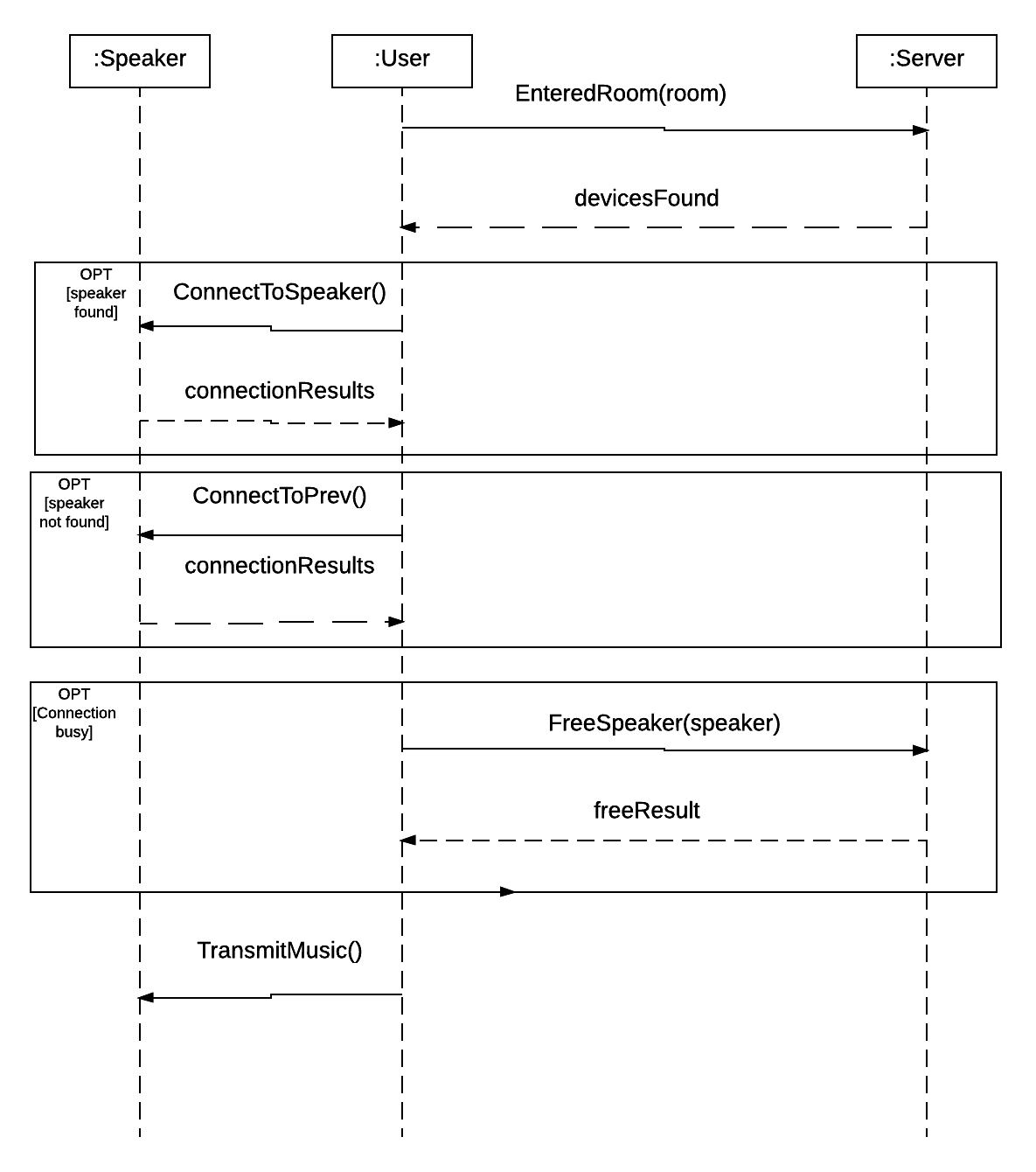
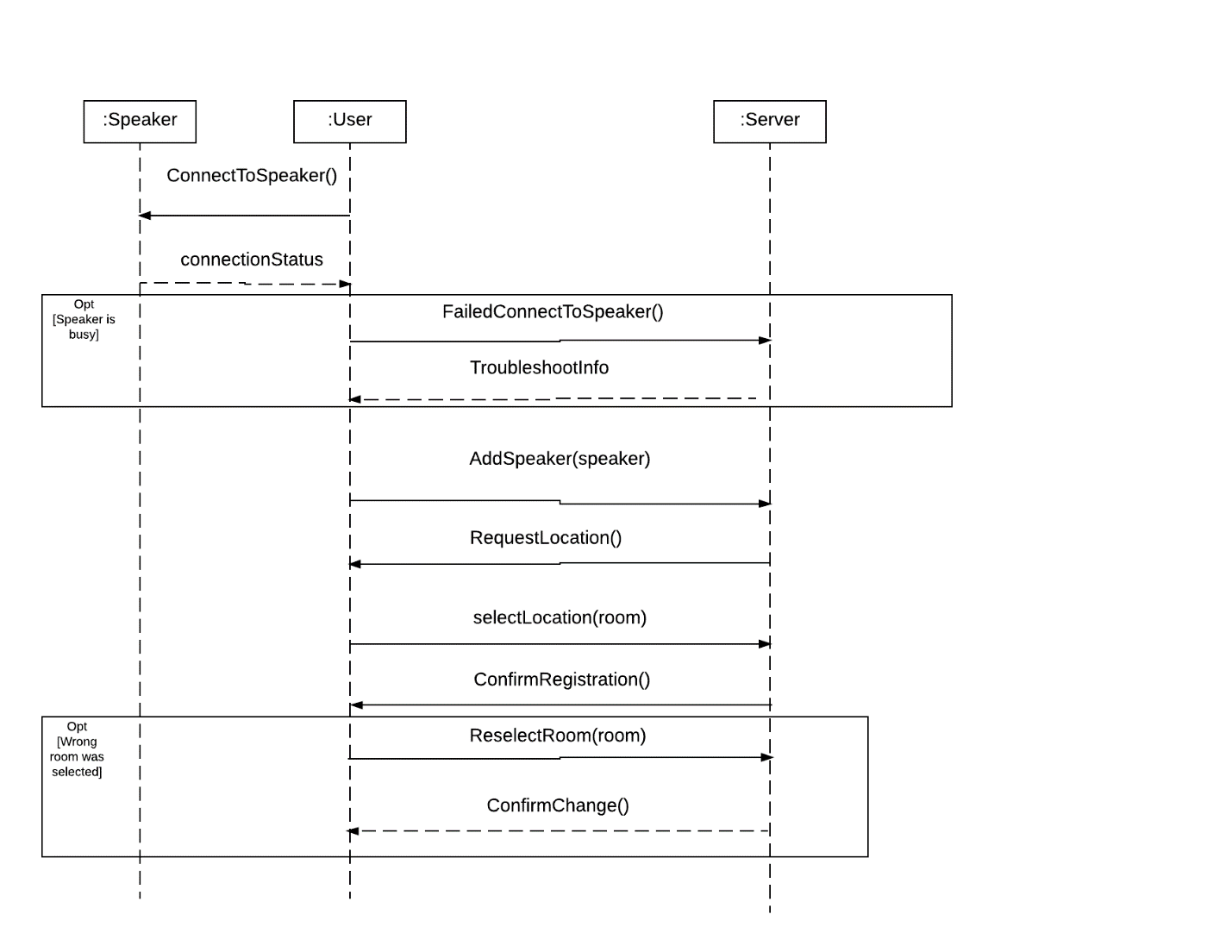
Use Cases:

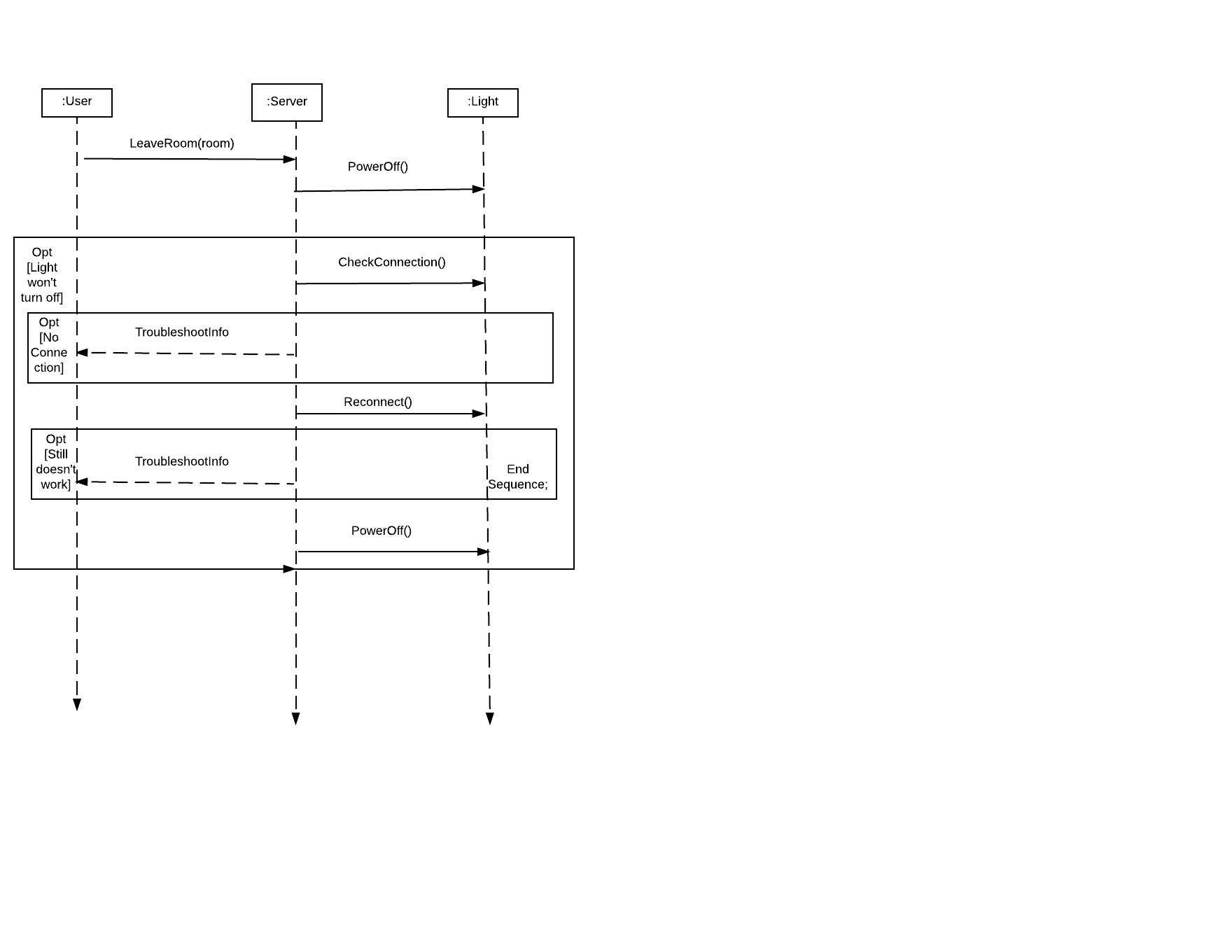
**System Sequence Diagram:** Turning on a speaker when entering a room



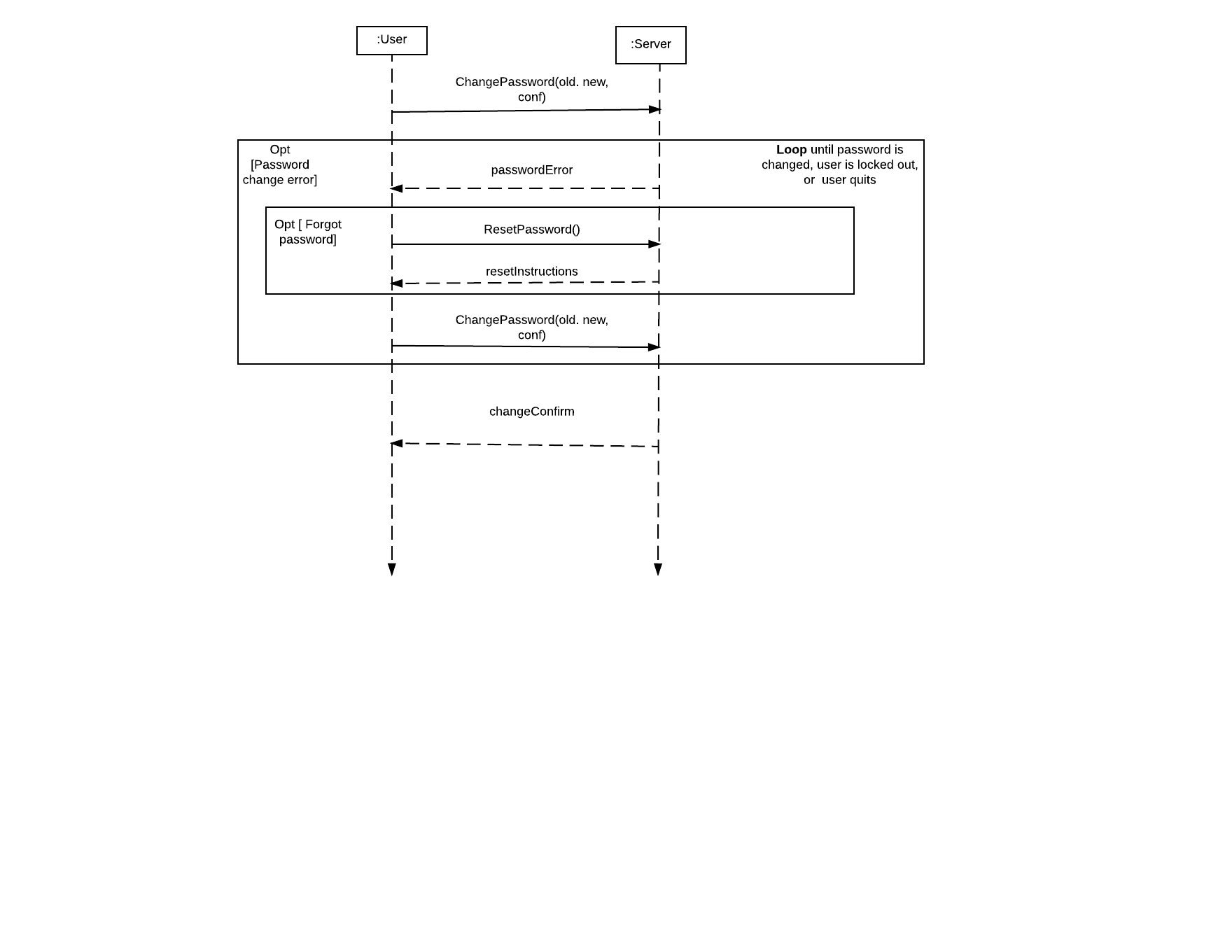
**System Sequence Diagram:** Adding a new speaker to the system



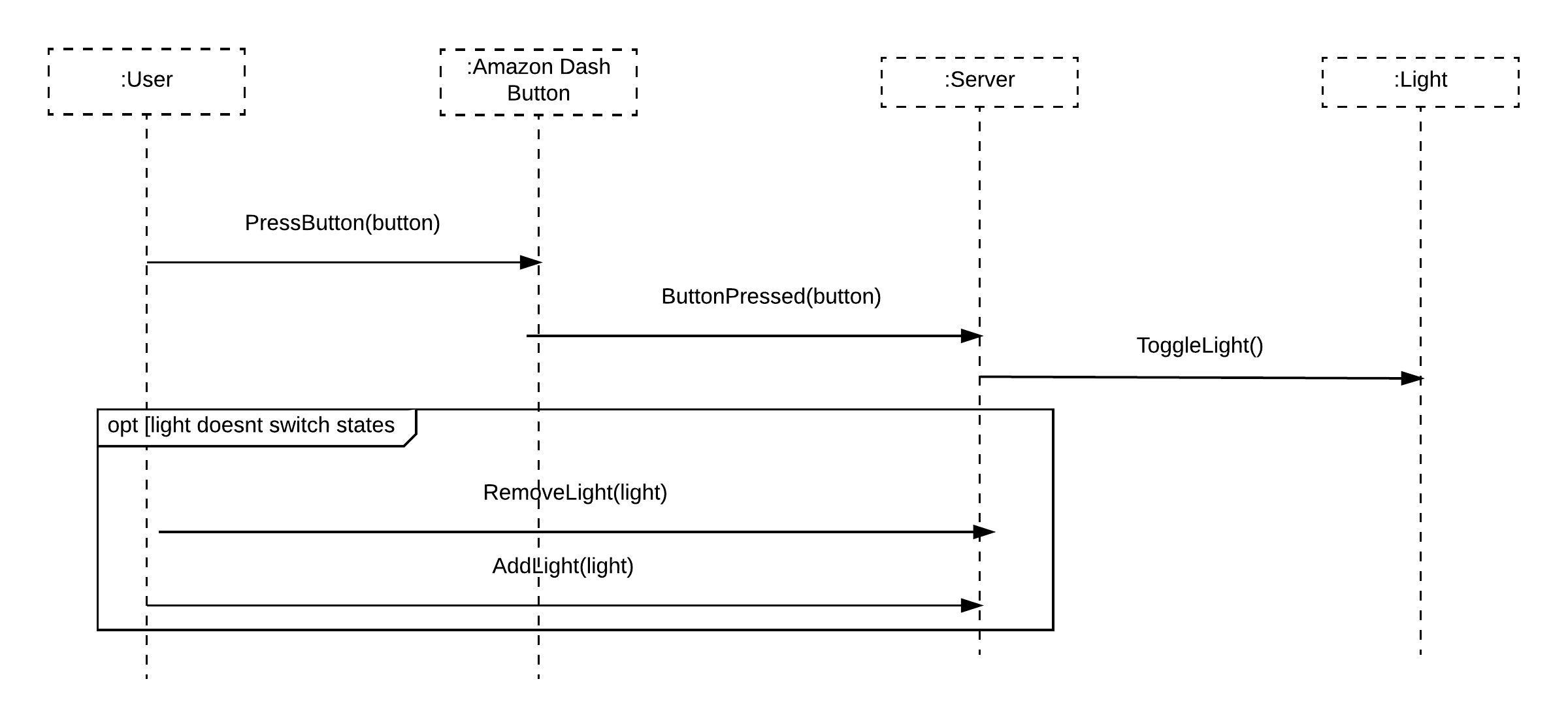
**System Sequence Diagram:** Turning off lights when leaving a room



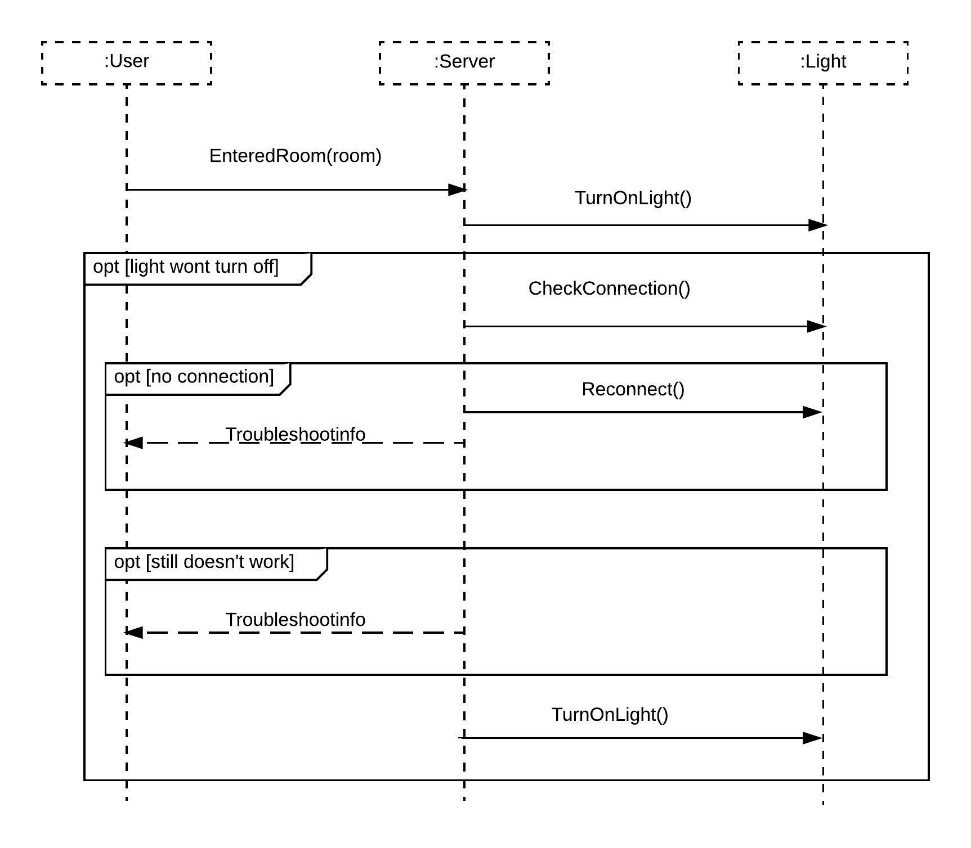
**System Sequence Diagram:** Change Password



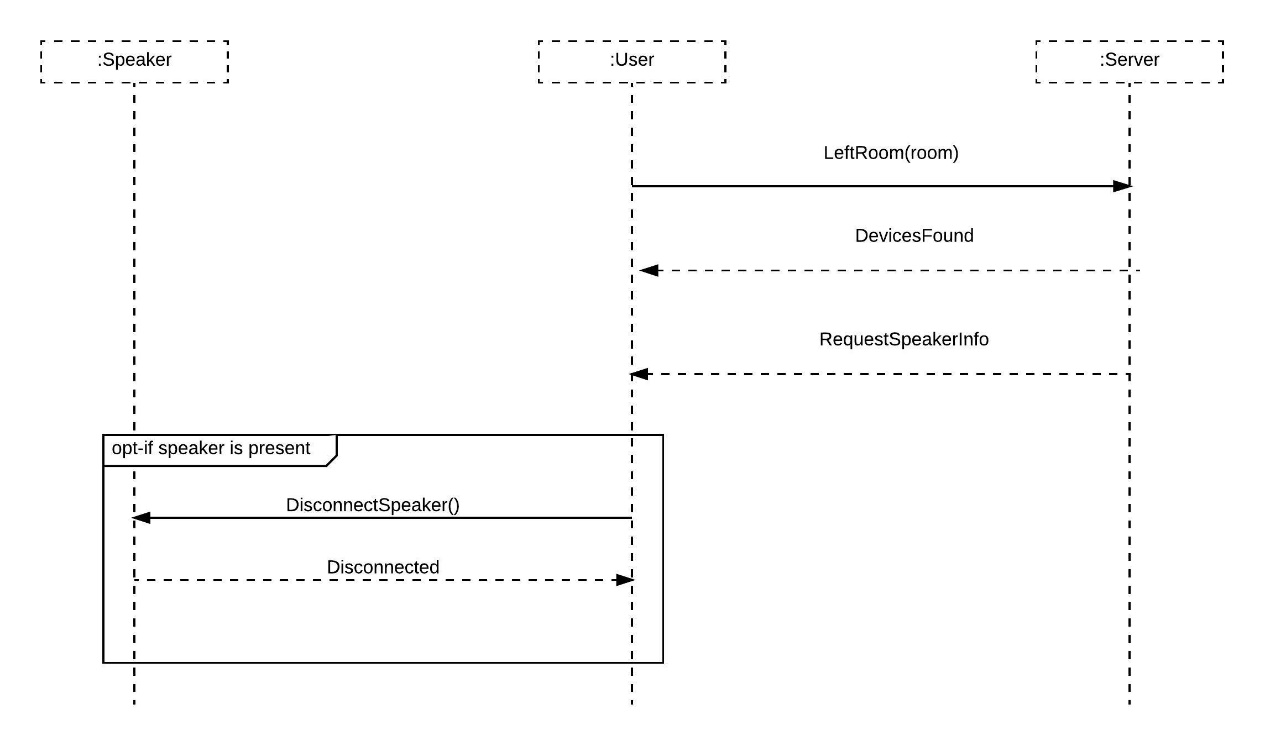
**System Sequence Diagram:** Manually turn lights on and off via Amazon Dash Button

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



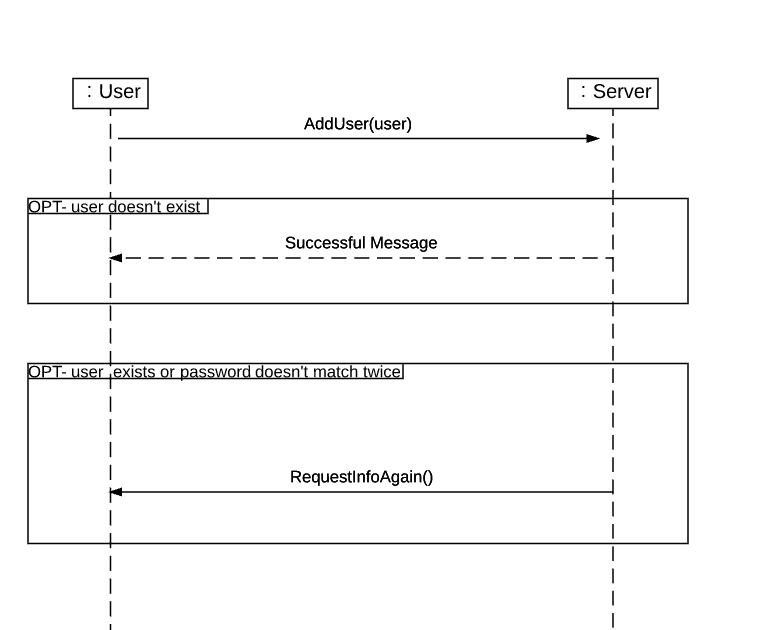
**System Sequence Diagram:** Turn off speaker by leaving a room



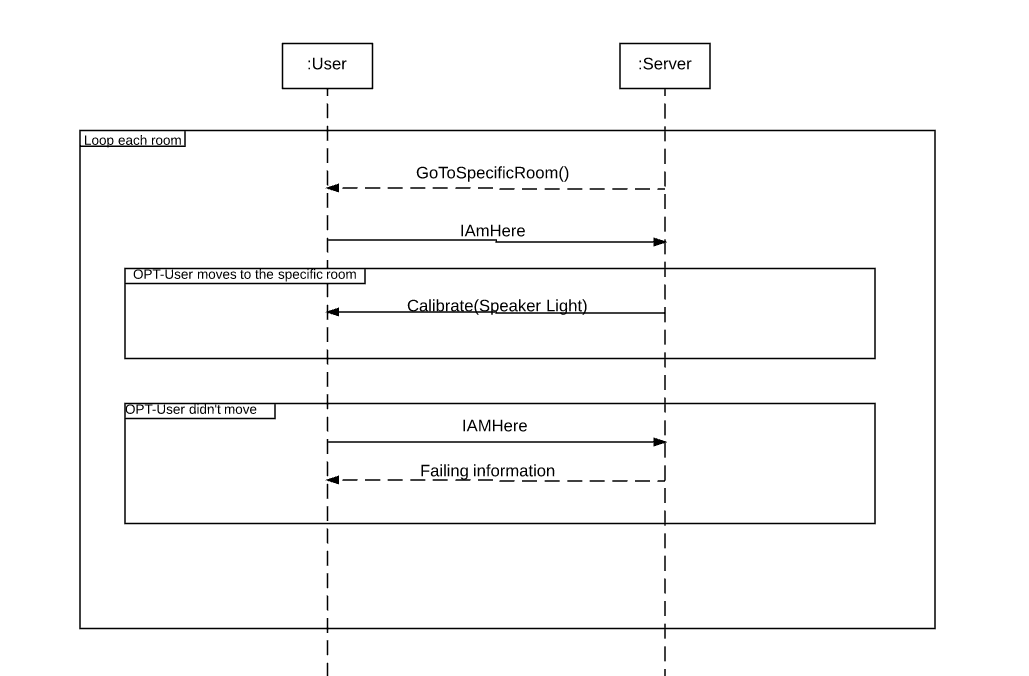
**System Sequence Diagram:** Control brightness of lights via app



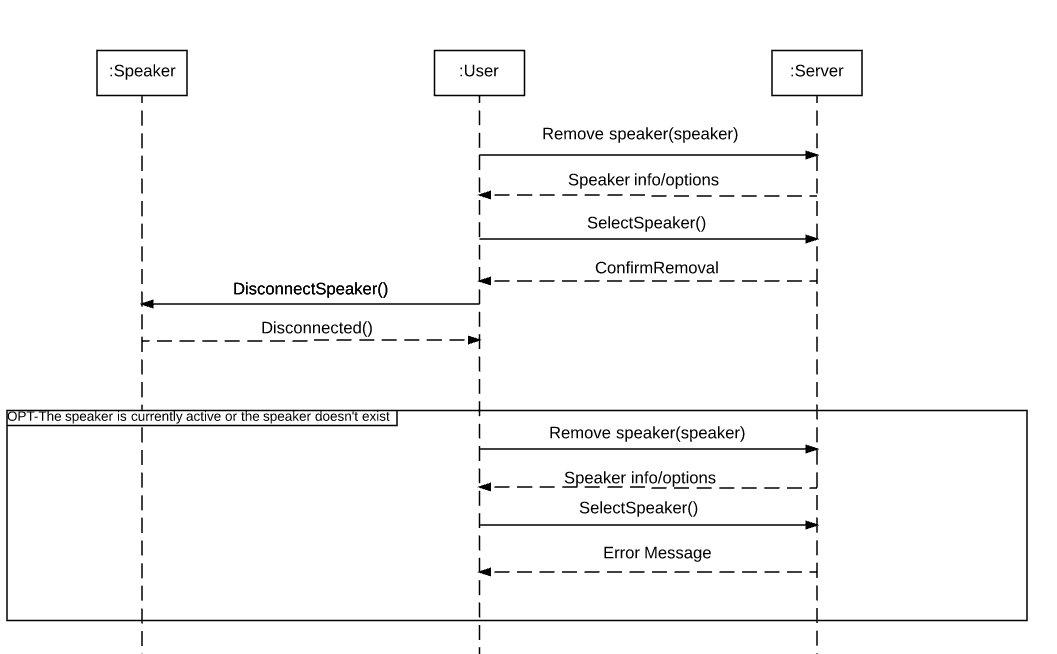
**System Sequence Diagram: Add user:**



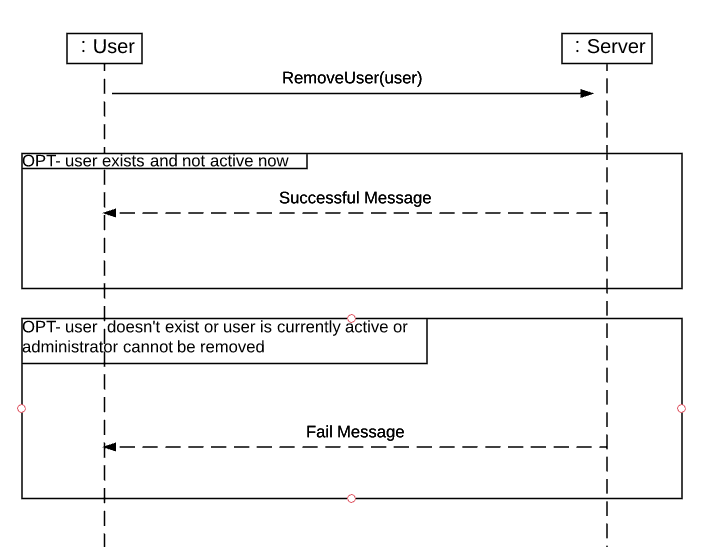
**System Sequence Diagram: Calibrate room boundaries**



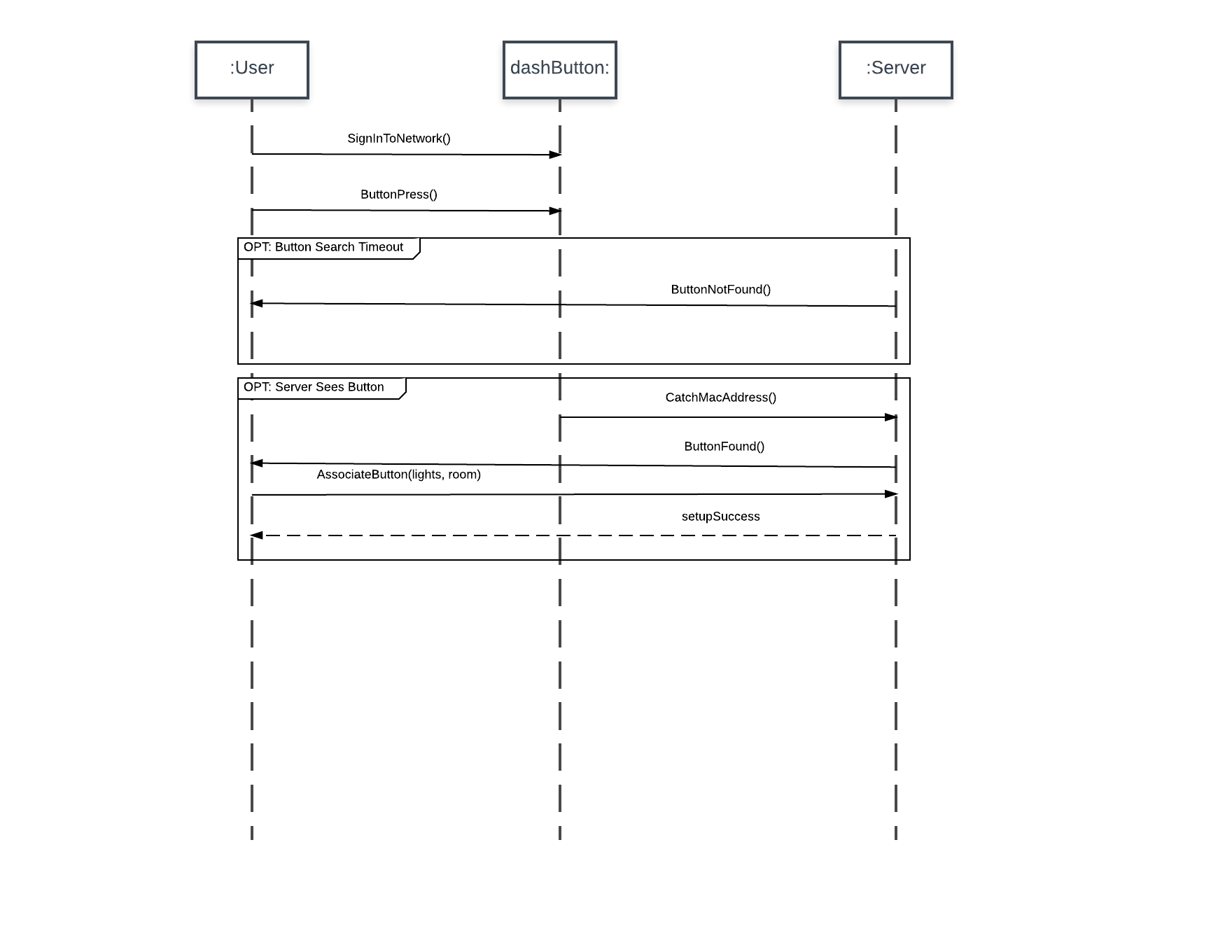
**System Sequence Diagram: Disable/remove speaker**



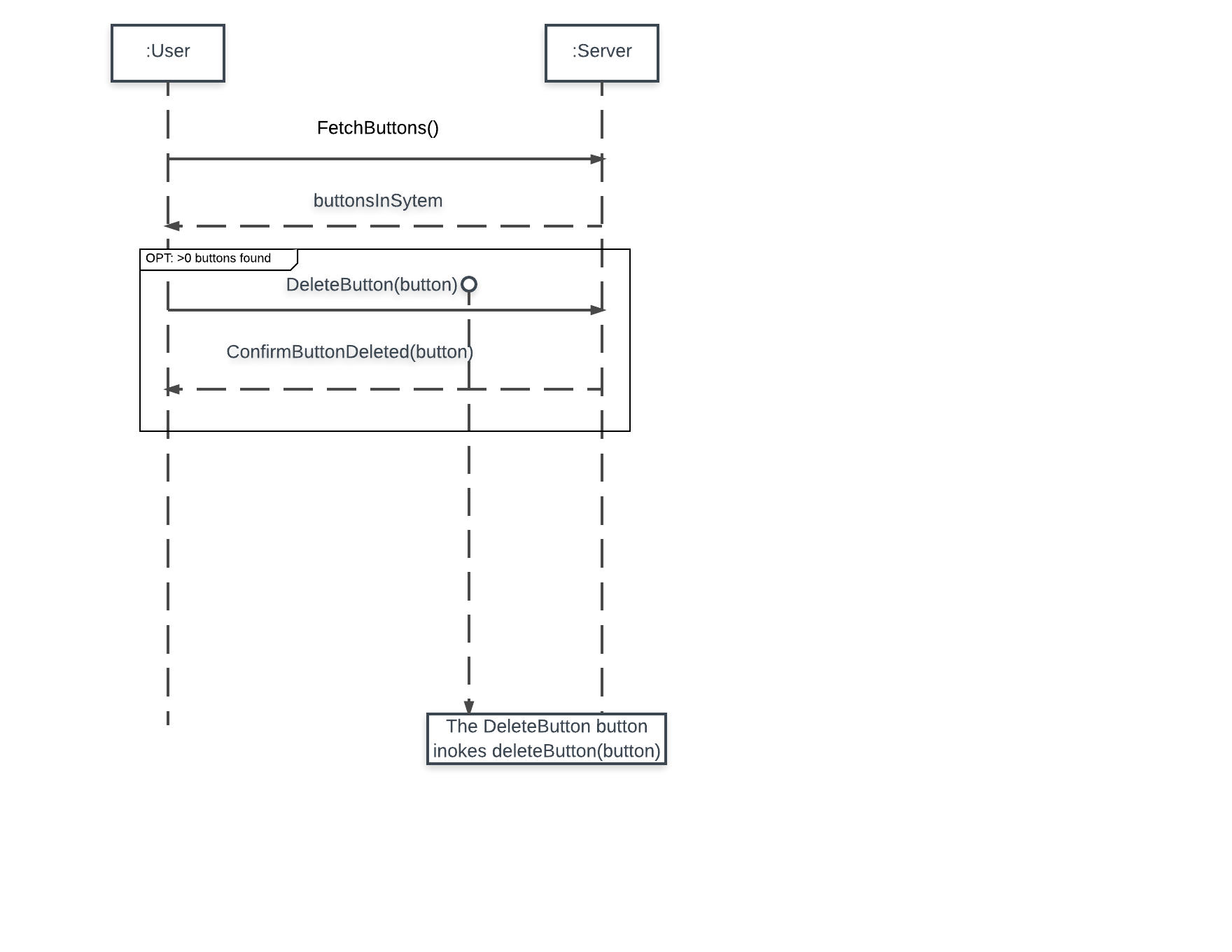
**System Sequence Diagram: Remove user**



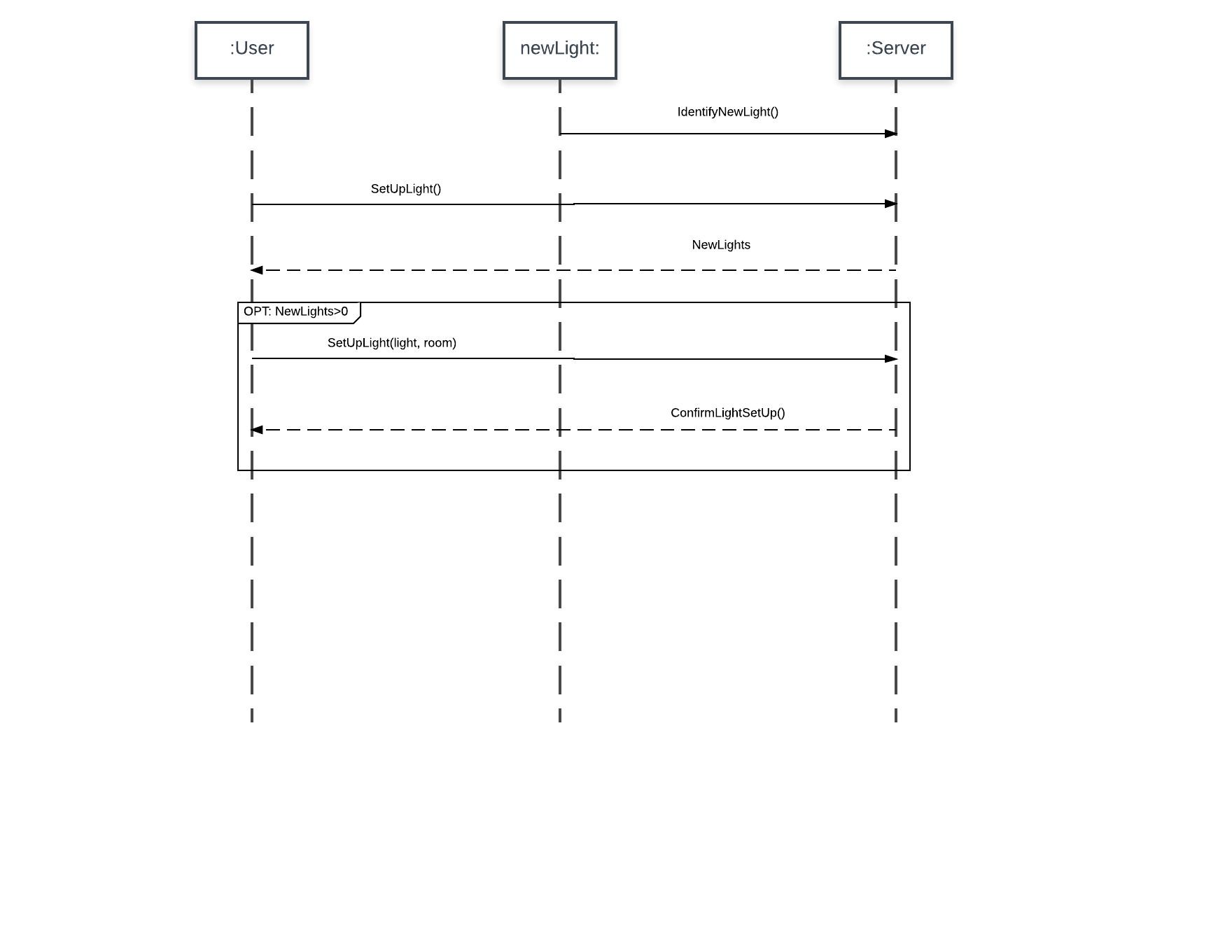
**System Sequence Diagram: Add Dash Button**

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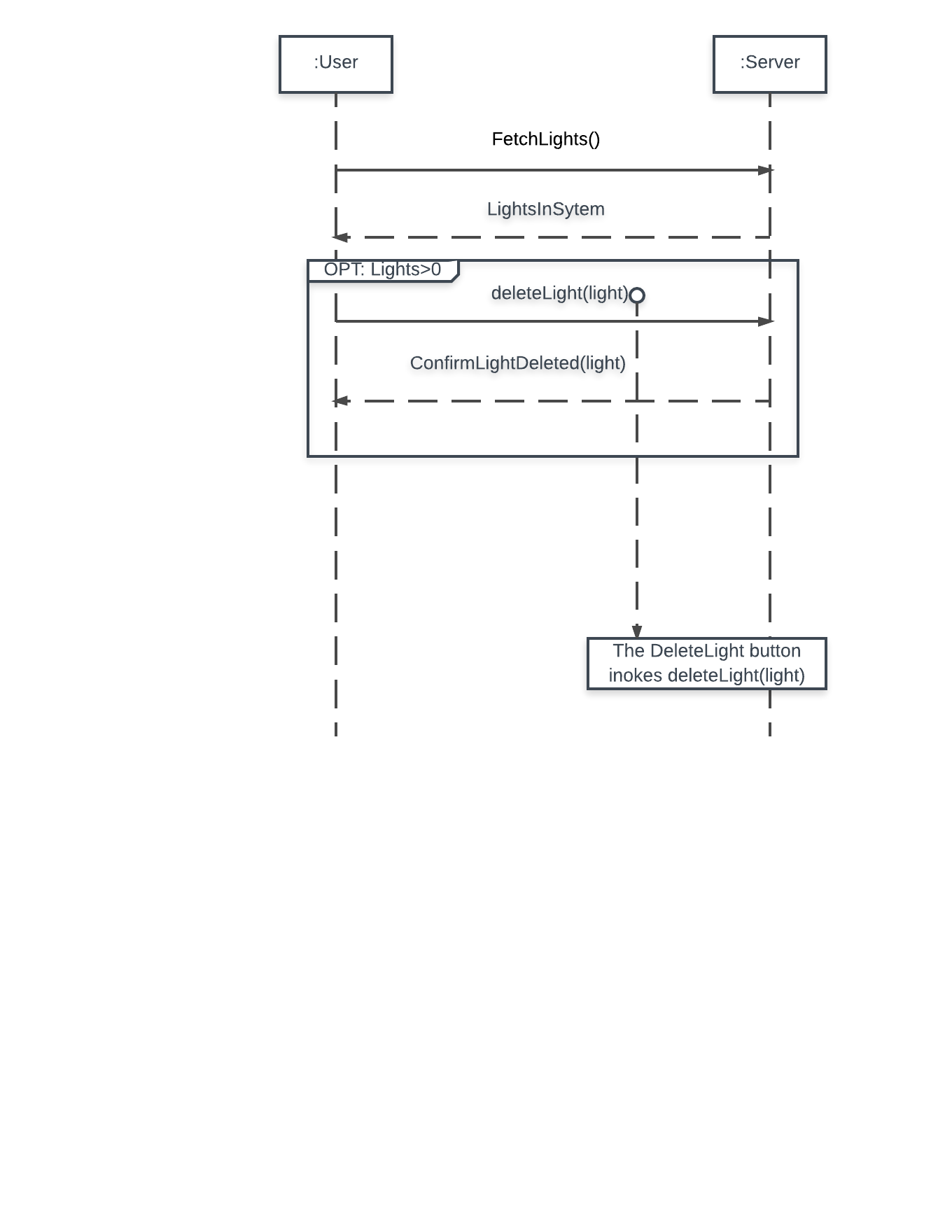
**System Sequence Diagram: Remove Dash Button**

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**System Sequence Diagram: Add Light**

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**System Sequence Diagram: Remove Light**

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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

