Team 11
I Choose You

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Status Update

- We are doing a moving Pokeball that throws AR code

- Parts ordered and delivered except hinge, battery, linear actuator

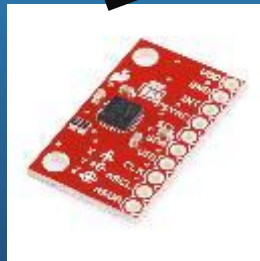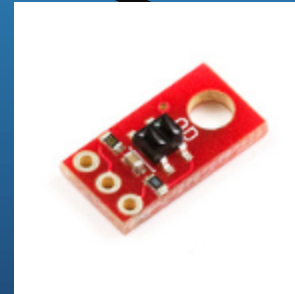- Research on IMU and exterior material

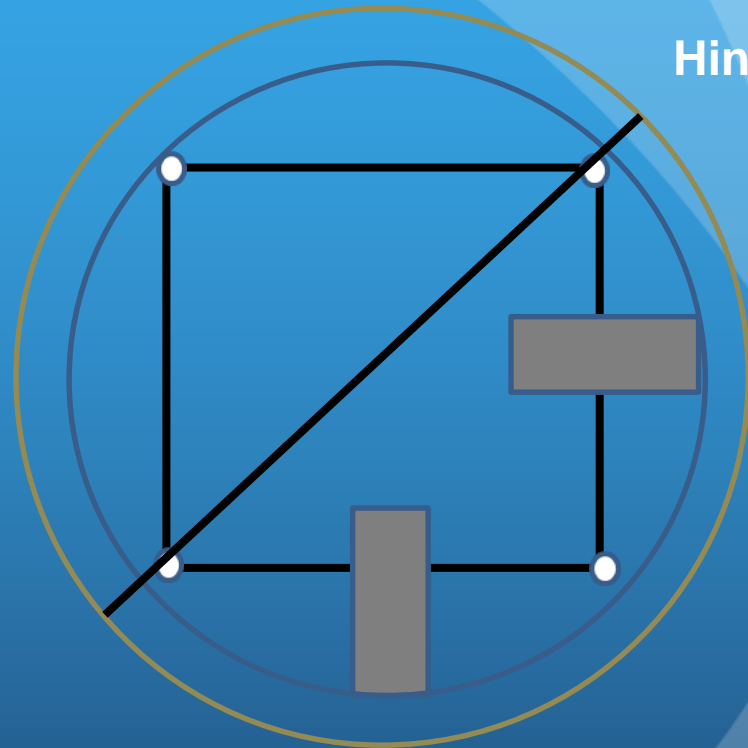# Architecture

Mechanical Design

Shell

Hinges

Wheels

Mechanical Design
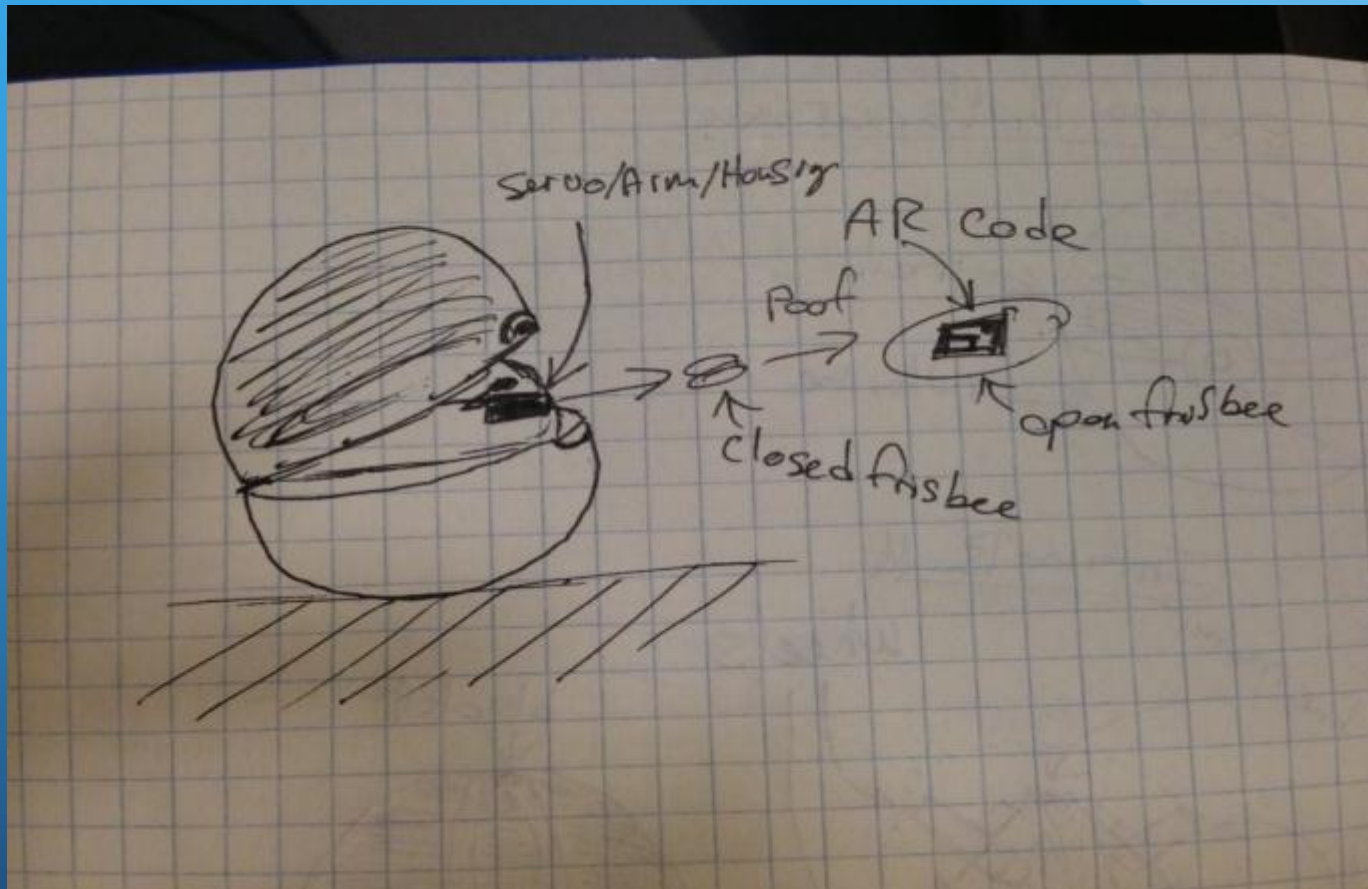
Hardware Layout
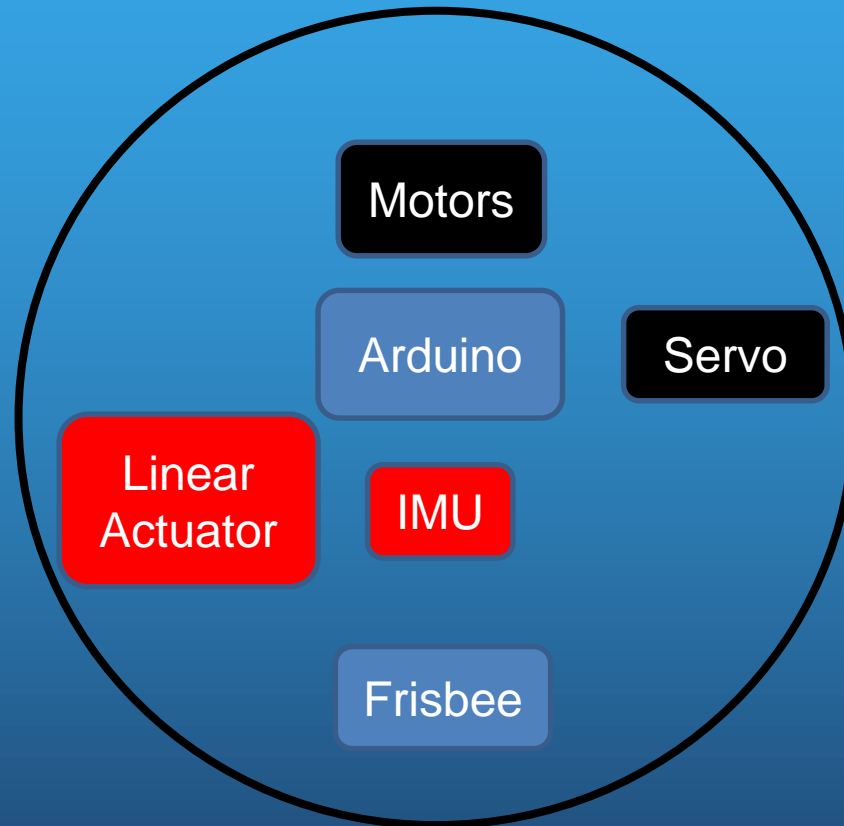
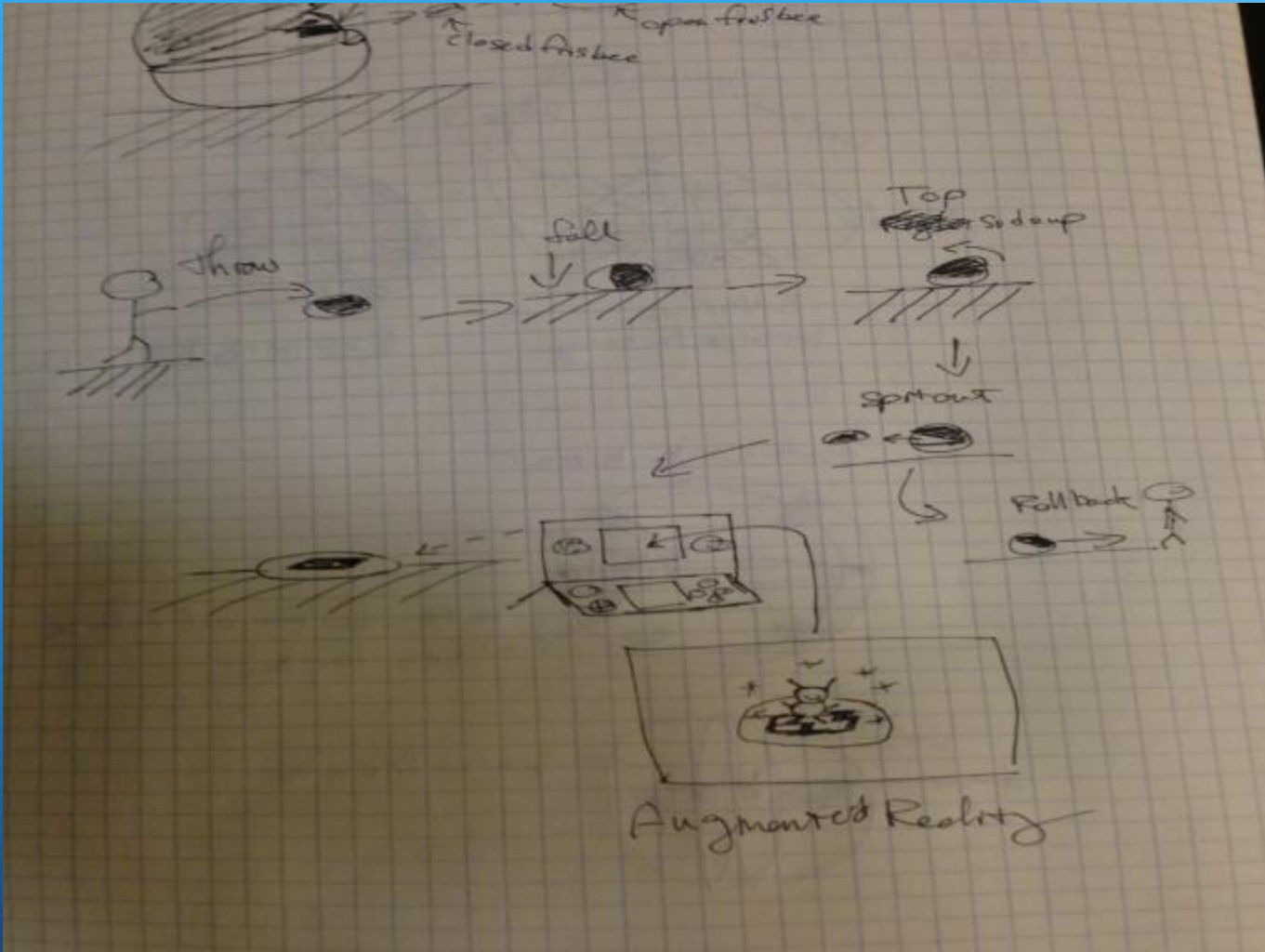Battery pack attached under this layer

Motors

Arduino

Servo

Linear Actuator

IMU

Frisbee

Use cases

- Push button to open the Pokeball

- Load device with AR codes and Frisbee

- Push button to close the Pokeball

- Throw Pokeball

- Reopen and launch AR codes

Use cases

Risks and Mitigations

- Accuracy of IMU

- Implementation of movement code

- Reloading Frisbee

- Rubber band breaks

- Use DMP to improve algorithms

- Move to Plan B (RC Car movement)

- Manually reload

- Convenient Replacement on parts

Plan

Plan A
- Be able to trace back to where it was thrown
- Throw out AR codes and launch games

Plan B
- Be able to re-orient itself and throw AR codes
- If movement code fails, make a RC version Pokeball

Plan C
- If IMU and movement code both fails, the Pokeball moves in a default path set in program

Division of Work

• Art – Interior (construction and circuits), opening and closing ball codes, fusing codes

• Brian - Movement code and IMU

• Ingrid – Exterior and interior constructions, line tracking

• Hanrui - IMU codes and Exterior construction