Subscriptions and Reservations – varianta Andrei Petrascu

Database diagram

Subscription	SubscriptionCalendar	Reservation		
pk id	pk id	pk id		
fk createdById	fk subscriptionId	fk createdById		
fk courtId	startDate: date	fk courtId		
month: string	endDate: date	startDate: date		
startHour: string		endDate: date		
endHour: string		fk player1		
price: int		fk player2		
		status: enum		

Create Monthly Subscription

<Form>

- 1. chooseCourt: dropdown with all courts
- 2. chooseMonth: dropdown with all year months (January, February, ..., December)
- 3. chooseStartHour: dropdown (00, 01, 02, ..., 23)
- 4. chooseEndHour: dropdown (00, 01, 02, ..., 23)
- 5. createMonthlySubscriptionButton

</Form>

handleCreateMonthlySubscriptionButton:

- set 'createdById' field with the logged user id [on front-end]
- compute 'price' taking into account the hourly rate [on back-end]
- send confirmation email to client
- save to DB to SubscriptionCalendar table the dates (let's say the month is April, startHour is 12 and endHour is 13; we will save 30 entries like: startDate='2022-04-01T12' endDate='2022-04-01T13', startDate='2022-04-02T12' endDate='2022-04-02T13' and so on, for every day of month 'month' of current year). I propose this approach to make our work easier when we have to search for court availability.
- save to DB to Subscription table

Create Reservation

<Form>

- 1. chooseCourt: dropdown with all courts
- 2. chooseStartDate: calendar (date and hour)
- 3. chooseEndDate: calendar (date and hour)
- 4. createReservationButton

</Form>

handleCreateReservationButton:

- set 'createdById' field with the logged user id [on front-end]
- compute 'price' taking into account the hourly rate [on back-end]
- send confirmation email to client
- set 'status' to 'OPEN'
- save to DB to Reservation table

status enum = {OPEN, CANCELED, PAYED, FINDING2, FINDING1, READY}

ClientPage/reservations

CreatedBy	Court	StartDate	EndDate	Player1	Player2	Status	Actions
Roly	24	2022-04-	2022-04-	Roly	Ady	READY	Cancel,
		08 T 12	08 T 13				FindOnePlayer
Raul	6	2022-04-	2022-04-			OPEN	Cancel,
		08 T 12	08 T 13				FindOnePlayer

Cancel: if diff(NOW, startDate) > 24h then SuccessfullyCancel

else Pay OR FindTwoPlayers

SuccessfullyCancel: change reservation status to CANCELED

Pay: change status to PAYED

FindTwoPlayers:

- change status to FINDING2
- notify all users in the platform (we can without queue: show all reservations having FINDING2 status)
- first 2 users which click 'accept' button will be player1 and player2
- if both player1 and player2 are set then change status to READY

FindOnePlayer:

- change status to FINDING1
- notify all users
- first user accepting will be player2, and player1 will be the user who created (createdById)
- if both players are set, change status to READY