





## Class Diagrams

BadCyclingPortalImpl
<ul style="list-style-type: none"><li>- getRaceIds(): int[]</li><li>- createRace(): int</li><li>- viewRaceDetails(): String</li><li>- removeRaceById(): void</li><li>- getNumberOfStages(): int</li><li>- addStageToRace(): int</li><li>- getRaceStages(): int[]</li><li>- getStageLength(): double</li><li>- removeStageById(): void</li><li>- addCategorizedClimbToStage(): int</li><li>- addIntermediateSprintToStage(): int</li><li>- removeCheckpoint(): void</li><li>- concludeStagePreparation(): void</li><li>- getStageCheckpoints(): int</li><li>- createTeam(): int</li><li>- removeTeam(): void</li><li>- getTeamRiders(): int[]</li><li>- createRider(): int</li><li>- removeRider(): void</li><li>- registerRiderResultsInStage(): void</li><li>- getRiderResultsInStage(): LocalTime[]</li><li>- getRiderAdjustedElapsedTimeInStage(): LocalTime</li><li>- deleteRiderResultsInStage(): void</li><li>- getRidersRankInStage(): int[]</li><li>- getRankedAdjustedElapsedTimeInStage(): LocalTime[]</li><li>- getRidersPointsInStage(): int[]</li><li>- getRidersMountainPointsInStage(): int[]</li><li>- eraseCyclingPortal(): void</li><li>- saveCyclingPortal(): void</li><li>- loadCyclingPortal(): void</li><li>- removeRaceByName(): void</li><li>- getGeneralClassificationTimesInRace(): int[]</li><li>- getRidersPointsInRace(): int[]</li><li>- getRidersGeneralClassificationRank(): int[]</li><li>- getRidersPointClassificationRank(): int[]</li><li>- getRidersMountainPointClassificationRank(): int[]</li></ul>

 Race
<ul style="list-style-type: none"> <li>- race_name: String</li> <li>- description: String</li> <li>- race_id: int</li> <li>- stages&lt;ArrayList&gt;: Stage</li> <li>- riders[]: Riders</li> <li><u>- races[]: Race</u></li> </ul>
<ul style="list-style-type: none"> <li>- getStages(): Stage</li> <li>- setStages(): void</li> <li>- getRace_id(): int</li> <li><u>- getRace(): Race</u></li> <li><u>- getRaceByName(): Race</u></li> </ul>

 Riders
<ul style="list-style-type: none"> <li>- name: String</li> <li>- team_id: int</li> <li>- id: int</li> <li>- yearofbirth: int</li> <li><u>- riders[]: Riders</u></li> <li>- startTime: LocalTime</li> <li>- finishTime: LocalTime</li> <li>- results[]: Results</li> <li>- totalElapsedTime: LocalTime</li> </ul>
<ul style="list-style-type: none"> <li>- getId(): int</li> <li><u>- getRider(): Riders</u></li> </ul>

 Teams
<ul style="list-style-type: none"> <li>- team_id: int</li> <li>- team_name: String</li> <li>- team_description: String</li> <li>- team_riders&lt;ArrayList&gt;: Riders</li> <li><u>- teams[]: Teams</u></li> </ul>
<ul style="list-style-type: none"> <li>- getTeam_name(): String</li> <li>- getTeam_riders(): Riders</li> <li><u>- getTeam(): Teams</u></li> </ul>

 Results
<ul style="list-style-type: none"> <li><u>- riders[]: Riders</u></li> <li><u>- checkpoints[]: Checkpoint</u></li> <li><u>- stages[]: Stage</u></li> <li><u>- elapsedTimes[]: LocalTimes</u></li> </ul>
<ul style="list-style-type: none"> <li><u>- sumLocalTimes(): LocalTime</u></li> <li><u>- covertToTotalSecondsArray(): int[]</u></li> </ul>

Stage
<ul style="list-style-type: none"> <li>- stageID: int</li> <li>- stageType: StageType</li> <li>- stageName: String</li> <li>- description: String</li> <li>- startTime: LocalDateTime</li> <li>- stage_length: double</li> <li>- active_status: boolean</li> <li>- finish_state: boolean</li> <li>- riders[]: Rider</li> <li>- checkpoints&lt;ArrayList&gt;: CheckPoint</li> <li>- <u>stages[]: Stage</u></li> </ul>
<ul style="list-style-type: none"> <li>- <u>getStage(): Stage</u></li> <li>- getStageId(): int</li> <li>- setStageId(): void</li> <li>- getStage_Length(): double</li> <li>- setStage_Length(): void</li> <li>- getStage_type(): StageType</li> <li>- getActiveStatus(): boolean</li> <li>- getCheckpoints(): Checkpoints&lt;&gt;</li> <li>- <u>stagePoints(): int[]</u></li> </ul>

Checkpoint
<ul style="list-style-type: none"> <li>- checkpoint_id: int</li> <li>- checkpointType: CheckpointType</li> <li>- location: double</li> <li>- averageGradient: double</li> <li>- length: double</li> <li>- riders[]: Riders</li> <li>- <u>checkpoints[]: Checkpoint</u></li> </ul>
<ul style="list-style-type: none"> <li>- getCheckpoint_id(): int</li> <li>- getRiders(): Riders[]</li> <li>- <u>checkpointSpringPoints(): int[]</u></li> <li>- <u>C4Points(): int[]</u></li> <li>- <u>C3Points(): int[]</u></li> <li>- <u>C2Points(): int[]</u></li> <li>- <u>C1Points(): int[]</u></li> <li>- <u>HCPoints(): int[]</u></li> <li>- <u>getCheckpoint(): Checkpoint</u></li> </ul>