

public class Database

- when run, contains all the House objects in an array list
- As according to the contents of the House objects (and their respective Reservation Objects), deals with all the write and read operations to the files (database.txt and change.txt)

- addReservation()

- checks validity of ID and days being booked, before creating a new Reservation object with those parameters, then writing their field to the database.txt

- readReservation()

- reads from the database.txt the appropriate lines, to then create a new Reservation object and adding it to the respective House object's array list (keeps doing this until no more lines to do this until EOF)

- init()

- creates default House objects and writes to database.txt if it is an empty file. Otherwise, it instead reads from the database.txt to create these House objects

- save()

- flushes database.txt file, then writes current contents of the House objects and their reservations

- change(),

- similar to save(), except first reads the new rental price for a given house ID from the change.txt file (if it is not empty), alters the House objects with this new information, then performs save() (equivalent to save()).

- print(), prints current houses and their reservations.

Public class House implements Serializable

- contains the details of the house (e.g. ID, rental price, description...) and an array list of objects of type Reservation (hence when a reservation for that House obj is created, it is added to this list)

Public class Reservation implements Serializable

- contains the details of a single reservation (e.g. rental price, to who, the days, ID of house), to then be added to the respective House object's array list (of type Reservation)

Public class Management

- Using a combination of the above functionality, allows the user to check current reservations and apply changes according to whats inside the change.txt file

Client

- Using a combination of the above functionality, allows the users to see which days and houses are available and at what price, in order to book a reservation.

