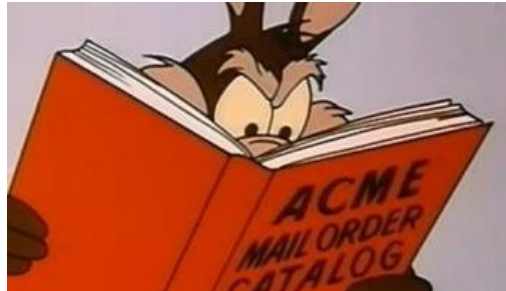


ACME Lab Inc.

Room Booking System



You are a developer in ACME Corporation, a large multinational company producing a wide array of outlandish products that fail or backfire catastrophically at the worst possible times. The company has only a few meeting rooms for its 100+ engineering team located in its headquarters, which until recently used to book by means of a shared spreadsheet. Being a high-tech company, we figured out that we can do better and decided to put forward a project to deliver a web application that would allow employees to easily book slots in any of their meeting rooms, through their browser.

Your team was handed the project and decided to go with a client-server application that would have two components; a front-end client written in React.js served by a back-end API written in java and springboot. It is expected that the application's data will be stored in a relational database.

Your job as the lead back-end software developer on this project is to **design and deliver** an API that will support the first iteration of the product (i.e., MVP), which will consist of the following use cases:

As an ACME Inc. employee I need to view a meeting room's bookings


Notes:

- Must be able to search by room and date (both mandatory).
- For each booking show the email of the employee that booked the slot, time from – time to.

Design mock-up:

Bookings

[Book a room](#)

Room	Date
Main conference room ▾	24/04/2023 
Search	

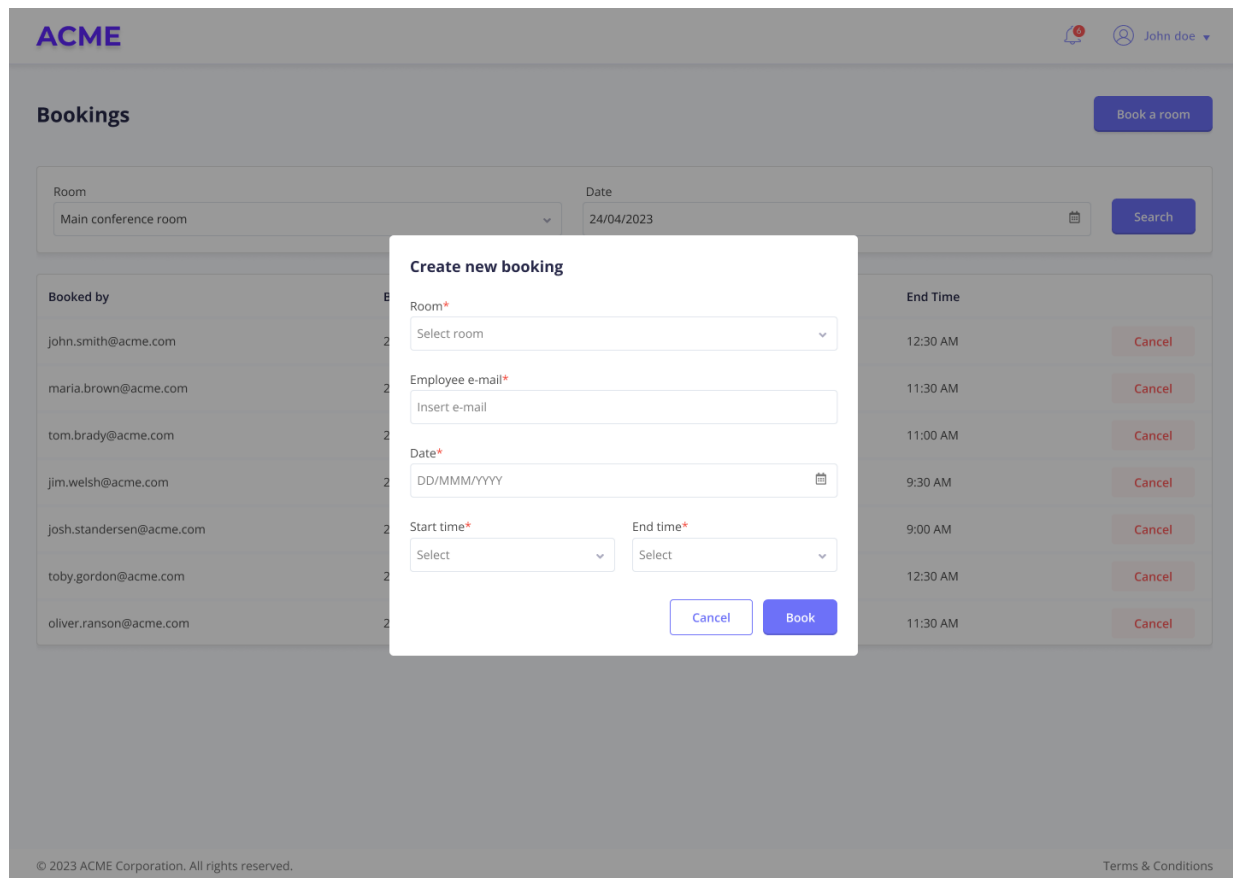
Booked by	Booking Date	Start Time	End Time	
john.smith@acme.com	24/04/2023	11:30 AM	12:30 AM	Cancel
maria.brown@acme.com	24/04/2023	11:00 AM	11:30 AM	Cancel
tom.brady@acme.com	24/04/2023	10:30 AM	11:00 AM	Cancel
jim.welsh@acme.com	24/04/2023	10:00 AM	9:30 AM	Cancel
josh.standersen@acme.com	24/04/2023	9:30 AM	9:00 AM	Cancel
toby.gordon@acme.com	24/04/2023	11:30 AM	12:30 AM	Cancel
oliver.ranson@acme.com	24/04/2023	11:00 AM	11:30 AM	Cancel

As an ACME Inc. employee I need to book a meeting room

Notes:

- Room (predefined list), employee email, date, time from, time to are mandatory.
- Employees can book a room for *at least* 1 hour or *consecutive* multiples of 1 hour (2, 3, 4, ...).
- Should not be allowed for two people to book an overlapping slot for the same room.

Design mock-up:



As an ACME Inc. employee I need to cancel a booking


Notes:

- Should happen through a button in the view booking view.
- Can't cancel a booking in the past

Design mock-up:

Bookings

[Book a room](#)

Room	Date	
Main conference room ▾	24/04/2023 	Search

Booked by	Booking Date	Start Time	End Time	
john.smith@acme.com	24/04/2023	11:30 AM	12:30 AM	Cancel
maria.brown@acme.com	24/04/2023	11:00 AM	11:30 AM	Cancel
tom.brady@acme.com	24/04/2023	10:30 AM	11:00 AM	Cancel
jim.welsh@acme.com	24/04/2023	10:00 AM	9:30 AM	Cancel
josh.standersen@acme.com	24/04/2023	9:30 AM	9:00 AM	Cancel
toby.gordon@acme.com	24/04/2023	11:30 AM	12:30 AM	Cancel
oliver.ranson@acme.com	24/04/2023	11:00 AM	11:30 AM	Cancel

A few clarifications about this assignment

- The views (UI) are out of scope for your deliverables. You are expected to deliver only a fully functional API that will be able to support these.
- Authentication and authorization are out of scope.
- For the database you can use an embedded database such as h2 database, if you want.

Good luck! 🙌