**Assignment**

Create a Backend application in Python Django which will help its employee to book a meeting room as and when required.

**Requirements**

1. Schedule meeting in the given slot.
2. Get all available slots for a specific day
3. Reschedule meeting to a given slot.
4. Cancel meeting if the meeting has not started
5. Bulk update all meetings
6. Bulk cancel all meetings

**Preferred Tech Stack**

**Backend:** Python Django

**Database:** PostgreSQL

**Note**

1. You can assume data to suit your requirements
2. You should not allow overlapping meeting
3. You can assume start and end time of a day(e.g. 09:00 - 18:00)
4. Your application should work for all cases, the samples given below are only for your understanding.

**Sample**

**1] Schedule meeting in the given slot**

**Input:**

1. 30/08/2021 09:00 - 11:00
2. 30/08/2021 13:00 - 15:00
3. 30/08/2021 15:00 - 16:00
4. 31/08/2021 13:00 - 15:00
5. 30/08/2021 15:00 - 16:00

**Output:**

*Based on availability, documents should be inserted into the Meetings collection.*

{

date:’30/08/2021’,

startTime: ‘09:00’,

endTime: ‘11:00’

},

{

date:’30/08/2021’,

startTime: ‘13:00’,

endTime: ‘15:00’

},

{

date:’30/08/2021’,

startTime: ‘15:00’,

endTime: ‘16:00’

},

{

date:’31/08/2021’,

startTime: ‘13:00’,

endTime: ‘15:00’

}

**2] Get all available slots for a specific day**

**Input:** 30/08/2021

*For example, the Meetings collection has following documents where each document represents one meeting:*

{

date:’30/08/2021’,

startTime: ‘09:00’,

endTime: ‘11:00’

},

{

date:’30/08/2021’,

startTime: ‘13:00’,

endTime: ‘15:00’

},

{

date:’30/08/2021’,

startTime: ‘15:00’,

endTime: ‘16:00’

},

{

date:’31/08/2021’,

startTime: ‘13:00’,

endTime: ‘15:00’

}

**Output:**

[

{

startTime: ‘11:00’,

endTime: ‘13:00’

},

{

startTime: ‘16:00’,

endTime: ‘18:00’

}

]

**3] Reschedule meetings to given slot**

**Input:**

1. 30/08/2021 10:00 - 11:00 to 30/08/2021 11:00 - 12:00
2. 30/08/2021 11:00 - 12:00 to 30/08/2021 13:00 - 14:00
3. 31/08/2021 13:00 - 15:00 to 30/08/2021 14:00 - 15:00

*For example, the Meetings collection has following documents where each document represents one meeting:*

{

date:’30/08/2021’,

startTime: ‘10:00’,

endTime: ‘11:00’

},

{

date:’30/08/2021’,

startTime: ‘11:00’,

endTime: ‘12:00’

},

{

date:’30/08/2021’,

startTime: ‘14:00’,

endTime: ‘16:00’

},

{

date:’31/08/2021’,

startTime: ‘13:00’,

endTime: ‘15:00’

}

**4] Cancel meetings if the meeting has not started**

**Input:**

30/08/2021 10:00 - 11:00

30/08/2021 11:00 - 12:00

31/08/2021 13:00 - 15:00

*For example, the Meetings collection has following documents where each document represents one meeting:*

{

date:’30/08/2021’,

startTime: ‘10:00’,

endTime: ‘11:00’

},

{

date:’30/08/2021’,

startTime: ‘11:00’,

endTime: ‘12:00’

},

{

date:’30/08/2021’,

startTime: ‘14:00’,

endTime: ‘16:00’

},

{

date:’31/08/2021’,

startTime: ‘13:00’,

endTime: ‘15:00’

}