E6: Alex Felderean, Lauren Hawkinson, Grace Jiang, Daniel Rihm

Clingan 12:40

Function: Robot::moveUnbounded

Description:

```
/**
 * @brief Moves the robot in the specified direction at the specified speed.
 * Requires 0 < speed < 100 AND 0 < angle < 360.
 *
 * @param angle The angle at which the robot moves at in degrees.
 * @param speed The speed at which the robot should move as a percent
 * of the max motor speed.
 */
```

Pseudocode:

```
function moveUnbounded(var angle, var speed):
   var motorFS = speed * cos(MOTOR_FRONT_ANGLE * PI / 180.0 - angle * PI / 180.0)
   var motorLS = speed * cos(MOTOR_LEFT_ANGLE * PI / 180.0 - angle * PI / 180.0)
   var motorRS = speed * cos(MOTOR_RIGHT_ANGLE * PI / 180.0 - angle * PI / 180.0)

   setMotorPercent(motorFS, motorLS, motorRS)
END moveUnbounded
```

And `setMotorPercent` is formally defined as:

```
/**
 * @brief Sets all motors' percents to the specified amounts.
 * Requires 0 < [all parameters] < 100.
 *
 * @param fSpeed The front motor's speed.
 * @param lSpeed The left motor's speed.
 * @param rSpeed The right motor's speed.
 */
```

And `cos` is formally defined as:

```
/**
 * @brief Computes cosine.
 *
 * @param x Any angle in radians.
 * @returns The cosine of x.
 */
```