UML Class Diagram - DISS Maze Robot Program

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de.tuhh.diss.lab.sheet5

Motors

- K_P:int = 20
- K_F:int = 20
- K_S:int = 35
- MIN_WALL_DIST:double = -13.5
- MIN_TARGET_DIST:double = -4
- motorSpeed:int
- currentDistance:float
- currentAngle: float
- lastAngle: float
- initialDIstance: float
- difference:float
- angle:int

+ setSpeed(degreesPerSecond:int):void
+ turn(degrees:float):void
+ moveForward():void
+ moveForwardToDistance(distanceToMove:double):void
+ moveForwardSlow):void
+ moveBackward():void
+ stop():void
+ angleRotation(distance:double):int

Beep

+ beepy():void

Gyro

- angle:int

+ getAngle():float

EV3GyroSensor

MazeSolver

- RIGHT:int = -90
- LEFT:int = 90
- BACK_CW:int = -180
- MOVE_DISTANCE:int = -35
- TILE_CENTER:double = 17.5

+ main(String[ ] args):void
+ wallFollower():void
+ scanScore():float[ ]
+ checkTarget(targetColor:String):boolean

ColorSensor

- colorID:int
- colorName:String

+ colorDetect():String

EV3ColorSensor

EV3LargeRegulateMotor

DisplayMenu

- POINTER_X:int = 0
- pointerY:int
- colorName:String

+ drawColorName():void
+ displayMenu():String

UsSensor

- distance:float

+ getDistance():float

EV3UltrasonicSensor