

MASLAB

Burrito

SOFTWARE DESIGN



Main Java Classes

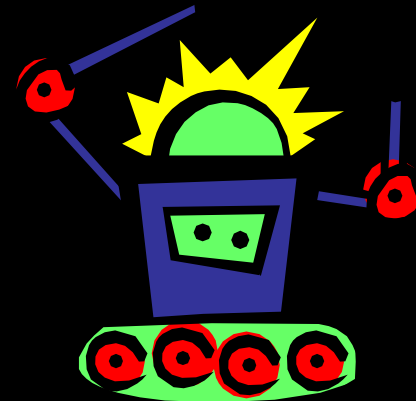
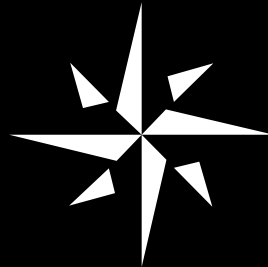


- **Brain** – a large FSM
Implemented as a large while loop with if-elseif statements to check different state variables
Spawns threads of other classes to do work in parallel. Receives input from sensors and makes decisions.

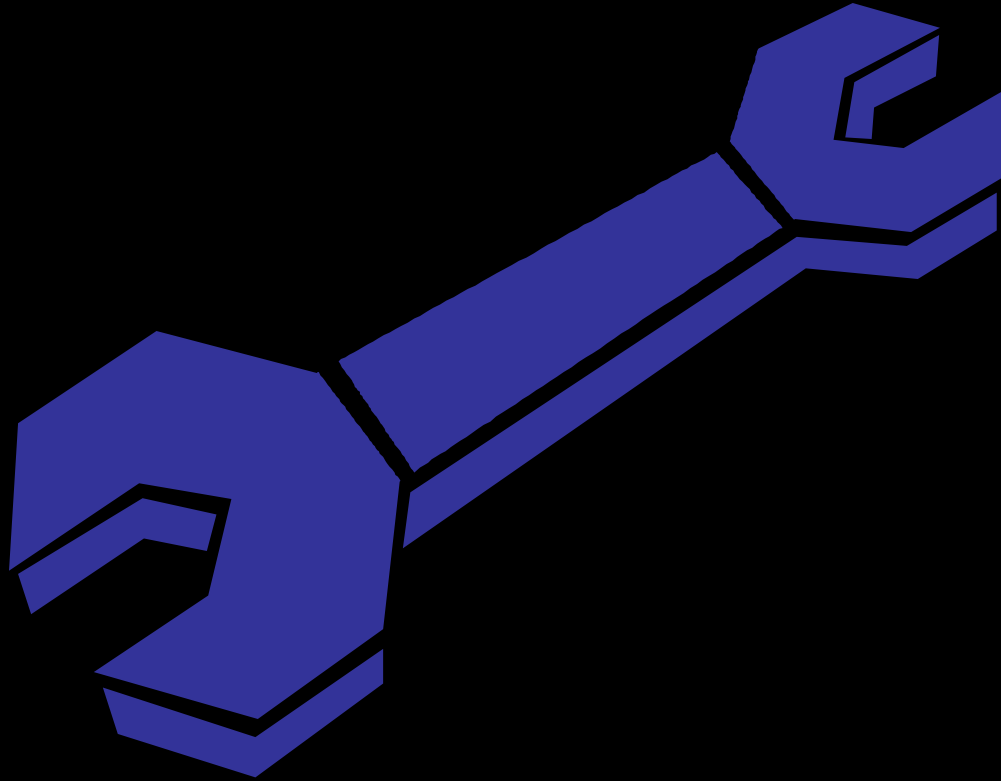


Main Java Classes

- Eye – specialized camera input handling class. Processes images and interfaces objects such as VisionColor, VisionObject, ball, barcode, etc. with the brain. Also has algorithms for recognizing objects and not just pointing them out
- Navigator - Uses input from other classes (like the brain does) to plot its internal map
- Bot – creates any necessary abstraction over input sensors, initializes them, and ensures they are online.



MECHANICS



Basic Points

- Differential Drive
- Encoders
- PID Drive



Scoring Strategy

- Wander for red balls while an internal map is built
- At a certain point, start the green ball challenge, depending on the internal map (only after some red balls have been scored)

