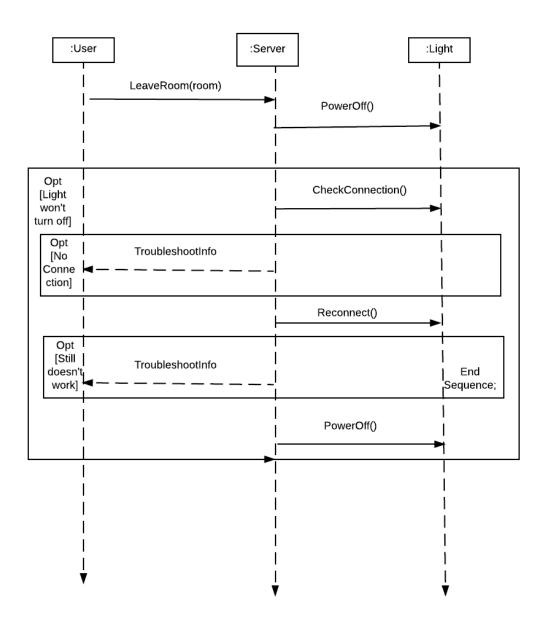
System Sequence Diagram: Turning on a speaker when entering a room



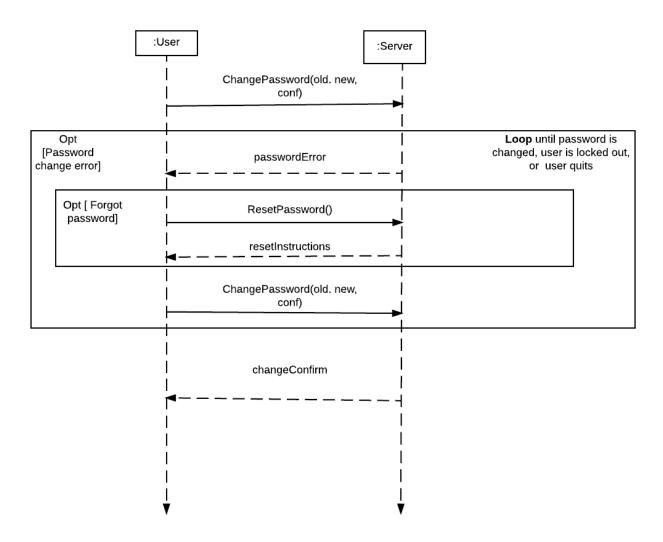
#### System Sequence Diagram: Adding a new speaker to the system



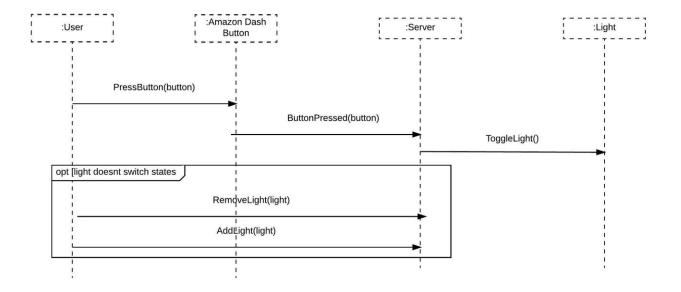
#### System Sequence Diagram: Turning off lights when leaving a room



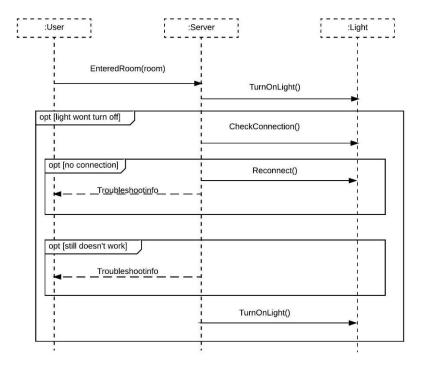
#### System Sequence Diagram: Change Password



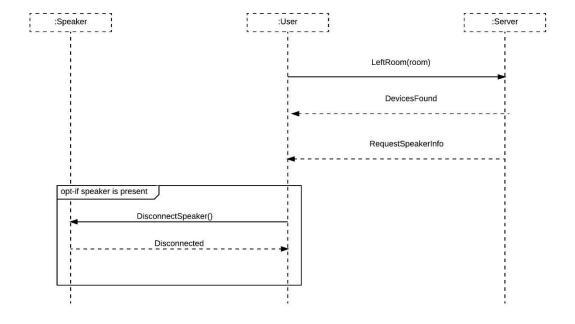
# **System Sequence Diagram:** Manually turn lights on and off via Amazon Dash Button



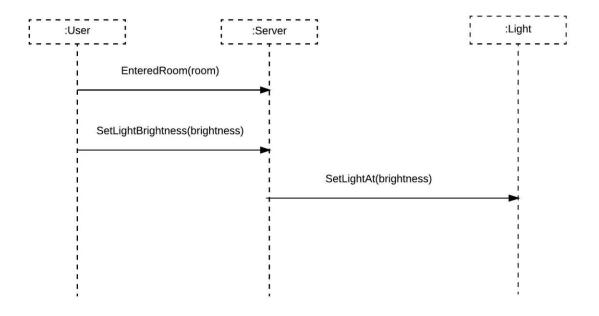
#### System Sequence Diagram: Turn on lights by entering a room



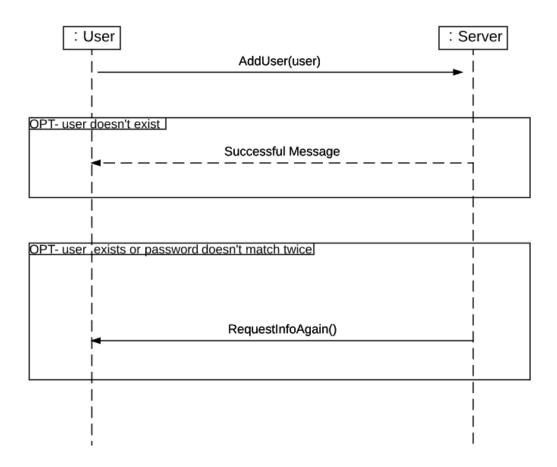
#### System Sequence Diagram: Turn off speaker by leaving a room



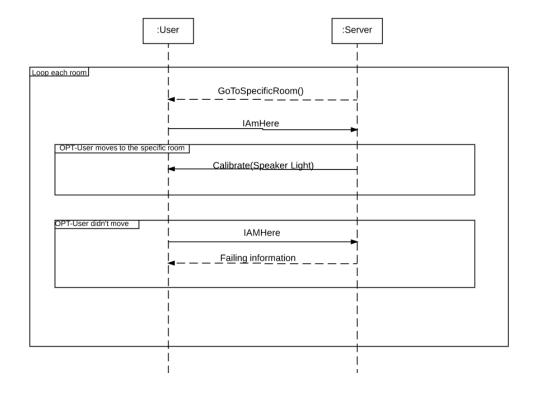
## System Sequence Diagram: Control brightness of lights via app



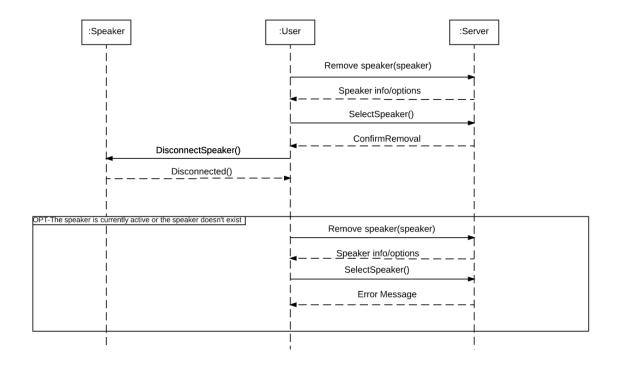
#### System Sequence Diagram: Add user:



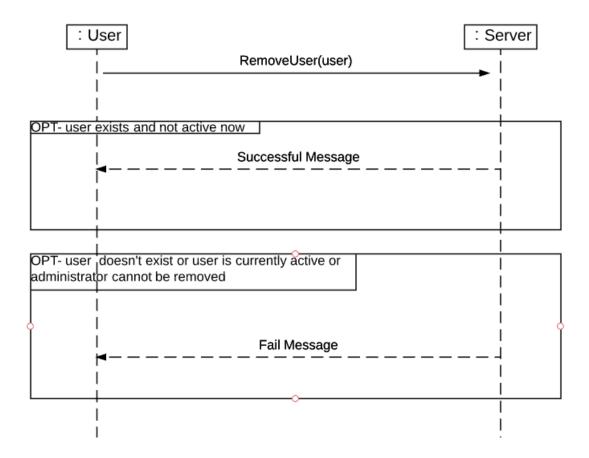
#### **System Sequence Diagram: Calibrate room boundaries**



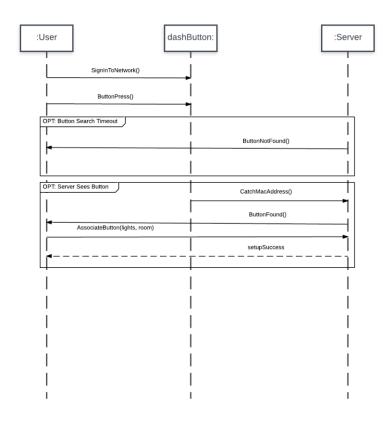
#### System Sequence Diagram: Disable/remove speaker



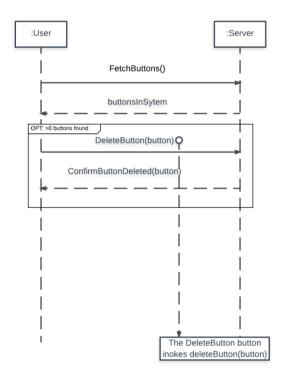
#### System Sequence Diagram: Remove user



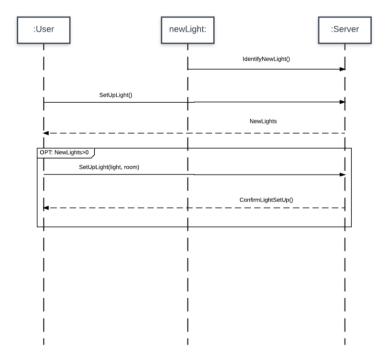
## **System Sequence Diagram: Add Dash Button**



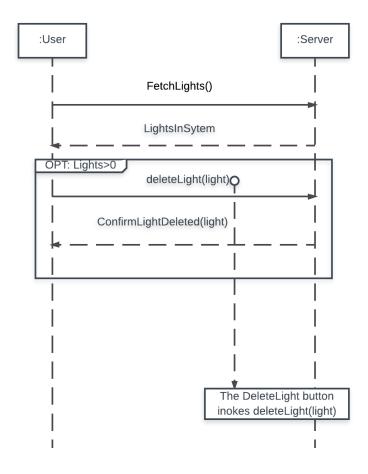
#### **System Sequence Diagram: Remove Dash Button**



## **System Sequence Diagram: Add Light**



#### System Sequence Diagram: Remove Light



# ALT case for Entire system:

- \*a At any time the server fails:
  - 1a. Server is offline
    - 1. Server auto restart
      - 1a. Server fails to auto restart
        - 1. Mobile app informs the user after 1 minute of no response from the

server

- 2. User manually restarts server
- 2. Server requests information from the mobile application and resumes normal functionality
- \*b At any time the mobile application fails:
  - 1. Mobile app searches for issue
    - 1a. Mobile app has no network connection
      - 1. App attempts to connect to wifi to restore connection
        - 1a. App fails to connect to wifi
    - 1. The information is stored on the app and queue to send when connection is restored
      - 2. The app informs the user that it has no network connection.
      - 2. App sends information to the server
    - 1b. Mobile application crashes
      - 1. Mobile app auto restarts
        - 1a. Mobile app fails to auto restart
          - 1. Mobile app sends information about the cause of the crash
          - 2. User manually restarts the app
- 2. Mobile app sends its information to the server and reestablishes connections based on what the server sends back

