MENTORMATE™

Assignment 1

Your first assignment is to record yourself answering the questions below **in English**. The video should be up to **5 minutes long**.

Questions:

1. Introduce yourself to us.
2. Why do you want to become part of our .NET internship program?
3. Tell us something you are proud of? It could be either professional or personal achievement.

Here are some **tips** on how to record your video:

- Record yourself in landscape mode (horizontal) for higher quality. If audio pickup isn't great, use headphones.
- Record yourself in good lighting, natural light is your best friend. Avoid direct sunlight.
- The shooting angle shouldn’t be much below or above your head. Just imagine you’re talking to someone.
- Don’t talk too fast and try to pause between thoughts.
- Try to be brief and to the point.

Upload the video to any Cloud (file transfer/sharing) platform - Youtube, Google Drive, WeTransfer, pCloud, Dropbox, One Drive, etc. Make sure that the link is shared externally, so we can open it.

Assignment 2

Your second assignment is to create a meeting scheduling software application, using one of the following languages: .NET, Java, C or C++ or JavaScript (any framework or library). Please upload the source code of the application to a private GitHub repository after you’re finished (if you are not sure how to do it, you can take a look at our **instructions**).

Create an application that checks meeting rooms’ schedules and finds open time slots that can be booked for meetings. The application should return all available slots for a given date that the user can choose from.

The application should read the schedules of the rooms from a file. The file contains the schedules, as well as information about the rooms. The following information is available for each room:

- `roomName` - the name of the room
- `capacity` - the maximum number of people that can be accommodated
- `availableFrom` - the time from which the room is available
- `availableTo` - the time from which the room is not available
- `schedule` - the current schedule of the room. A collection of scheduled time slots. Each time slot has the following properties:
    - `from` - the start time of the time slot (e.g. `2021-10-15T09:00:00`)
    - `to` - the end time of the time slot (e.g. `2021-10-15T10:00:00`)

Use the **following file** to test your implementation.

The application should accept the following arguments:

- The date for which to check for time slots
- Number of participants
- Meeting duration

The application should filter the list of rooms and select the ones that can fit the required number of participants, and return the list of available slots for each of the rooms. Each slot can start at every 15th of a minute, starting from 0 (e.g. 0, 15, 30, 45). For example, if a room is taken between 12:00-12:30 and 13:30-18:00, and the meeting should last 30 minutes, the following time slots should be returned: 12:30-13:00, 12:45-13:15, 13:00-13:30. Each time slot must not start before, or end after the time specified by the `availableFrom` and `availableTo` properties of the room.

The user should see the names of the rooms that are available. The user should be able to select one of the available time slots for a given room. The selected option should be persistent in the JSON file that contains the rooms' schedules.