CHALLENGE

Post-Covid scenario:

People are now free to travel everywhere but because of the pandemic, a lot of hotels went bankrupt. Some former famous travel places are left with only one hotel.

You've been given the responsibility to develop a booking API for the very last hotel in Cancun.

The requirements are:

- API will be maintained by the hotel's IT department.
- As it's the very last hotel, the quality of service must be 99.99 to 100% => no downtime
- For the purpose of the test, we assume the hotel has only one room available
- To give a chance to everyone to book the room, the stay can't be longer than 3 days and can't be reserved more than 30 days in advance.
- All reservations start at least the next day of booking,
- To simplify the use case, a "DAY' in the hotel room starts from 00:00 to 23:59:59.
- Every end-user can check the room availability, place a reservation, cancel it or modify it.
- To simplify the API is insecure.

<u>Instructions</u>:

- Pas de limite de temps (très bien fait il faut au moins 3 à 4 soirées)
- Le minimum requis est un README et du code.
- Tous les shortcuts pour gagner du temps sont autorisés dans la mesure où c'est documenté. Tout shortcut non expliqué doit etre consideré comme une erreur. On pourrait accepter un rendu avec 3 lignes de code si elles ont du sens et que tout le raisonnement et les problèmatiques à prendre en compte sont decrites.