Boat buddy

API Documentation

October 28, 2019

Contents

\mathbf{C}	ontents	1
1	Module angleToFunction1.1 Functions1.2 Variables	2 2 2
2	Module functionIntersect 2.1 Functions	3 3
3	Module map 3.1 Class DrawMap	4 4
4	Module mareeCalculator 4.1 Functions	5 5
5	Module run 5.1 Class Window	6 6
6	Module test_angleToFunction 6.1 Class AngleToFx_Test	7 7 7
7	Module test_functionIntersect 7.1 Class Intersection	8 8
8	Module test_mareeCalculator 8.1 Class MyTestCase	
In	adex	10

1 Module angleToFunction

1.1 Functions

 $\mathbf{angleToFunction}(\mathit{angle}, \mathit{point})$

Renvoie l'équation d'une droite à partir d'un point et d'un angle ! le cas ou a = +-inf

Parameters

angle: angle par rapport au nord. (0 - 360)

(type=float)

point: point de la droite

(type = tuple)

Return Value

a et b de l'équation f(x)=ax+b

(type = tuple)

Author: Maxime Favier

Since: 0.2 Version: 0.5

1.2 Variables

Name	Description	
package	Value: None	
е	Value: 2.71828182846	
pi	Value: 3.14159265359	

2 Module functionIntersect

2.1 Functions

functionIntersect(a, b, c, d)

Renvoie le point d'intersection de deux fonctions f1(x)=ax+b et f2(x)=cx+d

Parameters

a: coef directeur de la droite f1(x)

(type=float)

b: coef de la droite f1(x)

(type = float)

c: coef directeur de la droite f2(x)

(type = float)

d: coef de la droite f2(x)

(type=float)

Return Value

coord du point d'intersection (x,y)

(type=tuple)

Author: Maxime Favier

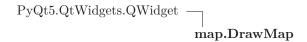
Version: 0.3

2.2 Variables

Name	Description		
package	Value: None		

3 Module map

3.1 Class DrawMap



init(self, im)
$\mathbf{init}\mathbf{ui}(self)$
$\mathbf{supprimerTraces}(self)$
$\mathbf{paintEvent}(\mathit{self}, \mathit{event})$
mousePressEvent(self, event)

4 Module mareeCalculator

4.1 Functions

marreCalculator(TMarreeHaute, HMarreeHaute, TMarreeBasse, HMarreeBasse, time)

Calcule la hauteur de l'eau

Parameters

TMarreeHaute: heure de maree haute en min

(type=int)

HMarreeHaute: hauteur de l'eau à maree haute

(type=float)

TMarreeBasse: heure de maree basse en min

(type=int)

HMarreeBasse: hauteur de l'eau à maree basse en min

(type=float)

time: temps de la journee

(type=int)

Return Value

hauteur de l'eau

(type = float)

Author: Maxime Favier

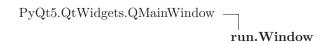
Since: 0.4 Version: 0.5

4.2 Variables

Name	Description	
MAXYEAR	Value: 9999	
MINYEAR	Value: 1	
package	Value: None	
datetime_CAPI	Value: <capsule "datetime.datetime_capi"<="" object="" th=""></capsule>	
	at 0x7f69d005a3c0>	
е	Value: 2.71828182846	
pi	Value: 3.14159265359	

5 Module run

5.1 Class Window



init(self)
$egin{align*} \mathbf{init}\mathbf{ui}(self) \end{aligned}$
$\boxed{\text{draw_toolbar}(\textit{self})}$
$\boxed{\mathbf{draw}_\mathbf{map}(\mathit{self})}$

${\bf 6}\quad {\bf Module\ test_angle To Function}$

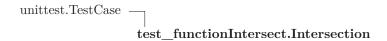
6.1 Class AngleToFx_Test

$$\begin{array}{ccc} \text{unittest.TestCase} & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ &$$

$\mathbf{test_angle0}(self)$
$\mathbf{test_angle180}(self)$
$\mathbf{test_angle45}(self)$
$\mathbf{test_angle225}(self)$
${f test_angle 315}(self)$

$7 \quad Module \ test_functionIntersect$

7.1 Class Intersection

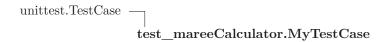


$\boxed{\textbf{test_droitesParalleles}(\textit{self})}$
$\boxed{\text{test_intersection00}(\textit{self})}$
$\boxed{\textbf{test_intersection12}(\textit{self})}$
$\boxed{\textbf{test_intersection52}(\textit{self})}$

${\bf 8}\quad {\bf Module~test_maree Calculator}$

8.1 Class MyTestCase

les exercices p25-26



${f test_marree1}(self)$		
les exercices p17-18		
${f test_marree2}(\mathit{self})$		
les exercices p19-20		
${\bf test_marree3}(\mathit{self})$		
les exercices p23-24		

Index

```
angleToFunction (module), 2
    angleToFunction.angleToFunction (function), 2
functionIntersect (module), 3
    functionIntersect.functionIntersect (function), 3
map (module), 4
    map.DrawMap (class), 4
      map.DrawMap.___init___ (method), 4
      map.DrawMap.init_ui (method), 4
      map.DrawMap.mousePressEvent (method), 4
      map.DrawMap.paintEvent (method), 4
      map.DrawMap.supprimerTraces (method), 4
mareeCalculator (module), 5
    mareeCalculator.marreCalculator (function), 5
run (module), 6
    run. Window (class), 6
      run.Window.___init___ (method), 6
      run.Window.draw_map (method), 6
      run. Window.draw toolbar (method), 6
      run. Window.init ui (method), 6
test angleToFunction (module), 7
    test angleToFunction.AngleToFx Test (class),
      test angleToFunction.AngleToFx Test.test angle0
        (method), 7
      test angleToFunction.AngleToFx Test.test angle180
        (method), 7
      test\_angleToFunction.AngleToFx\_Test.test\_angle225
        (method), 7
      test\_angleToFunction. AngleToFx\_Test. test\_angle315
         (method), 7
      test angleToFunction.AngleToFx Test.test angle45
        (method), 7
test_functionIntersect (module), 8
    test functionIntersect.Intersection (class), 8
      test\_functionIntersect.Intersection.test\_droitesParalleles
        (method), 8
      test functionIntersect.Intersection.test intersection00
        (method), 8
      test functionIntersect.Intersection.test intersection12
        (method), 8
      test\_functionIntersect.Intersection.test\_intersection52
        (method), 8
test mareeCalculator (module), 9
    test mareeCalculator.MyTestCase (class), 9
      test mareeCalculator.MyTestCase.test marree1
        (method), 9
```

- test_mareeCalculator.MyTestCase.test_marree2
 (method), 9
 test_mareeCalculator.MyTestCase.test_marree3
- test_mareeCalculator.MyTestCase.test_marree3 (method), 9
- test_mareeCalculator.MyTestCase.test_marree4 (method), 9