# A4设计报告

1.数据层设计

将数据库改为MongoDB-react以适应Reactive编程。

User类：包括id，用户名、密码

public class User extends Base /\*implements Serializable \*/{

@Id

private Integer id;

private String username;

private String password;

}

UserRepository 类：根据用户名和密码返回User，根据用户名返回User

public interface UserRepository extends ReactiveMongoRepository<User, String> {

Mono<User> findByUsernameAndPassword(String username, String password);

Mono<User> findByUsername(String username);

}

Gym类：id，健身馆名，健身馆信息

public class Gym extends Base implements Serializable {

@Id

private Integer id;

private String name;

private String info;

}

GymRepository 类：根据名称查找Gym，根据Id查找Gym，查找所有Gym

public interface GymRepository extends ReactiveMongoRepository<Gym, String> {

Mono<Gym> findByName(String name);

Mono<Gym> findById (Integer name);

Flux<Gym> findAll();

}

Trainer类：id，教练名称、教练信息

public class Trainer extends Base implements Serializable {

@Id

private Integer id;

private String name;

private String info;

}

TrainerRepository 类：根据名称查找Trainer，根据Id查找Trainer，查找所有Trainer

public interface TrainerRepository extends ReactiveMongoRepository<Trainer, String> {

Mono<Trainer> findByName(String name);

Mono<Trainer> findById (Integer name);

Flux<Trainer> findAll();

}

2.Mono+thymeleaf

在Controller中新增方法，view层使用thymeleaf模版引擎，处理MogoDB返回的数据并显示在前端页面上

