Model::Main

«boundary» JoinUI
-join: Join
+JoinUI(join: Join)
+signUp(in: ifstream&, out: ofstream&)

«control» Join
-userList: UserList
+Join(userList: UserList)
+joinNewMember(id: String, password: String, phoneNumber: String)

«entity» UserList
-users: User[*]
+addUser(user: User)

«entity» User
-id: String
-password: String

«boundary» LoginUI
-login: Login
+LoginUI(login: Login)
+signIn(in: ifstream&, out: ofstream&)

«control» Login
-loggedinUser: LoggedinUser
+Login(loggedinUser: LoggedinUser)
+loginUser(id: String, password: String)

«entity» LoggedInUser
-user: User
+getLoggedinUser(): User
+setLoggedinUser(id: String)

«boundary» LogoutUI
-logout: Logout
+LogoutUI(logout: Logout)
+selectLogout(in: ifstream&, out: ofstream&)

«control» Logout
-loggedinUser: LoggedinUser
+Logout(loggedinUser: LoggedinUser)
+logoutUser(): String

«boundary» QuitUI
+selectQuit(in: ifstream&, out: ofstream&)

«control» Quit
+quitSystem()

«boundary» AddBikeUI
-addBike: AddBike
+AddBikeUI(addBike: AddBike)
+registerBike(in: ifstream&, out: ofstream&)

«control» AddBike
-bikeList: BikeList
+AddBike(bikeList: BikeList)
+addNewBike(bikeId: String, bikeName: String)

«entity» BikeList
-bikes: Bike[*]
+addNewBike(bikeId: String, bikeName: String)
+findBikeName(bikeId: String): String

«Entity» Bike
-bikeId: String
-name: String

«boundary» RentBikeUI
-rentBike: RentBike
+RentBikeUI(rentBike: RentBike)
+chooseBike(in: ifstream&, out: ofstream&)

«control» RentBike
-member: Member
-bikeList: BikeList
+RentBike(member: Member, bikeList: BikeList)
+startRentBike(bikeId: String): String

«entity» Member
-phoneNumber: String
-rentedBikeCollection: RentedBikeCollection
+getRentedBikeList(): Bike[*]

«entity» RentBikeCollection
+rentedBikes: Bike[*]
+addRentedBike()

«boundary» RentedBikeInfoUI
-rentedBikeInfo: RentedBikeInfo
+RentedBikeInfoUI(rentedBikeInfo: RentedBikeInfo)
+selectRentedInfo(in: ifstream&, out: ofstream&)

«control» RentedBikeInfo
-member: Member
-bikeDetails: String[*]
+RentedBikeInfo(member: Member)
+showMemberBikes(): String[*]
+getBikeDetails(): String[*]

«Entity» Manager

Relationship labels: has, rent, 1, 0..*, 0..1