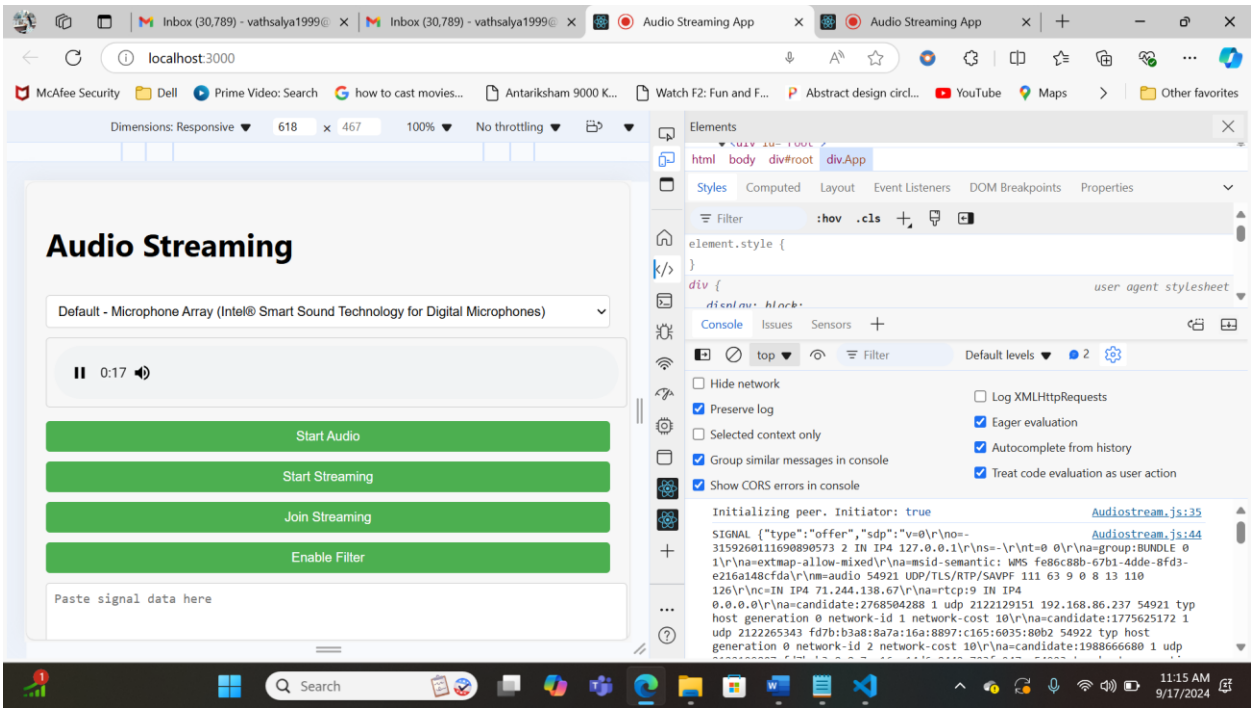
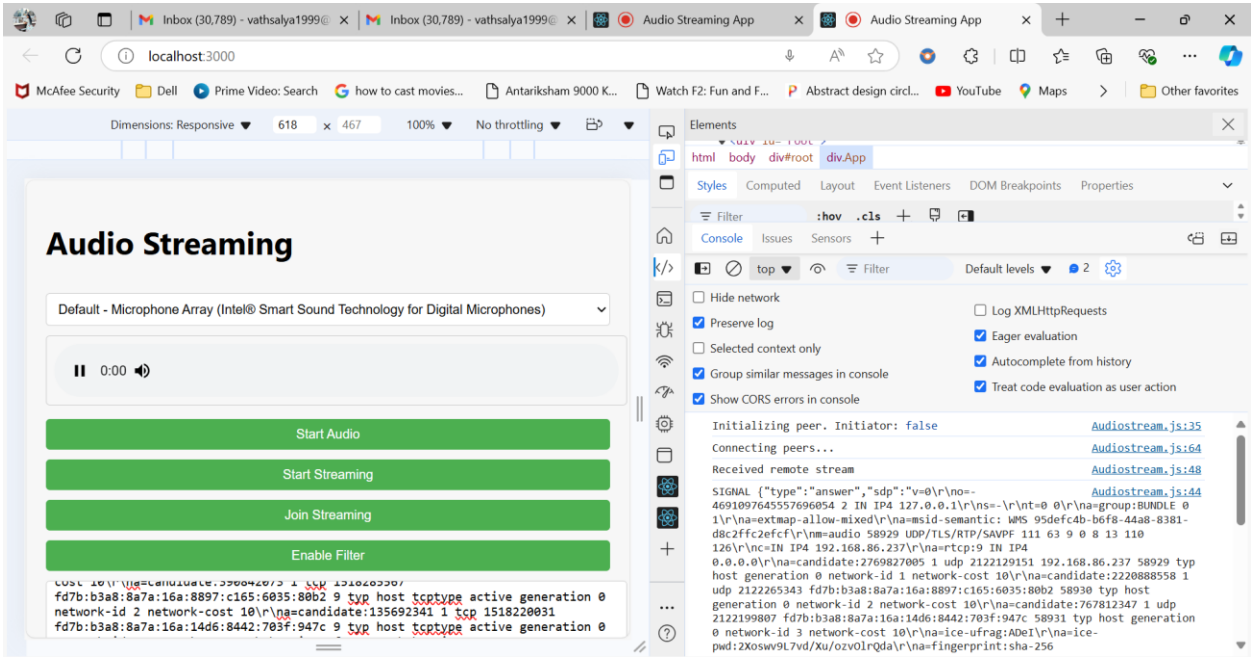
Testing the Application

User 1



User 2



As we can see here that Both the users are connected successfully and here the peer is initialized and are connected to each other and also in the Json data we can see that in the User 1 when the start streaming button is clicked then the JSON data can be visible in the developer inspect tools and once after the User 2 Joins the streaming and pastes this Json data from the user 1 , the user 2 gets connected to the peer and the answer/response will be displayed for the user 2.

Steps to run the application:

Step 1: Selecting the Microphone

1. **In Both Tabs (User 1 and User 2)**:
    - Find the "Select Audio Input" dropdown.
    - Choose the microphone you want to use from the list.
    - If you only have one microphone, select the same one in both tabs.
2. **Start Audio**:
    - Click the "Start Audio" button in both tabs to start capturing audio from the selected microphone.
    - You might hear the audio from your microphone through the speakers, which means audio capture is working.

Step 2: Starting the Streaming Connection

1. **In Tab 1 (User 1)**:
    - Click the "Start Streaming" button to initialize a WebRTC connection as the initiator.

    Open Developer Tools:

    - Right-click anywhere on the page and select "Inspect" to open Developer Tools.
    - Go to the "Console" tab.

    Retrieve the Signal Data:

    - Look for a message that says something like:
    - SIGNAL {"type":"offer","sdp":"..."}
    - Copy this entire JSON string (it contains the connection details that need to be shared with User 2).

Step 3: Joining the Stream

1. **In Tab 2 (User 2)**:

    Paste the Signal Data:

    - Locate the text area labeled "Paste signal data here."
    - Paste the JSON string you copied from User 1 into this text area.
    - Click the "Join Streaming" button.

    Open Developer Tools in Tab 2:

    - Right-click, select "Inspect," and go to the "Console" tab.

    Retrieve the Response Signal Data:

    - In the console, you will see another message that looks like:
    - Copy code SIGNAL {"type":"answer","sdp":"..."}
    - Copy this new JSON string.

Step 4: Completing the Connection

1. **Back to Tab 1 (User 1)**:

    - Paste the new JSON string (the one you just copied from Tab 2) into the "Paste signal data here" text area in Tab 1.
    - This completes the WebRTC handshake between User 1 and User 2.

Step 5: Testing the Audio Stream

1. **In Both Tabs**:

    - After completing the signaling process, you should now be able to hear audio from each other's microphones. Speak into your microphone in each tab to verify.
    - If the connection is successful, you will hear the audio captured by the microphone in one tab playing through the other tab's speakers.

Step 6: Testing the Audio Filter

1. **In Either Tab**:

    - Click the "Enable Filter" button to modify the audio stream.
    - Speak into the microphone while the filter is enabled to hear the changes in the audio quality.
    - Click the button again to disable the filter and compare the sound.