```
            <<boundary>>                          <<boundary>>                          <<boundary>>
               JoinUI                                 AuthUI                             BikeManageUI


  +requestJoin(id, pw, ph)            +requestLogin(id, pw)              +requestBikeRegistration(bikeId, bikeName)
                                      + requestLogout()


            <<control>>                          <<control>>                          <<control>>
            JoinService                          AuthService                       BikeManageService


  + join(id, pw, ph)                  + login(id, pw)                    + registerBike(bikeId, bikeName)
                                      + logout()
```

```
            <<boundary>>                          <<boundary>>
            RentalBikeUI                          RentalInfoUI


  +requestBikeRental(bikeId)           +requestRentalInfo()


            <<control>>                          <<control>>
          RentalBikeService                     RentalInfoService


  + rentalBike(memberId, bikeId)       + fetchRentalInfo(memberId)
```

```
                                                                      <<entity>>
         <<entity>>                                                    MemberDB
          Member
                                         0..*   owns    1    - members: member [*]
     - id : string
     - pw : string                                             + save(user)
                                                               + findById(id)
     + verifyAuth(pw)
     + getId()



         <<entity>>                              <<entity>>
           User                                    Admin

     - ph : string

     + createUser(id, pw, ph)


          1                                          1

         records


          0..*                                                0..*

         <<entity>>                                      <<entity>>
          Rental                                           Bike

     - rentals: vector<<memberId, bikeId>>       - bikeId :string
                                          1    1  - bikeName : string
     + saveRental(memberId, bikeId)
     + getRental(memberId)                           + createBike(bikeId, bikeName)
                                         uses        + getBikeById(bikeId)
```