**🌟 Flow of APIs (End-to-End Process)**

**Step 1: Create a Room (API Call)**

* **API:** POST /api/meetings/create-room
* **Input (Body):**

json

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{

"title": "Team Meeting",

"hostUserId": "USER\_ID\_OF\_HOST"

}

* **Output:**

json

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{

"success": true,

"roomId": "ROOM\_ID"

}

* **What happens?**
  + This creates a new meeting room on **100ms**.
  + Stores the roomId, meetingId, hostUserId in the **MongoDB Meeting schema**.
  + Status of the meeting is set to ongoing.

**Step 2: Generate User-Specific Token (API Call)**

* **API:** GET /api/meetings/get-token/:meetingId/:userId
* **Input (Params):**
  + meetingId: ID of the meeting created in Step 1.
  + userId: The ID of the user trying to join (unique per user).
* **Output:**

json

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{

"success": true,

"token": "GENERATED\_100MS\_APP\_TOKEN"

}

* **What happens?**
  + Generates a unique **App Token** for the user using their userId and roomId.
  + Token is required by the frontend to join the 100ms room.

**Step 3: Joining the Meeting (Frontend Integration)**

* **What happens?**
  + The frontend (React App) uses the generated token to connect to **100ms SDK** and join the video call.
  + You will need to use HMSRoomProvider and HMSRoom components from @100mslive/react-sdk.

**Step 4: Decline Call (If User Wants to Reject the Invitation)**

* **API:** POST /api/meetings/decline-call/:meetingId/:userId
* **Input (Params):**
  + meetingId: ID of the meeting.
  + userId: The user declining the call.
* **Output:**

json

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{

"success": true,

"message": "Call declined successfully"

}

* **What happens?**
  + If no one has joined the call, it marks the meeting status as declined.
  + This is useful for missed calls or users choosing not to join.

**Step 5: Leave the Meeting (If User Wants to Exit Midway)**

* **API:** POST /api/meetings/leave-meeting/:meetingId/:userId
* **Input (Params):**
  + meetingId: The ID of the ongoing meeting.
  + userId: The user leaving the meeting.
* **Output:**

json

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{

"success": true,

"message": "Left the meeting successfully"

}

* **What happens?**
  + The user is removed from the meeting's participants list.
  + The meeting status remains ongoing if other participants are still present.

**Step 6: Start Recording (To Record the Meeting)**

* **API:** POST /api/meetings/start-recording/:meetingId
* **Input (Params):**
  + meetingId: ID of the meeting to be recorded.
* **Output:**

json

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{

"success": true,

"recordingId": "RECORDING\_ID",

"meeting": {...}

}

* **What happens?**
  + 100ms API starts recording and generates a recordingId.
  + The recording is **marked as ongoing** in the Meeting schema.

**Step 7: Stop Recording (When Meeting Ends or Recording Needs to Stop)**

* **API:** POST /api/meetings/stop-recording/:recordingId/:meetingId
* **Input (Params):**
  + recordingId: The ID received from the start-recording API.
  + meetingId: The meeting that is being recorded.
* **Output:**

json

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{

"success": true,

"meeting": {...}

}

* **What happens?**
  + 100ms API stops the recording and provides the URL of the recorded video.
  + The URL is saved in the Meeting schema's recordings array.

**Step 8: Fetch Recordings (To Retrieve Saved Recordings)**

* **API:** GET /api/meetings/fetch-recordings/:meetingId
* **Input (Params):**
  + meetingId: The ID of the meeting whose recordings you want to fetch.
* **Output:**

json

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{

"success": true,

"recordings": [

{

"url": "RECORDING\_URL",

"startedAt": "2025-03-11T10:00:00Z",

"endedAt": "2025-03-11T11:00:00Z"

}

]

}

* **What happens?**
  + Retrieves all the saved recordings from the database for the given meeting.

**🔑 What You Need to Do in Frontend:**

1. **Call create-room API to create a meeting and get roomId.**
2. **Call get-token API to get a token for the user joining the meeting.**
3. **Use the 100ms SDK to join the room using the generated token.**
4. **Call start-recording and stop-recording APIs to control recording.**
5. **Use fetch-recordings API to get all the recordings of a particular meeting.**