# Test cases

## Find free court in the given time interval

Tests method from ReservationRepository *findFreeCourtForReservation(LocalDateTime start, LocalDateTime end, Long reservationId)*, which returns a list of tennis court IDs that can be assigned to a given reservation, i.e. courts that are free in the given time interval. The third parameter, reservationId is required to update the details of the given reservation.

Given the following records in the database:

|  |  |
| --- | --- |
| Courts table | |
|  | id |
| court#1 | 1 |
| court#2 | 2 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Reservations table | |  |  |  |
|  | id | court\_id | start | ending |
| reservation#1 | 1 | 1 | 5/12/2022 8:00 | 5/12/2022 9:00 |
| reservation#2 | 2 | 2 | 5/12/2022 8:00 | 5/12/2022 9:00 |
| reservation#3 | 3 | 1 | 5/12/2022 10:00 | 5/12/2022 12:00 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Tests are run as follows: | |  |  |  |
| Case no | start | end | reservation\_id | Expected |
| 1 | 5/12/2022 8:00 | 5/12/2022 10:00 | 4 | Empty list |
| 2 | 5/12/2022 10:00 | 5/12/2022 11:00 | 4 | A list containing [2] |
| 3 | 5/18/2022 10:00 | 5/18/2022 12:00 | 4 | A list containing [1, 2] |
| 4 | 5/12/2022 8:00 | 5/12/2022 9:00 | 1 | A list containing [1] |
| 5 | 5/12/2022 8:00 | 5/12/2022 9:00 | 2 | A list containing [2] |
| 6 | 5/12/2022 8:00 | 5/12/2022 9:00 | 4 | Empty list |
| 7 | 5/20/2022 10:00 | 5/20/2022 12:00 | 3 | A list containing [1, 2] |

## Save reservation

Tests method from ReservationService class *saveReservation(Reservation reservation)* which saves a reservation into the database after validating the reservation details, that is, checks if the reservation does not start in the past, is during an open day and its duration is within the allowed length.

In the following tests, the current date-time is set to 2022-05-10T14:00:00 by ISO 8601 format.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Case no | start | end | duration | Expected |
| 1 | 5/12/2022 8:00 | 5/12/2022 10:00 | 2 | saved |
| 2 | 5/12/2000 10:00 | 5/12/2000 11:00 | 1 | Exception denoting past reservation thrown |
| 3 | 5/18/2022 10:00 | 5/18/2022 22:00 | 0 | Exception denoting invalid duration thrown |
| 4 | 5/14/2022 8:00 | 5/14/2022 9:00 | 1 | Exception denoting is not open day thrown |
| 5 | 5/12/2022 8:00 | 5/12/2022 9:00 | 1 | saved |
| 6 | 5/12/2022 18:00 | 5/12/2022 9:00 | -9 | Exception invalid duration thrown |
| 7 | 5/20/2022 10:00 | 5/20/2022 12:00 | 2 | saved |