LABs Reservation System

> **I** LabRoom.java > If Optional Reserve Tasks. java > People.java > Person.java ReserveTasks.java > MRoom.java Welcome to KKU LAB Managament System 2023-11-19 | 02:25:18 Make a reservation + New User 2. Update a reservation Print all reservations on screen 4. Print reservations to File 6. Remove Reservation 7. Create New User 8. Print all users on screen 9. Remove User Please Enter a number: Please Enter a number:1 Enter person name, id, age (press Ent Ahmad 445-234-110 Ahmad has been added. No. of users is: 1 Enter room name: LAB-18-S Enter Date in yyyy-mm-dd: 2023-12-12 At what Clock 1-24 (Only 1 hour can b Done, Room LAB-18-S booked in 2023-12 Please Enter a number:3 Session [18S-1-B13, 2023-12-12, at 5, Session [LAB-18-S, 2023-12-12, at 4, Please Enter a number:5

Saving...

✓

⊞ sem451

DataTasks.java

> If FileNames.java

```
    DataTasks
    A saveDataToFile(): void
    A loadDataFromFile(): void
```

FileNames

SF SESSIONS_FILE: String

FPRINT_FILE: String

FPEOPLE_FILE: String

ReserveTasks

A reserveBlock(ReserveBlock): boolean

A updateBlock(ReserveBlock): boolean

A removeBlock(ReserveBlock): boolean

A removeAllEndedBlocks(): void

A printReservedBlocks(List<ReserveBlock>): void

A loadDataFromFile(): boolean

A saveDataToFile(): boolean

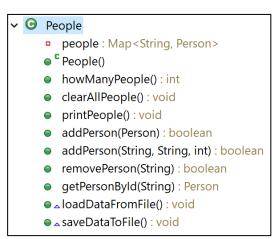
OptionalReserveTasks

 A findReservedBlocksBy(Person): List<ReserveBlock>
 A findPeopleReservedBlock(ReserveBlock): List<Person>
 A findHoursForReservedBlock(ReserveBlock, LocalDate): List<Integer>
 A findDatesForReservedBlock(ReserveBlock): List<LocalDate>
 A findReservedBlockAt(int): List<ReserveBlock>
 A findReservedBlockAt(LocalDate): List<ReserveBlock>
 A findReservedBlockAt(LocalDate, int): List<ReserveBlock>

name : String location: String length: float width: float window: boolean secDoor: boolean Room(String) hasWindow(): boolean setWindow(boolean): void hasSecDoor(): boolean setSecDoor(boolean) : void ■ toString(): String getArea(): float getName(): String setName(String): void getLocation(): String setLocation(String): void getLength(): float setLength(float): void

getWidth() : float
setWidth(float) : void

numberOfPc : int vdi: boolean store: boolean dataShow: boolean note: String C LabRoom(String) LabRoom(String, int, boolean) getNote(): String addNote(String): void clearNote(): void getNumberOfPc(): int setNumberOfPc(int): void isVdi(): boolean setVdi(boolean): void isStore(): boolean setStore(boolean): void isDataShow(): boolean setDataShow(boolean): void



```
Person

A name: String

A id: String

A age: int

A blocked: boolean

Person(String, String, int)

A toString(): String

name(): String

rename(String): void

getId(): String

setId(String): void

getAge(): int

setAge(int): void

isBlocked(): boolean
```

setBlocked(boolean): void

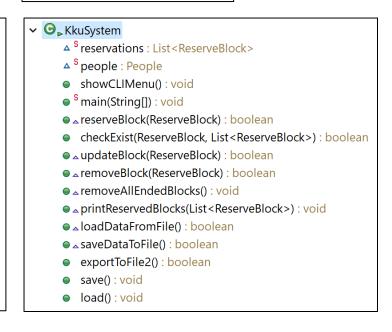
```
■ major: String
■ gpa: float
■ level: int
■ Student(String, String, int)
■ getMajor(): String
■ setMajor(String): void
■ getGpa(): float
■ setGpa(float): void
■ getLevel(): int
■ setLevel(int): void
```

```
✓ ■ ReserveBlock
     △ by: Person

▲ d: LocalDate

△ clock: int

     △ room: Room
     ReserveBlock(Person, LocalDate, int, Room)
       equals(ReserveBlock): boolean
     ● _ toString(): String
     getBy(): Person
     setBy(Person) : void
     getDate(): LocalDate
       setDate(LocalDate): void
       getClock(): int
       setClock(int): void
       getRoom(): Room
       setRoom(Room): void
```



Instructions

- Due date will be on Bb.
- You need to submit GitHub link that shows the code after editing
- Issues email me mmbasher@kku.edu.sa

Questions

- 1. Install the project code from https://github.com/MohammadAlasmary/ReservationSystem/
- 2. If you know how to import it using Eclipse, go to step.6
- 3. Create a new Java project with any name using Eclipse
- 4. Inside the project, create a package with name sem451
- 5. Copy all the java files from ...\RoomReserve.zip\Room Reservation\src\sem451\ to the created package to be as the first image
- 6. Try to run the code several times and study its issues
- 7. Try to understand the project with help of class diagrams
- 8. Fix the code to handle any errors might happen from the user during writing date, time, or age.
- 9. Implements at least one method from OptionalReserveTasks inside KkuSystem class
- 10. Create a separate class for ReserveBlockList as people for Person class to manage all of its functions
- 11. When you are done, fork and upload your code on your GitHub account and submit the link.