# Technical Documentation

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Repo: <https://github.com/fw-screenmedia-technicaltest/technicaltest>

## Assumptions

Hotels will have 6 rooms each

Bookings can’t be changed after they’ve been made

Find hotel will return a list of hotels which match the search term

## Data

Hotels

* Id (Primary Key, int)
* Name

Rooms

* Id (Primary Key, int)
* Number (NVarchar(50))
* Hotel Id (Foreign Key)
* Room Type Id (Foreign Key)

Room Type

* Id (Primary Key)
* Name (NVarchar(50))
* Capacity (Small Int

Room Availability

* Id (Primary Key, int)
* Room Id (Foreign Key)
* Date (Date)

Bookings

* Id (Primary Key, int)
* Room Id (Foreign Key)
* Personal Details Id (Foreign Key)
* Number of guests (Small Int)

RoomBooking

* Id
* Room
* Booking
* People

Personal Details

* Id (Primary Key)
* First Name (NVarchar(50))
* Last Name (NVarchar(50))
* Email Address (NVarchar(50))
* Telephone Number (NVarchar(50))

## API Endpoints

/hotel GET

* Parameters
  + string name
* Output
  + Hotel List

/Availability GET

* Parameters
  + Number of People
  + From Date
  + To Date
  + HotelID
* Output
  + Availability List

/Booking POST

* Parameters
  + Room Type Id
  + Personal Details
  + From Date
  + To Date
  + Number of People
* Output
  + Booking Reference Number

/Booking GET

* Parameters
  + Booking Reference Number
* Output
  + Booking Details

### Utility Endpoints

Utility/Seed GET – Hitting this endpoint to seed the database

Utility/Reset GET – Hitting this endpoint to reset the database

## Services

Hotel Service

* Tests
  + Find a hotel based on its name

Availability Service

* Tests
  + Find available rooms between two dates for a given number of people
  + A room cannot be double booked for any given night.

Booking Service

* Tests
  + Book Room
  + Find booking details based on booking ref number
  + A room cannot be occupied by more people than its capacity
  + A room cannot be double booked for any given night.

Utility Service

* Tests
  + For testing purposes the API should expose functionality to allow for seeding and resetting the data
  + Seeding: Populate database with just enough data for testing
  + Resetting: Remove all data ready for seeding