

PrestoCardSystem
~ users: ArrayList<User> = new ArrayList<>() ~ admin: AdminUser = new AdminUser("Boss", "1234")
+ PrestoCardSystem() ~ doEvent(data: ArrayList<String>()): void

AdminUser
- userName: String = "Admin" - password: String <u>~ totalFare: Double</u> ~ totalStations: int
+ AdminUser() ~ report(): String ~ clearData(): void

User
- userName: String - emailAddress: String - myCards: ArrayList<Card> - password: String - month: int - totalMonth: int = 1 - averageMonthlyFare: double = 0.0
+ User() ~ buyCard(): void ~ addCard(card: Card): void ~ lostCard(id: int): void ~ getMyCards(): ArrayList<Card> ~ changeName(newName; String): void ~ getUserName(): String ~ getEmailAddress(): String ~ updateAverageMonthlyFare(month: String, fare: double): void ~ getAverageMonthlyFare(): double ~ getTotalMonth(): int - convertMonth(month: String): int

Card
- isSuspended: boolean = false - id: int - user: User - balance: double <u>- idIncrementer: int = 1000</u> - myTrip: ArrayList<Trip> = new ArrayList<>()
~ Card() ~ reverseSuspended(): void ~ getId(): int ~ setUser(user: User): void ~ increaseBalance(i: int): void - deductFare(vehicle: String): void ~ recordTrip(vehicle: String, enterOrExit: String, time: Date, station: Station): void ~ getBalance(): void ~ recentTripString(): String

StationManager
- stationSet: ArrayList<Station> = new ArrayList<>() - stationIDSet: ArrayList<String> = new ArrayList<>() - stopSet: ArrayList<Station> = new ArrayList<>() - stopIDSet: ArrayList<Station> = new ArrayList<>()

Station
- name: String - distance: Integer - neighbours: ArrayList<Station> = new ArrayList<>() - vehicle: String ~ Station(name: String) ~ setDistance(distance: Integer): void ~ getDistance(): Integer

```

+ StationManager()
~ addStations(station: Station); void
~ getStationSet(): ArrayList<Station>
~ getStationIDSet(): ArrayList<String>
~ minDistance(source: Station, destination: Station): int
~ addStops(station: Station); void
~ getStopSet(): ArrayList<Station>
~ getStopIDSet(): ArrayList<String>
~ newStation(StationID: String, vehicle: String): Station

```

```

~ getDistance(): Integer
~ getNeighbours(): ArrayList<Station>
~ getName(): String
~ addNeighbours(neighbour: Station): void
~ getVehicle(): String

```

