

HW9-6

StopWatch

- startTime: long
- endTime: long
- + stopWatch(): void
- + getStartTime(): long
- + getEndTime(): long
- + start(): void
- + stop(): void
- + getElapsedTime(): long

HW9-9

Regular Polygon

- numberOfSides: int
- sideLength: double
- centerX: double
- centerY: double
- + RegularPolygon()
- + RegularPolygon(numberOfSides: int, sideLength: double)
- + RegularPolygon(numberOfSides: int, sideLength: double, centerX: double, centerY: double)
- + getNumberOfSides(): int
- + setNumberOfSides(num: int): int
- + getSideLength(): double
- + setSideLength(sideLength: double): double
- + getCenterX(): double
- + setCenterX(centerX: double): double
- + getCenterY(): double
- + setCenterY(centerY: double): double
- + getPerimeter(): double
- + getArea(): double

HW10_4

MyPoint

J. PWH

```
- X: double  
- Y: double  
  
+ MyPoint(): void  
+ MyPoint(x: double, y: double): void  
+ X(): double  
+ setX(x: double): double  
+ Y(): double  
+ setY(y: double): double  
+ distance(x: double, y: double): double  
+ distance(Point: MyPoint): double
```

HW10_12

Triangle 2D

P. PWH

```
- P1, P2, P3: MyPoint.  
  
+ Triangle2D(): void  
+ Triangle2D(x1: double, y1: double, x2: double, y2: double,  
              x3: double, y3: double): void  
+ Triangle2D(P1: MyPoint, P2: MyPoint, P3: MyPoint): void  
+ getP1(): MyPoint  
+ getP2(): MyPoint  
+ getP3(): MyPoint  
+ setP1(P1: MyPoint): void  
+ setP2(P2: MyPoint): void  
+ setP3(P3: MyPoint): void  
+ getPerimeter(): double  
+ getArea(): double  
+ contains(x: double, y: double): boolean  
+ contains(P: MyPoint): boolean  
+ contains(Triangle2D t): boolean  
+ overlaps(Triangle2D t): boolean  
+ getMAX(... n: double): double  
+ getMIN(... n: double): double  
+ getTrianglePoints(): MyPoint[]
```


HW10_14.

MyDate

```
- day: int
- month: int
- year: int

+ MyDate(): void
+ MyDate(elapsedTime: long): void
+ MyDate(year: int, month: int, day: int): void
+ getYear(): int, getMonth(): int, getDay(): int
+ setYear(year: int): int
+ setMonth(month: int): int
+ setDay(day: int): int
+ setDate(elapsedTime: long): void
```

HW10_15

MyRectangle2D

```
- centerX: double
- centerY: double
- width: double
- height: double

+ MyRectangle2D(centerX: double, centerY: double,
                width: double, height: double): void
+ getRectangle(points: double[]): MyRectangle2D
+ getRectangle(points: MyPoint[]): MyRectangle2D
- getLeftMostPoint(points: MyPoint[]): MyPoint
- getRightMostPoint(point: MyPoint[]): MyPoint
- getHighestPoint(point: MyPoint[]): MyPoint
- getLowestPoint(points: MyPoint[]): MyPoint
```


HW10_22

MyString1

AD: M/V/H

```
- chars : char []
+ MyString1 (chars : char []) : void
+ MyString1 (string : String) : void
+ charAt (index : int) : char
+ length () : int
+ substring (begin : int, end : int) : MyString1
+ toLowerCase () : MyString1
+ equals (s : MyString1) : boolean
+ substring (l : int) : MyString1
- get count (l : long) : int
```

HW11_8.

Transaction

2. AD: M/V/H

```
- type : char
- amount : double
- balance : double
- description : string

+ Transaction (type : char, amount : double,
               balance : double, description : string) : void
```

Account

```
- name : string
- balance : double
- annualInterestRate : double
- transactions : ArrayList<Transaction>

+ Account () : void
+ Account (name : string, balance : double) : void
+ get Balance () : double
+ set Balance (balance : double) : void
+ get AnnualInterestRate () : void
+ set AnnualInterestRate (annualInterestRate : double) : void
+ withdraw (amount : double) : void
+ deposit (amount : double) : void
+ get Transactions () : ArrayList<Transaction>
```


~~HW13_5~~
HW13_5

<< Comparable >>
Geometry Object

F. 81/1/4

- + compareTo (O: Geometry Object): Int
- + max (O1: Geometry Object, O2: Geometry Object): Geometry Object
- + get Area(): double
- + get Perimeter(): double

Circle

- x: double
- y: double
- radius: double

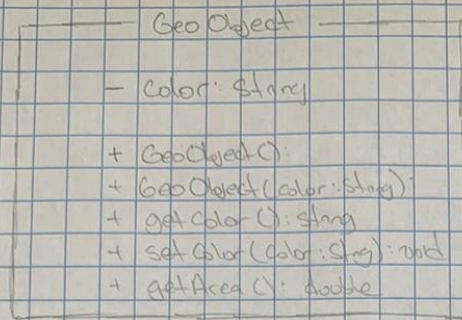
- + Circle():
- + Circle(x: double, y: double, radi: double): double
- + get Perimeter(): double
- + get Area(): double

Rectangle

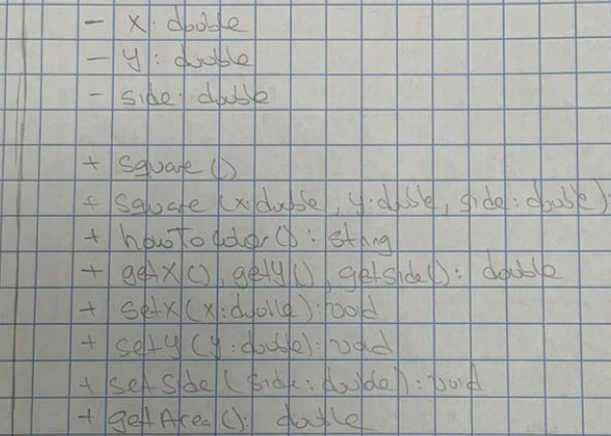
- center x: double
- center y: double
- width: double
- height: double

- + Rectangle():
- + Rectangle(center x, center y, width, height: double):
- + get Area(): double
- + get Perimeter(): double

HW13_7.



↓
« Colorable »
Square



C	1	1	0	0
D	1	1	0	1
E	1	1	1	0
F	1	1	1	1

HW13_17

Complex

- a : double
- b : double
- + Complex (a:double, b:double):
- + Complex (a:double):
- + Complex ():
- + getRealPart(): double
- + getImaginaryPart(): double
- + add (Complex:Complex): Complex
- + subtract (Complex:Complex): Complex
- + multiply (Complex:Complex): Complex
- + divide (Complex:Complex): Complex
- + abs(): double