## **UML Class Diagram for PidController Class**

## **PidController**

- -kp:double
- -ki:double
- -kd:double
- -setPoint:double
- -previousTime:double
- -previousError:double
- -currentSpeed:double
- -currentTime:double
- -gain:double
- -sumOfErrors:double
- +calculateGain(const double actualSpeed, const double currentTime):double
- +setKp(const double kp):void
- +setKi(const double ki):void
- +setKd(const double kd):void
- +setSetPoint(const double setPoint):void