The infinite operation loop specifically calls three functions designed by the group: bumbSense, tryPlay, and tryAdvance.

Remarkably, the bumpSense function senses bumps.

The tryPlay function sends a request for packet 18 from the robot. If the play button is pressed, the request will return one and the play function will commence. Otherwise, there is a return to main.

The play function can only be called by the tryPlay function. It has calls to two separate functions: driveStraightDistanceCm and rotateDegreeRight. These functions take parameters that determine the robot's movements.

The driveStraightDistanceCm takes an int parameter that is the amount of centemeters the robot should be moving forward. This measurement is divided by 30 centementers (for the speed) and is multiplied by 1000 for ms conversion for delay. t=d/v determines the time which the robot will move forward. Additionally, 350 was multiplied by the time figure for adjustments. The wheels move forward for the duration of the delay. At that point, the wheels stop.

The rotateDegreeRight function takes two parameters. One is a degree measurement, and the other is a boolean. The boolean determines the direction the robot is turning, i.e., true if the robot is turning right. It was determined that eight seconds multipled to the degree measurement gives an accurate turning radius for the robot while both wheels are spinning at 30 cm/s. After the delay, the wheels stop.

The tryAdvance function works in a similar way to the tryPlay function, and the advance function works similar to the play button.