Bon Voyage UML Diagram

RegisteredUser

- userID: UUID
- userName: String
- password: String
- email: String
- guests: ArrayList<Passport>
- birthdate: Date
- booking: Booking

+ RegisteredUser(UUID id, String firstName, String lastName, String username, String address, Date birthdate, String email, ArrayList<Passport> friends)

User

- *userID: UUID*
- *email: String*
- *firstName: String*
- *lastName: String*
- *username: String*
- *address: String*
- *birthdate: Date*
- *friends: ArrayList<Passport>*

+ *User(UUID id, String firstName, String lastName, String username, String address, Date birthdate, String email, ArrayList<Passport> friends)*
+ *toString: String*
+ *setFirstName(String firstName): void*
+ *setLastName(String lastName): void*

Booking

- bookingID: UUID
- ownerID: UUID
- friends: ArrayList<UUID>
- hotel: UUID

+ Booking(UUID booking, ArrayList<UUID> friends, UUID hotel, UUID owner)
+ toString: String
+ editBooking: String
+ getInstance: Bookings

Users

- *user: Users*
- *users: ArrayList<User>*

- Users
+ getInstance: Users
+ haveUser(String keyword): boolean

Flight

- planeType: String
- seats: ArrayList<String>
- destination: String
- departTime: LocalTime
- arrivalTime: LocalTime
- departureLoc: String
- flightNumbers: String
- uuid: UUID
- airline: String
- departureDate: Date

+ Flight (UUID flightID, String flightNumber, String planeType, String airline, String dest_airport, String dep_airport, Date departDate, LocalTime depart, LocalTime arrive, ArrayList<String> seats)
+ getUUID: UUID
+ toString: String
+ isMatch: boolean

Hotel

- rooms: ArrayList<Room>
- name: String
- uuid: UUID
- hasPool: boolean
- hasGym: boolean

+ Hotel(String name, UUID uuid, ArrayList<Room> rooms, boolean pool, boolean gym)
+ toString(): String

Room

+ roomNum: String
+ roomType: String
+ availabilities: ArrayList<Date>
+ daysBooked: ArrayList<Date>

+ Room(String roomNum, String roomType, ArrayList<Date> avail)

Flights

- *flight: Flights*
- *flightsList: ArrayList<Flight>*

- Flights
+ getInstance: Flights
+ haveFlight: boolean
+ searchFlights(String source, String dest, Date date): ArrayList<Flight>

Bookings

- *booking: Bookings*
- *bookings: ArrayList<Booking>*

+ getInstance: Bookings
+ getBooking(String keyword): Bookings

Hotels

- *hotel: Hotels*
- *hotels: ArrayList<Hotel>*

+ getInstance: Hotels
+ haveHotel(String keyword): boolean
+ searchHotels(String dest, String roomType, String ammenities): ArrayList<Hotel>

DataWriter

+ toString(Date date): String
+ toString(LocalTime time): String
+ saveUsers: void
+ getUserJSON(User user): JSONObject
+ saveFlights: void
+ getFlightJSON(Flight flight): JSONObject
+ saveBookings: void
+ getBookingJSON(Booking booking): JSONObject
+ saveHotels: void
+ getHotelJSON(Hotel hotel): JSONObject

DataLoader

+ parseDate(String date): Date
+ parseTime(String time): LocalTime
+ getAllFlights: ArrayList<Flight>
+ getAllHotels: ArrayList<Hotel>
+ getAllUsers: ArrayList<User>
+ getAllBookings: ArrayList<Booking>
+ getAllPassports: ArrayList<Passport>