Backend Architecture

```
                                    ┌─────────────────────────────┐
                                    │    Repository Class         │
                                    │ extending CRUD/JPA repository│
                                    └─────────────────────────────┘
                                              ↕
                                     Dependency Injection

┌──────────┐   HTTP    ┌──────────┐        ┌──────────────┐        ┌──────────┐
│  Client  │ ←──────→  │Controller│ ←────→ │ Service Layer│ ←────→ │  Model   │
└──────────┘  Request  └──────────┘        └──────────────┘        └──────────┘
                                              ↑                         │
                                              │                         │ JPA Data
                                              │   ┌──────────────┐      │
                                              └──→│MySQL database│←─────┘
                                                  └──────────────┘
```
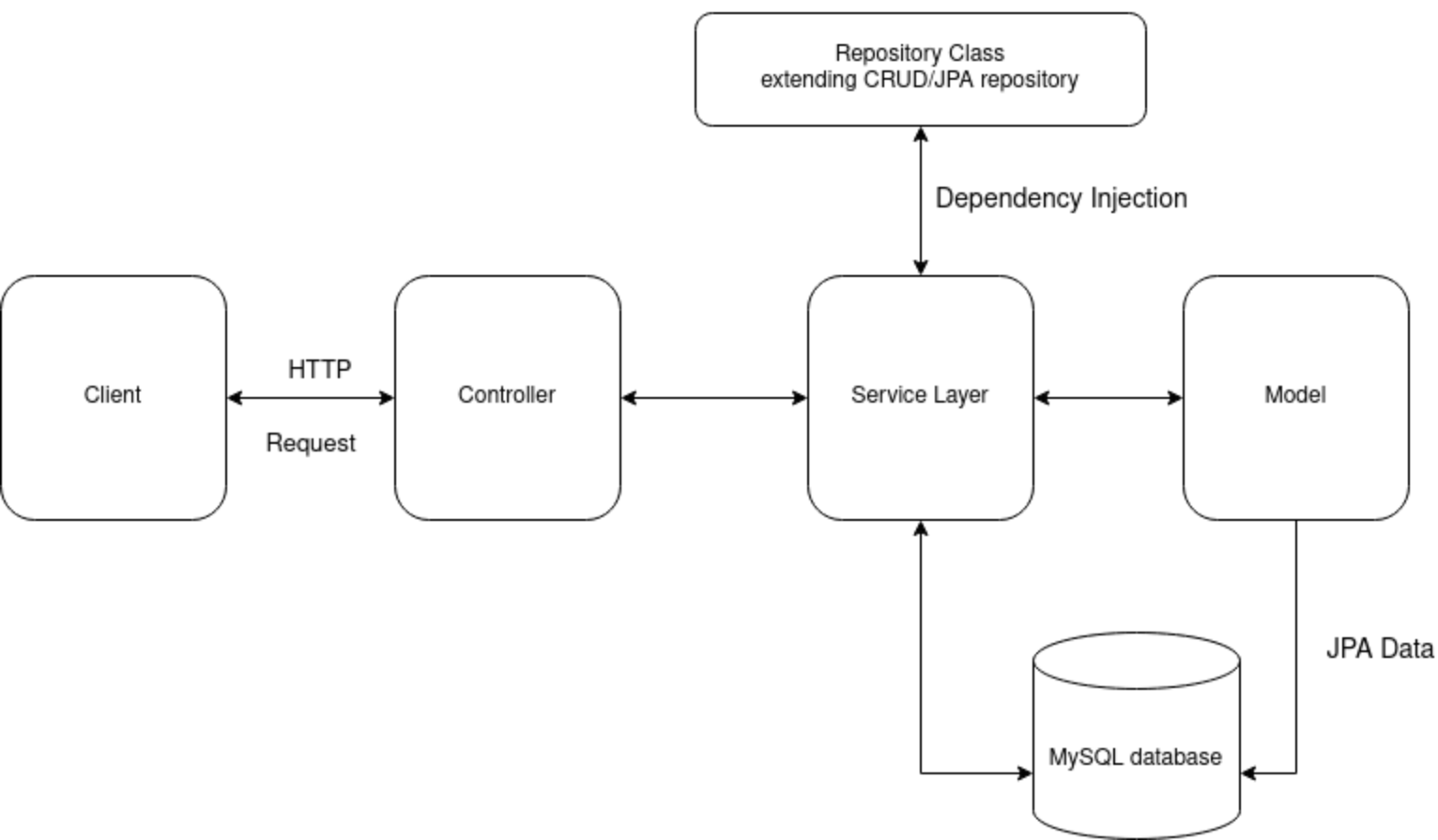
Domain Architecture

Users: AR

user_id: long
identity: string
email: string
name: string
residences: List<Residence>
sharings: List<Sharing>

Residences: Entity

residence_id: long
user_id: long
name: string
min_capacity: int
max_capacity: int
address: string
county: string
city: string
sharings: List<Sharing>

Sharings: Entity

sharing_id: long
user_id: long
residence_id: long
title: string
description:string
capacity:int
start_datetime: datetime
end_datetime: datetime

Macro Architecture

Users: AR

Residences: Entity

Sharings: Entity