Model1::ClassDiagram

SignUpService
___
+signUpUser(id, password, phone)
+showCompletionMessage()

AuthenticationService
___
+authenticate(id, password): Boolean
+logout()

BicycleService
___
+addBicycle(bicycleId, productName)
+showRegistrationMessage()

RentalService
___
+rentBicycle(memberId, bicycleId)
+showRentalMessage()
+getActiveRentals(memberId): Rental
+returnRentalList(rentals)

User
___
-id: String
-password: String
-role: String
___
+createUser(id, password, phone)
+validateCredentials(id, password): Boolean
+terminateSession()

Member
___
-phoneNumber: integer
___

1

Admin
___
___

1

0..*

Rental
___
-rentalId: String
-memberId: String
-bicycleId: String
-productName: String
___
+create(memberId, bicycleId)
+fetchActiveRentals(memberId): Rental

1   1

0..*

Bicycle
___
-bicycleId: String
-productName: String
-isAvailable: Boolean
___
+create(bicycleId, productName)
+checkAvailability(): Boolean
+updateRentalStatus(rented: Boolean)
+getBicycleDetails(): {bicycleId, productName}()