Team 6

ROBOTICS COMPETITION - JUNE 2019

Pololu Maze Solver Base Code

Follows a line segment until it reaches a:

- Intersection
- Turn
- Dead end
- Finish line

Chooses a turn (left-hand-on-the-wall strategy)

Logs the chosen turn

Simplifies path by eliminating dead ends

```
char path[100];
```

```
typedef struct {
  char dir;
  unsigned long mils;
} pathChange;

pathChange path[100];
```

```
follow_segment();
```

```
while (delta < 0.94 * path[i].mils) {
    startMils = millis();
    follow_segment();
    endMils = millis();
    delta += endMils - startMils;
}</pre>
```

```
case 'R':
    // Turn right.
    OrangutanMotors::setSpeeds(80, -80);
    delay(200);
```

```
case 'R':
    // Turn right.
    OrangutanMotors::setSpeeds(TURN_SPEED, -TURN_SPEED);
    delay(150);

    for (i = 0; i < 2; ++i) {
        if (lineInSight()) break;
        delay(25);
    }</pre>
```