## MiniCyclingPortal getRacelds (): int createRace (name : String, description : String): int viewRaceDetails (raceId: int): String removeRaceByld (raceld : int) getNumberOfStages (raceld: int): int addStageToRace (raceld : int, stageName : String, description : String, length : double, startTime : LocalDate Time, type: StageType): int getRaceStages (raceId: int): int getStageLength (stageId : int): double removeStageByld (stageId: int) addCategorizedClimbToStage (stageId: int, location: Double, type: CheckpointType, averageGradient: Double, length: Double): int addIntermediateSprintToStage (stageId: int, location: double): int removeCheckpoint (checkpointld : 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): removeRider (riderId: int) registerRiderResultsInStage (stageId : int, riderId : int, checkpointTimes: LocalTime...) getRiderResultsInStage (stageId : int, riderId : int): Local getRiderAdjustedElapsedTimeInStage (stageId : int, riderId : int): LocalTime deleteRiderResultsInStage (stageId: int, riderId: int) getRidersRankInStage (stageId: int): int getRankedAdjustedElapsedTimesInStage (stageId: int): LocalTime getRidersPointsInStage (stageId: int): int getRidersMountainPointsInStage (stageId: int): int eraseCyclingPortal () saveCyclingPortal (filename : String) loadCyclingPortal (filename : String) CyclingPortalImpl races: HashMap < Integer, HashMap < String, Object > > stages: HashMap<Integer, HashMap<String, Object>> checkpoints: HashMap < Integer, HashMap < String, Object>> teams: HashMap < Integer, HashMap < String, Object > > riders: HashMap < Integer, HashMap < String, Object > > allResults: HashMap<Integer, HashMap<Integer, Local Time[]>> mountainPoints: HashMap < Integer, 1> + «create» CyclingPortalImpl () + getRacelds (): int {Annotation = Override} + createRace (name : String, description : String): int + viewRaceDetails (raceId : int): String {Annotation = Override} + removeRaceById (raceId: int) + getNumberOfStages (raceld : int): int + addStageToRace (raceld : int, stageName : String, description: String, length: double, startTime: LocalDate Time, type: StageType): int + getRaceStages (raceId : int): int + getStageLength (stageId : int): double + removeStageByld (stageId : int) + addCategorizedClimbToStage (stageId : int, location : Double, type : CheckpointType, averageGradient : Double, length : 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 {Annotation = Override} + getTeamRiders (teamId : int): int {Annotation = Override} + createRider (teamID : int, name : String, yearOfBirth : int) + removeRider (riderId : int) + registerRiderResultsInStage (stageId : int, riderId : int, checkpoints : LocalTime...) + getRiderResultsInStage (stageId : int, riderId : int): Local Time {Annotation = Override} getRiderAdjustedElapsedTimeInStage (stageId: int, rider Id: int): LocalTime + deleteRiderResultsInStage (stageId : int, riderId : int) + getRidersRankInStage (stageId : int): int + getRankedAdjustedElapsedTimesInStage (stageId : int): LocalTime + getRidersPointsInStage (stageId : int): int + getRidersMountainPointsInStage (stageId: int): int + eraseCyclingPortal () + saveCyclingPortal (filename : String) + loadCyclingPortal (filename : String) RankRiders + rank (stageId : int): HashMap < ]. ]>

«interface»

## PointsHandler

 getStagePoints (riderIds : int, stageType : StageType): int + getMountainPoints (riderIds : int, checkpointType : CheckpointType): int

 getEntries (stageId : int, riderResults : HashMap < Integer,</li> |>): List<Map.Entry<Integer, LocalTime[]>>

+ getRiderAdjElapTimeCopy (stageId : int, riderId : int): LocalTime

## StageHandler

+ isNotWaiting (stageDetails : HashMap < String, Object > ) + isWaiting (stageDetails : HashMap < String, Object > ) + isTimeTrialStage (stageDetails : HashMap < String,

Object>) + clearStage (stageId : int)

## **IDHandler**

+ newld (category : HashMap < Integer, HashMap < String, Object>>): int + addIdToArray (category : HashMap < Integer, HashMap <

String, Object>>, id: int, stageDetails: HashMap<String, Object>, categoryString : String): ArrayList<Integer>

+ getidsFromHashMap (category : HashMap < Integer, HashMap < String, Object >> ): int getidsFromArray (category : Arraylish (integer >): int