**Use Cases & Test Cases**

**Use Case:**

* **Name** : Mobile Client Connection
* **Description**: Connects the mobile device to the desktop server
* **Actor**: Everyone who owns a mobile device and connected to the Wifi network.
* **Pre-condition:** Must be connected to the Wifi network, and the user is currently in the app main menu.
* **Post-condition:** The mobile device is now connected to the desktop server.

**Main Course:**

1. The user clicks the “Connect” button.
2. The user inputs the IP of the server in the textbox provided and clicks the “Connect” button.

**Exception:**

**2.a)** If the user receives a message “Connection Failed!”. Repeat Step 2.

1. The user’s mobile device is now connected to the desktop server.
2. If there exists an audio stream instance, the app fetches the audio stream.

**Exception:**

**4.a)** If there is no existing audio stream, user receives a message “No audio stream found!” and user is sent back to the main menu.

**Test Case:**

**Given:**

Francis wants to connect his mobile device to the desktop server using the IP address provided: 192.168.0.1.

**When:**

Francis presses the “Connect” button on the menu and inputs the IP: 192.168.0.1 to the text box, and presses the “Connect” button.

**Then:**

Francis’ mobile device is connected and fetches audio stream to the desktop server.

**Use Case:**

* **Name** : Mobile Client Disconnection
* **Description**: Disconnects the mobile device from the desktop server
* **Actor**: Everyone who owns a mobile device and connected to the Wifi network.
* **Pre-condition:** Must be connected to the Wifi network and the app also “Connected” to the desktop server,
* **Post-condition:** The mobile device is now disconnected from the desktop server and returns to the main menu.

**Main Course:**

1. The user clicks the “Disconnect” button.
2. The user is prompted before disconnecting.
3. The user clicks “Yes” button.

**Alternative:**

**3a)** The user clicks “No” button, Use case exits.

**4,** The user is now disconnected from the server and returns to the main menu.

**Test Case:**

**Given:**

Francis wants to disconnect his mobile device from the desktop server.

**When:**

Francis presses the “Disconnect” button and then presses “Yes” after the prompt.

**Then:**

Francis’ mobile device is diconnected from the desktop server.

**Use Case:**

* **Name**: VLC Server Streaming
* **Description:** The desktop server can stream audio to the clients using VLC.
* **Actor**: User
* **Pre-condition:** The desktop server must be connected to the network.
* **Post-condition:** The desktop server streams the audio to all clients.

**Main Course:**

1. The user opens VLC.
2. The user clicks “Media” in the menu bar and clicks “Stream…”
3. The user clicks “Add” and selects the audio file.
4. The user clicks “Stream”.
5. The user clicks “Next”.
6. The user selects the “RTSP” protocol and clicks “Add”.

**Alternatives:**

**6.a)** The user selects the “HTTP” protocol and clicks “Add”.

1. The user creates a Transcoding profile with a name.
2. Under the “Encapsulation” tab, the user selects “RAW”.
3. Under the “Audio” tab, the user checks the Audio checkbox and selects the codec: MPEG4 Audio (AAC).
4. The user clicks “Save”
5. The user selects the profile with the profile name of the newly created profile.
6. Then the user clicks “Stream”.

**Test Case:**

**Given:**

Francis wants to stream an audio file in VLC with the file name: “Aylius-Voicemail.mp3” using “RTSP” protocol and a transcoding profile named: “RTSP test” from the desktop server.

**When:**

Francis opens VLC, clicks the “Media” button in the menu bar, clicks “Stream…”, clicks “Add”, selects the file “Aylius-Voicemail.mp3”, clicks “Stream”, clicks “Next” selects “RTSP” protocol, clicks “Add”, creates a profile with the name: “RTSP test”, selects the “RAW” as encapsulation type, selects “MPEG4 Audio (AAC)” under the audio tab, clicks save, selects the “RTSP test” transcoding profile and clicks “Stream”.

**Then:**

The audio stream “Aylius-Voicemail.mp3” is broadcasted to all the clients.