Design backend APIs which showcase the following actions in POSTMAN via a sequence of API calls.

1. A student A enters his university ID number and pswd and gets a unique token(pick a code generated uuid for now) back which is used in authentication in all further APIs for this user - sent as bearer token in the headers.

2. A sees a list of free sessions available with the dean. Each dean slot is 1 hr long and dean is only available on Thur, Fri 10 AM every week.

3. A picks one of the above slots and books.

4. Dean logins in with his university ID and pswd (similar to 1 above). Yes Dean too gets his own token.

5. Dean sees a list of all pending sessions - student name, and slot details. Currently only A.

6. Student B logs in, gets a list of free slots and books a slot.

7. Dean logs in back and sees a list of his pending sessions - both A and B.

8. Dean logs in back after slot time booked by A and he can see only B in the list. (You can simulate this by manually changing the start slot time that A booked to a past time. Yes thts is a DB manual edit)

Submission -

Share a video to vamsee@ratham.in that shows

1. the postman demo,

2. explains the code base, database structures

3. All actual data in DB that got inserted after the above demo

Instructions -

* Choose any language or DB that you seem apt
* All APIs except login APIs must take uuid bearer token that is validated in BE
* In the postman demo, show that a wrong uuid authentication will make an API fail
* If you don't understand the bearer token or authentication concept, google it. It is easy to understand.
* There could be multiple deans in the college with their available free weekly schedule
* If you are new to API design, try these resources. These should be enough for you to solve this assignment.

Resources:

* API design - how to design one API - <https://www.youtube.com/watch?v=_YlYuNMTCc8>
* Mistakes folks do during API design - <https://www.youtube.com/watch?v=P0a7PwRNLVU>
* <https://www.youtube.com/watch?v=MiOSzpfP1Ww>
* Bearer token - how to create/use it? <https://www.youtube.com/watch?v=n-IFlWGX1t4>
* How to connect API and DB?
  + NodeJS - Watch full sequence, not just the first video <https://www.youtube.com/watch?v=cfuWY46xuJc&list=PLdHg5T0SNpN3EoN3PEyCmPR42Ok_44OFT&index=1>
  + GoLang - <https://www.youtube.com/watch?v=zICaTPBkupY>