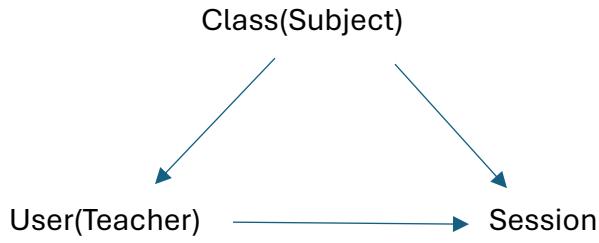


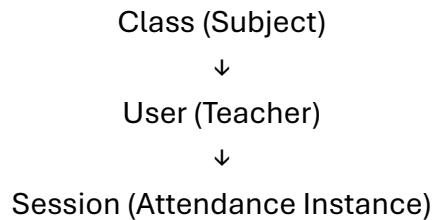
## **Proposed Connection**



## **Problems Statement :**

1. Currently a session is generated randomly without any connection to the subject/class
2. Classes(subjects) are assigned to teachers, when in reality teachers should be assigned to each class/subject.(As a single subject can have multiple teachers)

So the hierarchy should look like this:



## **Proposed Solution :**

We give the Teacher the option to select the subject first before creating a session

# Teacher Dashboard

Welcome, januth teacher

Create Session

Create Class

Update

## Create Attendance Session

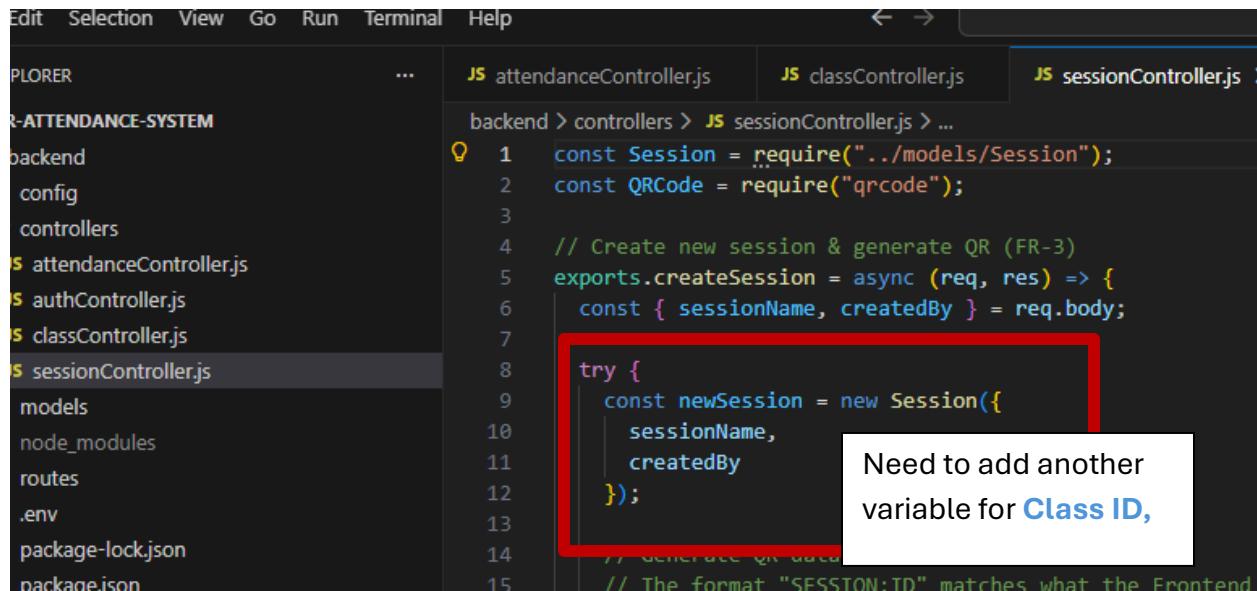
Enter Session Name (e.g. Week 9)

Generate QR Code

Add a **dropdown** here, listing the classes available to each teacher.

After selecting a subject the “Session Name” field will be enabled and the teacher can go ahead with creating a session

This Session Name field should be initially **disabled** until the subject/class is selected from the dropdown



```
attendanceController.js classController.js sessionController.js
backend > controllers > sessionController.js > ...
1 const Session = require("../models/Session");
2 const QRCode = require("qrcode");
3
4 // Create new session & generate QR (FR-3)
5 exports.createSession = async (req, res) => {
6   const { sessionName, createdBy } = req.body;
7
8   try {
9     const newSession = new Session({
10       sessionName,
11       createdBy
12     });
13
14     // Generate QR code
15     // The format "SESSION-ID" matches what the Frontend
```

Need to add another variable for **Class ID**,

```

_id: ObjectId('696ccfd80c1d0d5b8b7136b0')
sessionName : "week 1"
createdBy : "januth teacher"
isActive : true
qrCode : "data:image/png;base64,iVBORw0KGgoAAAANSUhEUgAAQAAACUCAYAAAB1PADUAAAA..."
createdAt : 2026-01-18T12:19:36.287+00:00
updatedAt : 2026-01-18T12:19:36.287+00:00
__v : 0

_id: ObjectId('696ccfde0c1d0d5b8b7136b2')
sessionName : "week 2"
createdBy : "januth teacher"
isActive : true
qrCode : "data:image/png;base64,iVBORw0KGgoAAAANSUhEUgAAQAAACUCAYAAAB1PADUAAAA..."
createdAt : 2026-01-18T12:19:42.100+00:00
updatedAt : 2026-01-18T12:19:42.100+00:00
__v : 0

_id: ObjectId('696ce5e90c1d0d5b8b7136b9')
sessionName : "week4"
createdBy : "januth teacher 2"
isActive : true
qrCode : "data:image/png;base64,iVBORw0KGgoAAAANSUhEUgAAQAAACUCAYAAAB1PADUAAAA..."
createdAt : 2026-01-18T13:53:45.602+00:00
updatedAt : 2026-01-18T13:53:45.602+00:00
__v : 0

```

There needs to be some extra variables in DB for a “session”:

```
{
  _id,
  sessionName,
  createdBy,
  classId: Class ObjectId, // links the session to a class
  teacherId: Teacher ObjectId, // we have createdBy, but better to add the teacher ID as well
  isActive,
  qrCode,
  createdAt,
  updatedAt
}
```