

Hotel

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| <ul style="list-style-type: none">• Defines Hotel• Stores the Hotel• Gets type of Hotel• Adds new room type to Hotel• Gets number of rooms in Hotel | <ul style="list-style-type: none">• TypeOfRoom |
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HotelInitialiser

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| <ul style="list-style-type: none">• Reads Hotel and Room data from specified file• Creates appropriate Hotel and TypeOfRoom objects and stores in list | <ul style="list-style-type: none">• Hotel• TypeOfRoom |
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Room

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| <ul style="list-style-type: none">• Defines a room(ie. type,occupancy,room number)• Stores room• Finds how many rooms of this type are available between two dates• Returns the cost of a room by passing in the room's rates for the week | <ul style="list-style-type: none">• Reservation• ReservationCancellationManager• TypeOfRoom• Hotel• HotelInitialiser |
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TypeOfRoom

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| <ul style="list-style-type: none">• Defines Room Types• Creates room object with type, occupancy and rates• Returns number of this type of room available | |
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Cancellation

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| <ul style="list-style-type: none"> • 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 | <ul style="list-style-type: none"> • Reservation |
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Reservation

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| <ul style="list-style-type: none"> • Defines Reservation (ie. Standard or Advanced Purchase, check in and check out date,type of Room, occupancy,cost) • Stores the reservation • Calculates cost | <ul style="list-style-type: none"> • Room |
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Data Analysis

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| <ul style="list-style-type: none"> • 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 | <ul style="list-style-type: none"> • HotelInitialiser • Hotel • Reservation • Room • TypeOfRoom • Room • Cancellation • RandomReservationsGenerator |
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InputScanner

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| <ul style="list-style-type: none">• 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 | <ul style="list-style-type: none">• InputValidator• Reservation• Room |
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InputValidator

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| <ul style="list-style-type: none">• 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 | |
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PrintedMenus

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| <ul style="list-style-type: none">• 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 | |
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Reader

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| <ul style="list-style-type: none">• Will read the contents of files and convert them into Reservation and/or Cancellation objects. | <ul style="list-style-type: none">• Reservation• Cancellation• Room |
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Writer

- Writes both reservations and cancellations
- Reservation
- Cancellation

ReservationCancellationManager

- Keeps track of all the reservations
- Provides numerous functionalities for these reservations.
- Reservation
- Cancellation

ReservationSystem

- Creates menus and sub menus so that the user can use all the different methods we have created.
- Contains main run function which runs the startup menu
- InputScanner
- PrintedMenus
- Reader

SystemMain

- Main driver of text UI
- ReservationSystem

HotelGUI

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| <ul style="list-style-type: none">• Main Driver of GUI version | <ul style="list-style-type: none">• InputScanner• InputValidator• Writer• Reader• HotelInitialiser• Hotel• Reservation• Room• TypeOfRoom• ReservationCancellationManager• DataAnalysis |
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