

## Lab 6 : Problem 1

Square
+ width: double
+ Square( ) + Square (x: double) + getArea( ): double + getPerimeter( ): double

## Lab 6 : Problem 2

Bond
+ coupon: double + payments: int + interest: double + valueMaturity: double
+ Bond( ) + Bond (coupon: double, payments: int, interest: double, valueMaturity: double) + getPrice( ): double

## Lab 6 : Problem 3

Soccer Match
<ul style="list-style-type: none"><li>+ startTime: Date</li><li>+ endTime: Date</li><li>+ location: String</li><li>+ home: String</li><li>+ visitor: String</li><li>+ homePlayers: Player[ ]</li><li>+ visitorPlayers: Player[ ]</li><li>+ homeGoals: Goal [ ]</li><li>+ visitorGoals: Goal [ ]</li><li>+ numberOfHomePlayers: int</li><li>+ numberOfVisitorPlayers: int</li><li>+ numberOfHomeGoals: int</li><li>+ numberOfVisitorGoals: int</li></ul>
<ul style="list-style-type: none"><li>+ SoccerMatch( )</li><li>+ SoccerMatch(startTime: Date, home: String, visitor: String)</li><li>+ addHomePlayer( ): void</li><li>+ addVisitorPlayer( ):void</li><li>+ getWinner( ): String</li><li>+ addHomeGoal( ): void</li><li>+ addVisitorGoal( ): void</li></ul>

Player
+ name: String + goals: int + team: String
+ Player( ) + getName( ): String + setName( ): void + getGoals( ): int + setGoals( ): void + getTeam( ): String + setTeam( ): void

Goal
+ minute: int + player: Player
+ Goal( minute: int, player: Player) + getMinute( ): int + setMinute( ): void + getPlayer( ): Player + setPlayer( ): void