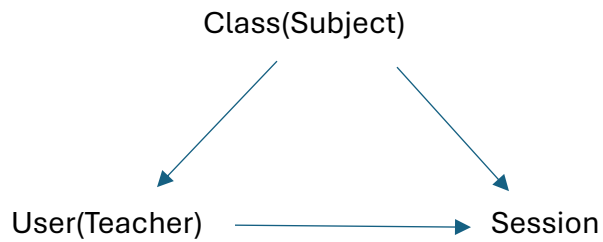


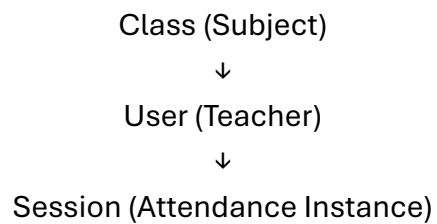
Proposed Connection



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

```
Edit Selection View Go Run Terminal Help
EXPLORER
R-ATTENDANCE-SYSTEM
  backend
  config
  controllers
    attendanceController.js
    authController.js
    classController.js
    sessionController.js
  models
  node_modules
  routes
  .env
  package-lock.json
  package.json
JS attendanceController.js
JS classController.js
JS sessionController.js
backend > controllers > JS 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**,

My Queries

Data Modeling

CONNECTIONS (1)

Search connections

localhost:27017

admin

booksdb

config

foodDB

local

myprojectDB

qr_attendance

attendances

classes

sessions

users

localhost:27017 > qr_attendance > sessions

Documents 0

Aggregations

Schema

Indexes 1

Validation

Type a query: { field: 'value' } or [Generate query](#)

ADD DATA

UPDATE

DELETE

EXPORT DATA

EXPORT CODE

```

_id: ObjectId('696ccfd80c1d0d5b8b7136b0')
sessionName: "week 1"
createdBy: "januth teacher"
isActive: true
qrCode: "data:image/png;base64,iVBORw0KGgoAAAANSUhEUgAAAJQAAACUCAYAAAB1PADUAAAA..."
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,iVBORw0KGgoAAAANSUhEUgAAAJQAAACUCAYAAAB1PADUAAAA..."
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,iVBORw0KGgoAAAANSUhEUgAAAJQAAACUCAYAAAB1PADUAAAA..."
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
}

```