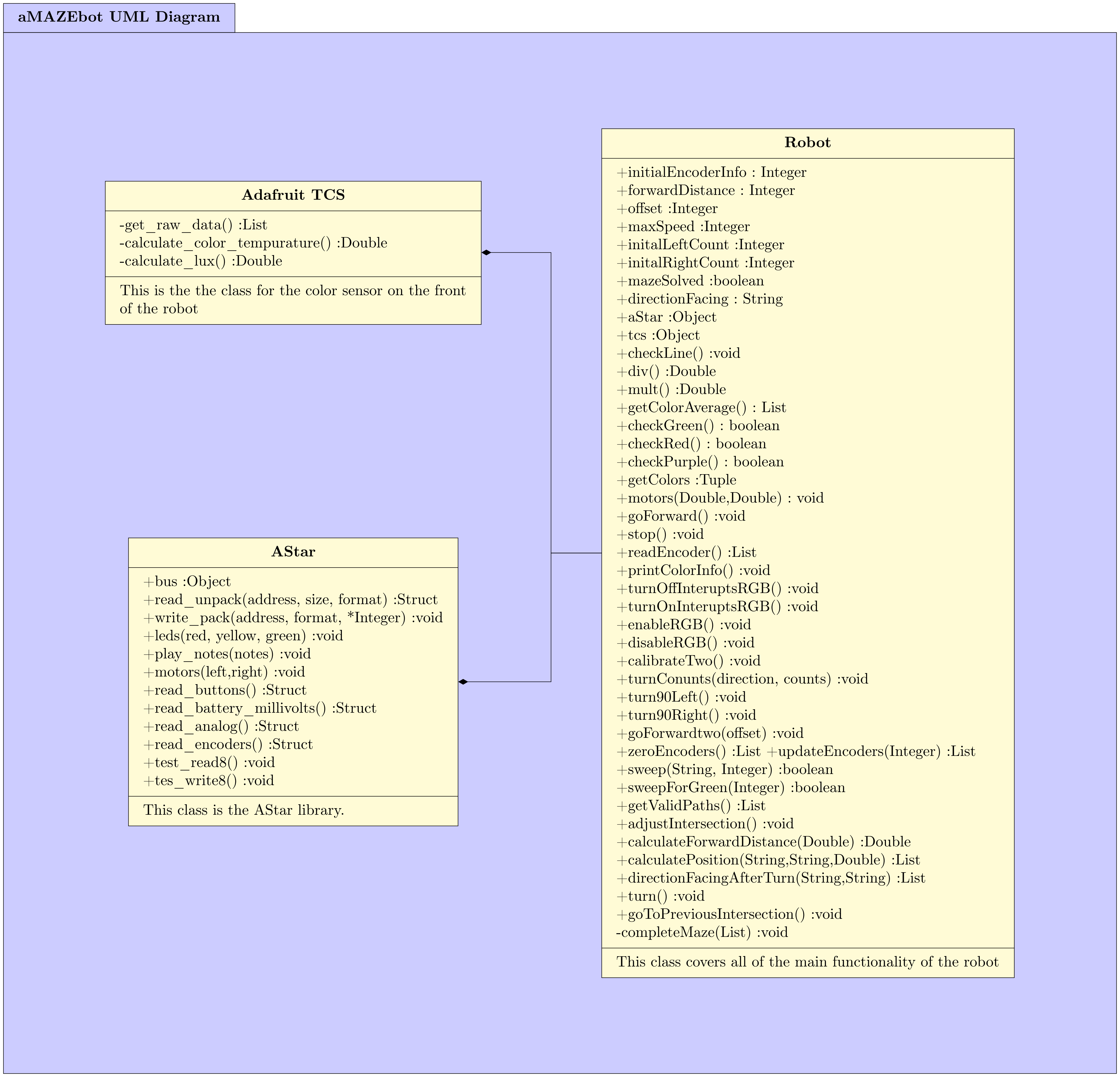

aMAZEbot UML Diagram

Adafruit TCS

-get_raw_data() :List
-calculate_color_tempurature() :Double
-calculate_lux() :Double

This is the the class for the color sensor on the front of the robot

AStar

+bus :Object
+read_unpack(address, size, format) :Struct
+write_pack(address, format, *Integer) :void
+leds(red, yellow, green) :void
+play_notes(notes) :void
+motors(left,right) :void
+read_buttons() :Struct
+read_battery_millivolts() :Struct
+read_analog() :Struct
+read_encoders() :Struct
+test_read8() :void
+tes_write8() :void

This class is the AStar library.

Robot

+initialEncoderInfo : Integer
+forwardDistance : Integer
+offset :Integer
+maxSpeed :Integer
+initalLeftCount :Integer
+initalRightCount :Integer
+mazeSolved :boolean
+directionFacing : String
+aStar :Object
+tcs :Object
+checkLine() :void
+div() :Double
+mult() :Double
+getColorAverage() : List
+checkGreen() : boolean
+checkRed() : boolean
+checkPurple() : boolean
+getColors :Tuple
+motors(Double,Double) : void
+goForward() :void
+stop() :void
+readEncoder() :List
+printColorInfo() :void
+turnOffInteruptsRGB() :void
+turnOnInteruptsRGB() :void
+enableRGB() :void
+disableRGB() :void
+calibrateTwo() :void
+turnConunts(direction, counts) :void
+turn90Left() :void
+turn90Right() :void
+goForwardtwo(offset) :void
+zeroEncoders() :List +updateEncoders(Integer) :List
+sweep(String, Integer) :boolean
+sweepForGreen(Integer) :boolean
+getValidPaths() :List
+adjustIntersection() :void
+calculateForwardDistance(Double) :Double
+calculatePosition(String,String,Double) :List
+directionFacingAfterTurn(String,String) :List
+turn() :void
+goToPreviousIntersection() :void
-completeMaze(List) :void

This class covers all of the main functionality of the robot