| Hotel | | |
|---|--------------|--|
| Defines Hotel Stores the Hotel Gets type of Hotel Adds new room type to Hotel Gets number of rooms in Hotel | • TypeOfRoom | |

| | HotelInitialiser | |
|---|--|--|
| • | Reads Hotel and Room data from specified file Creates appropriate Hotel and TypeOfRoom objects and stores in list | HotelTypeOfRoom |

| Room | |
|--|--|
| Defines a room(ie. type,occupancy,room number)Stores room | |

| TypeOfRoom | |
|---|--|
| Defines Room Types Creates room object with type, occupancy and rates Returns number of this type of room available | |

https://echeung.me/crcmaker/

Cancellation

- Gets Cancellation date
- Creates Cancellation object
- Returns Reservation date belonging to Cancellation.
- Returns if Cancellation can be refunded
- Returns Cancellation date
- Convert to Csv format
- Checks if reservation is refundable

Reservation

Reservation

- Defines Reservation (ie. Standard or Advanced Purchase, check in and check out date,type of Room, occupancy,cost)
- Stores the reservation
- Calculates cost

Room

Data Analysis

- Returns occupancy figures for each Hotel and Room type
- Returns occupancy figures for each Hotel and Room type over specific period of time
- Returns income figures for each hotel and room type
- Returns income figures for each hotel and room type
- Returns income figures for each hotel and room type over specific period of time
- Goes through all cancellations and sees if there are income to be made from reservations that can't be cancelled
- Returns cost of a room

- HotelInitialiser
- Hotel
- Reservation
- Room
- TypeOfRoom
- Room
- Cancellation
- RandomReservationsGenerator

InputScanner

- Uses InputValidator and allows users to input their choices. Also allows them to re-enter until they reach a choice that is acceptable.
- Takes the user through a bunch of reservation questions so a reservation instance can be completed
- InputValidator
- Reservation
- Room

InputValidator

- Necessary for other classes as it has various methods using regex
- Validates the input if it is in the range given
- Validates if the String input is an integer or not
- Validates if the String input is a reservation type
- Validates if String input is a double
- Validates if String correctly represents an occupancy
- Validates if String correctly represents a date

PrintedMenus

- Necessary to print the menu that allows the user to see which options one might have.
- Menu that gives the options for each submenu
- Analytical menu that gives options for different sections
- Method that prints out each String needed for the user

RandomReservationsGenerator

Used to generate random reservations

| Reader | |
|--|---|
| Will read the contents of files and convert them into Reservation and/or Cancellation objects. | ReservationCancellationRoom |

| Writer | |
|--|--|
| Writes both reservations and cancellations | ReservationCancellation |