Checkpoint

checkpointId: int

checkpointCheckpointType: CheckpointType

location: Double

averageGradient: Double

length: Double stage: int

getID(): int setID(newId:int) getType()

setType(newType:CheckpointType)

getLocation(): double

setLocation(newLocation:double)

getGradient(): double

setGradient(newGradient:double)

getLength(): double

setLength(newLength:double)

getStage(): int

setStage(newStage:int)

toString(): String

Race

raceId: int

raceName: String raceDesc: String

stages: ArrayList<Integer> riders: ArrayList<Integer>

getName(): String

setName(newName:String)

getDesc(): String

setDesc(newDesc:String)

getID(): int

setID(newld:int) getStages(): ArrayList<Integer>

addStage(stageId:Integer)
removeStage(stageId:int)

getRiders(): ArrayList<Integer>

removeRider(riderId:int) toString(): String

CyclingPortalImpl

raceArray: ArrayList<Race> stageArray: ArrayList<Stage>

checkpointArray: ArrayList<Checkpoint>

riderArray: ArrayList<Rider> teamArray: ArrayList<Team>

getRaceIds(): int[]

createRace(name:String, description:String): int

viewRaceDetails(raceId:int): String removeRaceById(raceId:int)

getNumberOfStages(raceId:int): int

 $add Stage To Race (race Id: int, \ stage Name: String, \ description: String, \ length: double,$

startTime:LocalDateTime, type:StageType): int

getRaceStages(raceId:int): int[]

getStageLength(stageId:int): double

removeStageById(stageId:int)

add Categorized Climb To Stage (stage Id: int, location: Double, type: Checkpoint Type, type: Checkpoint Type; type: Checkpoint Type; t

averageGradient:Double): int

addIntermediateSprintToStage(stageId:int, location:double): int

removeCheckpoint(checkpointId:int) concludeStagePreparation(stageId:int) getStageCheckpoints(stageId:int): int[]

createTeam(name:String, description:String): int

removeTeam(teamId:int)

getTeams(): int[]

getTeamRiders(teamId:int): int[]

createRider(teamId:int, name:String, yearOfBirth:int): int

removeRider(int riderId)

registerRiderResultsInStage(stageId:int, riderId:int, checkpoints:LocalTime[])

 $getRiderResultsInStage(stageId:int, \ riderId:int): \ LocalTime[]$

getRiderAdjustedElapsedTimeInStage(stageId:int, riderId:int): LocalTime

deleteRiderResultsInStage(stageId:int, riderId:int)

getRidersRankInStage(stageId:int): int[]

getRankedAdjustedElapsedTimeInStage(stageId:int): LocalTime[]

getRidersPointsInStage(stageId:int): int[]

getRidersMountainPointsInStage(stageId:int): int[]

eraseCyclingPortal()

saveCyclingPortal(filename:String)

loadCyclingPortal(filename:String)

Rider

riderId: int

riderName: String

competedRaces: ArrayList<Integer>

team: int

yearOfBirth: int

getName(): String

setName(newName:String)
getID(): int

setID(): Int

getRaces(): ArrayList<Integer>

setRaces(newRaces:ArrayList<Integer>)

getTeam(): int

setTeam(newTeam:int)

getBirth(): int

setBirth(newBirth:int)
toString(): String

stageName: String stageDesc: String stageLength: double stageRace: int

stageId: int

checkpoints: ArrayList<Integer> riderResults: ArrayList<Result> stageStageType: StageType waitingForResults: boolean

Stage

getName(): String

setName(newName:String)

getID():int setID(newId:int)

getDesc(): String
setDesc(newDesc:String)

getLength(): double

setLength(newLength:double)

getRace(): int

setRace(newRace:int) getType(): StageType

setType(newType:StageType)

getState(): boolean

setState(newState:boolean)

getCheckpoints(): ArrayList<Integer>
addCheckpoint(checkpointId:int)

removeCheckpoint(checkpointId:int)

getAllRiderResults(): ArrayList<Integer>

setAllRiderResults(newResults:ArrayList<Integer>) getRiderResults(riderId:int): LocalTime[]

addRiderResults(newResult:Result)

removeRider(riderId:int)

getAdjustedRiderResults(): ArrayList<Result>

getSortedElapsedResults(): ArrayList<Result>
getSortedCheckpointResults(sortCheckpoints:int): ArrayList<Result>

toString(): String

Team

teamId: int teamName: String teamDesc: String riders: ArrayList<Integer>

getName(): String setName(newName:String) getID(): int setID(newId:int)

getDesc(): String

setDesc(newDesc: String) getRiders(): ArrayList<Integer> addRider(riderId:Integer) removeRider(riderId:Integer)

toString(): String

Result

riderId: int

checkpointTimes: LocalTime[]

totalTime: long

getID(): int setID(newId:int)

getCheckpointTimes(): LocalTime[]

setCheckpointTimes(newTimes:LocalTime[])

setCheckpointTime(newTime:LocalTime, checkpointReplaced:int)

getLocalTime(): long toString(): String