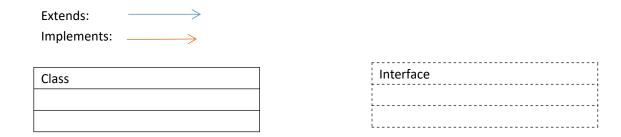
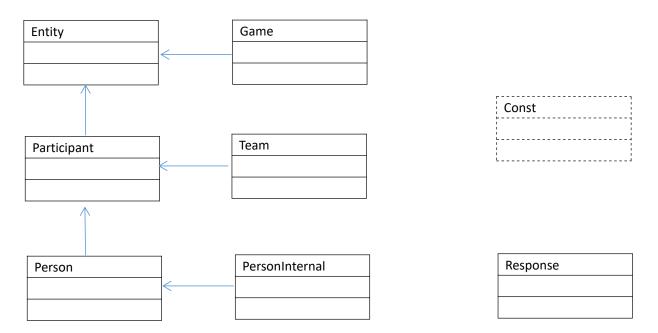
Class Introduction

1. Introduction



2. Model

1) Overview



2) Response

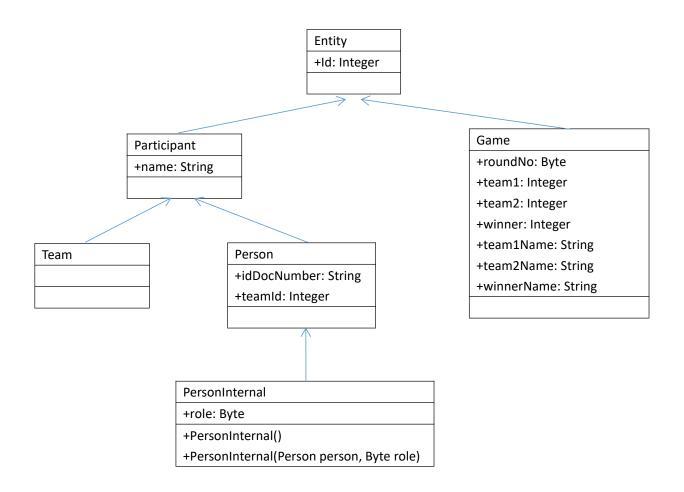
Const(Interface)

Define Const used in the system:
Status code options
Status message options
Person roles
Max length of Strings
Max round no of game
Response format

Response<T extends Entity>

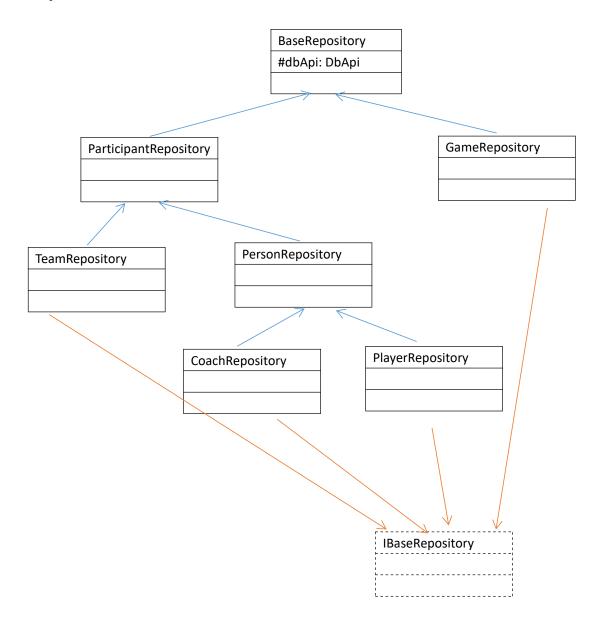
+statusCode: int +statusMsg: String +entities: ArrayList<T>

3) Entities



3. Repository

1) Overview



2) DbApi

DbApi -mySqlHost: String -mySqlDb: String -mySqlUsername: String -mySqlUsername: String -mySqlPassword: String -dataSource: HikariDataSource -lock: Lock +finalize() -initialize() ~getConnection(): Connection

~readByColumn(String colName, String tableName, Class<? extends Entity> cls, Object colValue): Response

~readTable(String tableName, Class<? extends Entity> cls): Response

~readByFilters(String tableName, Class<? extends Entity> cls, String filters, ArrayList<Object> parameters): Response

~read(String sql, Class<? extends Entity> cls): Response

~read(String sql, ArrayList<Object> parameters, Class<? extends Entity> cls): Response

-getResultColumnFieldMap(Class cls, ResultSetMetaData resultSetMetaData): HashMap<String, Field>

~read(Connection connection, String sql, ArrayList<Object> parameters, Class<? extends Entity> cls): Response

-getColNames(Connection connection, String tableName): ArrayList<String>

~write(Optional<? extends Entity> optionalEntity, String tableName): Response

~write(Connection connection, Optional<? extends Entity> optionalEntity, String tableName): Response

~delete(Integer id, String tableName): Response

~delete(Connection connection, Integer id, String tableName): Response

~executeNonQuery(String sql, ArrayList<Object> parameters): Response

~executeNonQuery(Connection connection, String sql, ArrayList<Object> parameters): Response

3) IBaseRepository

IBaseRepository

+readAll(): Response<? extends Entity>

+readById(Integer id): Response<? extends Entity>

+delete(Integer id): Response

4) BaseRepository

BaseRepository

#dbApi: DbApi

+BaseRepository(DbApi dbApi)

#readById(Integer id, String tableName, Class cls): Response

5) GameRepository

GameRepository

#teamRepository: TeamRepository

-tableName: String

-cls: Class

-sqlReadAll: String

+GameRepository(DbApi dbApi, TeamRepository teamRepository)

+readAll(): Response

+readById(Integer id): Response

+read(Byte roundNo, Integer team1, Integer team2): Response

+setGameResult(Integer id, Integer winner): Response

+write(Game game): Response

+delete(Integer id): Response

6) ParticipantRepository

ParticipantRepository

+ParticipantRepository(DbApi dbApi)

#readByName(String name, String tableName, Class cls): Response

7) TeamRepository

TeamRepository

-tableName: String

-cls: Class

-sql4IsChildExists: String

TeamRepository(DbApi dbApi)

+readAll(): Response

+readById(Integer id): Response

+isChildExists(Integer id): Resonse

+readByName(String name): Response

+write(Team team): Response +delete(Integer id): Response

8) PersonRepository

PersonRepository

#teamRepository: TeamRepository

-tableName: String -clsOutput: Class -clsOutput1: Class

PersonRepository(DbApi dbApi, TeamRepository teamRepository)

#readByRole(Byte role): Response

#readById(Integer id, Byte role): Response

+readByIdDocNumber(String idDocNumber): Response

#write(Person person, Byte role): Response
#delete(Integer id, Byte role): Response

9) CoachRepository

CoachRepository

 ${\tt CoachRepository(DbApi~dbApi, TeamRepository)}$

+readAll(): Response

+readById(Integer id): Response +write(Person person): Response +delete(Integer id): Response

10)PlayerRepository

PlayerRepository

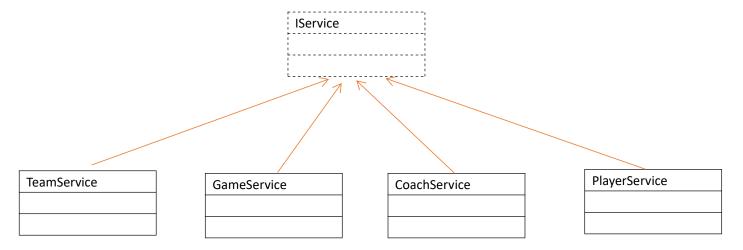
+PlayerRepository(DbApi dbApi, TeamRepository teamRepository)

+readAll(): Response

+readById(Integer id): Response +write(Person person): Response +delete(Integer id): Response

4. Service

1) Overview



2) IService

IService(Interface)
readAll(): Response<? extends Entity>
readById(Integer id): Response<? extends Entity>
delete(Integer id): Response

3) TeamService

TeamService

-teamRepository: TeamRepository

+TeamService(TeamRepository teamRepository)

+readAll(): Response<Team>: Response<Team>

+readByld(Integer id): Response<
+write(Team team): Response

+delete(Integer id): Response

4) GameService

GameService	
-gameRepository: GameRepository	
+GameService(GameRepository gameRepository)	
+readAll(): Response <game></game>	
+readById(Integer id): Response <game></game>	
+setGameResult(Integer id Integer winner): Response	

+write(Game game): Response +delete(Integer id): Response

5) CoachService

CoachService

-coachRepository: CoachRepository

+CoachService(CoachRepository coachRepository)

+readAll(): Response<Person>

+readById(Integer id): Response<Person>

+write(Person person): Response +delete(Integer id): Response

6) PlayerService

PlayerService

-playerRepository: PlayerRepository

+PlayerService(PlayerRepository playerRepository)

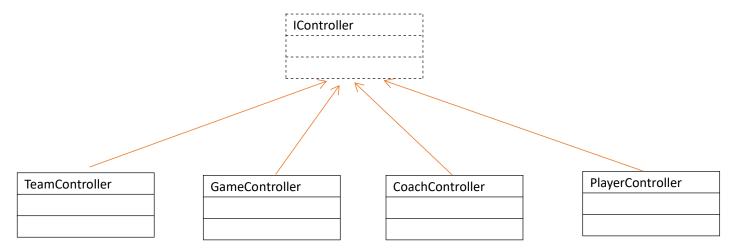
+readAll(): Response<Person>

+readById(Integer id): Response<Person>

+write(Person person): Response +delete(Integer id): Response

5. Controller

1) Overview



2) IController

IController
+readAll(): Response extends Entity
+readById(Integer id): Response extends Entity
+delete(Integer id): Response

3) TeamController

TeamController
-teamService: TeamService
+TeamController(TeamService teamService)
+readAll(): Response <team></team>
+readById(@RequestParam Integer id): Response <team></team>
+write(@RequestBody Team team): Response
+delete(@RequestParam Integer id): Response

4) GameController

-gameService: GameService +GameController(GameService gameService) +readAll(): Response<Game> +readById(@RequestParam Integer id): Response<Game> +setGameResult(@RequestParam Integer id, @RequestParam Integer winner): Response +write(@RequestBody Game game): Response +delete(@RequestParam Integer id): Response

5) CoachController

CoachController

-coachService: CoachService

+CoachController(CoachService coachService)

+readAll(): Response<Person>

+readById(@RequestParam Integer id): Response<Person>

+write(@RequestBody Person coach): Response +delete(@RequestParam Integer id): Response

6) PlayerController

PlayerController

-playerService: PlayerService

+PlayerController(PlayerService playerService)

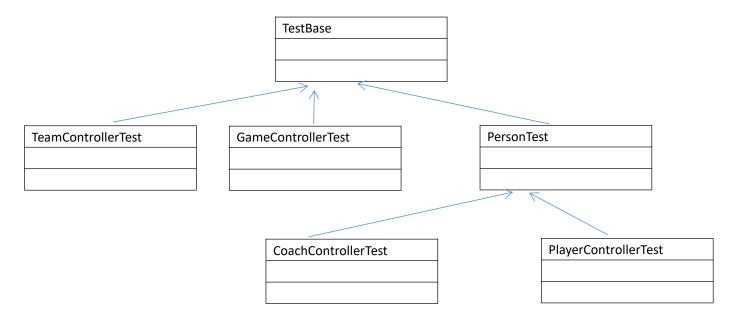
+readAll(): Response<Person>

+readById(@RequestParam Integer id): Response<Person>

+write(@RequestBody Person coach): Response +delete(@RequestParam Integer id): Response

6. Test

1) Overview



2) TestBase

TestBase #mockMvc: MockMvc #BASE_URL_TEAM: String #BASE URL GAME: String #BASE URL COACH: String #BASE URL PLAYER: String #gson: Gson #INVALID STATUS: int #INVALID ID: int -APPLICATION JSON UTF8: MediaType #isStatusCodeValid(int statusCode): boolean #getStr(int length): String #readAll(String url) #readById(String url, Integer id): int #writeOnce(String url, Optional<? extends Entity> optionalEntity, int expectedResultCode, int unUxpectedResultCode): int #writeATeam(): int #writeAGameForATeam(Integer team1, Integer team2): int #writeAGame(): int #writeAPersonForATeam(String baseUrl, Integer teamId): int #writeAPerson(String url): int #deleteAGame(int id, int expectedResultCode, int unUxpectedResultCode) #deleteAPerson(String baseUrl, int id, int expectedResultCode, int unUxpectedResultCode)

#delete(String url, Integer id, int expectedResultCode, int unUxpectedResultCode)

3) TeamControllerTest

TeamControllerTest

~readAll()

~readById()

~writeOnce(Team team, int expectedResultCode, int unUxpectedResultCode): int

~write()

~delete(int id, int expectedResultCode, int unUxpectedResultCode)

~delete()

4) GameControllerTest

GameControllerTest
~readAll()
~readById()
~writeOnce()
~writeOnce(Game game, int expectedResultCode, int unUxpectedResultCode): int
~write()
~delete()
~setGameResult()
satGamaPasult(Intagar id Intagar winner int avnactadPasultCada int unl IvnactadPasultCada)

5) PersonTest

PersonTest

~writeACoach(): int
~writeAPlayer(): int
~writeOnce(String url, Person person, int expectedResultCode, int unUxpectedResultCode): int
~write(String url)

6) CoachControllerTest

CoachControllerTest	
~readAll()	
~readById()	
~write()	
~delete(int id, int expectedResultCode, int unUxpectedResultCode)	
~delete()	

7) PlayerControllerTest

PlayerControllerTest
~readAll()
~readById()
~write()
~delete(int id, int expectedResultCode, int unUxpectedResultCode)
~delete()