

Diagrams

Sunday, November 6, 2016 2:29 PM

Domain Level Classes

ParkingLot

- lotId: int
- lotName: string
- totalExited: int
- totalEntered: int
- vehiclesInLot: int
- genSpots: int
- handiSpots: int
- facStaffSpots: int

+ParkingLot(String aName, int aId, int aGenSpots,
int aHandiSpots, int aFacStaffSpots): void

+getId(): int

+getName(): String

+getGenSpots(): int

+getHandiSpots(): int

+getFacStaffSpots(): int

+getTotalEnt(): int } Database query

+getTotalExit(): int

+getTotalVehicles(): int

-setGenSpots(int aGenSpot): void

-setHandiSpots(int aHandiSpot): void

-setFacStaffSpots(int aFacStaffSpot): void

-setId(int aLotId): void

+setName(String aName): void

User

- userId: int
- fName: String
- lName: String
- email: String
- isFacStaff: boolean
- isResident: boolean
- isCommuter: boolean
- isHandicap: boolean
- isGuest: boolean

+User(int aId, String aFName,
String aLName, String aEmail,
boolean aFacStaff, boolean aResident,
boolean aCommuter, boolean aHandicap,
boolean aGuest): void

+getUserId(): int

+getName(): String

+getEmail(): String

+isFacStaff(): boolean

+isResident(): boolean

+isCommuter(): boolean

+isHandicap(): boolean

+isGuest(): boolean

-setUserId(int aId): void

-setName(String aName): void

-setEmail(String aEmail): void

+setFacStaff(boolean aFacStaff): void

+setResident(boolean aResident): void

+setCommuter(boolean aCommuter): void

+setHandicap(boolean aHandicap): void

+setGuest(boolean aGuest): void

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+setHandicap(boolean aHandicap):void  
+setGuest(boolean aGuest):void
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setGenSpots(), setHandiSpots(), setFacStaffSpots(), and setId() are only going to be used by the constructor. Don't need setters for totalEntered and totalExited b/c those variables are initiated to zero. The getters for totalEntered and totalExited will query the database of parking lots (which collects information from each individual sensor plate). Then getTotalVehicles() will subtract the number of vehicles exited from the number of vehicles entered to return its value (will check first to make sure that totalEntered > totalExited).