

## Capstone Project Proposal

Our capstone project consist of a ghost (an intelligent robot ) from the Destiny video game. The software for the project is Arduino and the language would be C,tools we will need would be researched for different ways to build a simple ai in java. Our expected challenges would be that our 3d modeling designs, Random computer suicides, and hardware failure.

Our project is unique because we have researched ai's and no one has built a destiny ghost. Our Ghost will have the ability to float in mid air because we will have a magnetic `table.

We plan to divide the work equally by always working together. We live close to each other so whenever we would plan to work on the project one of us would just walk over. When in class we could research and code two different milestones.

### **Material to buy:**

- 3D printer filament
- 2 Servos
- 4 RC wheels
- 2 Motors
- Materials for magnetic table
- Materials for the moving chassis
- Aluminum sheets
- Magnets
- Primer puddie
- Paint

Milestone 1: Research

Milestone 2: Build prototype with cardboard

Milestone 3: Design computer 3d model shell

Milestone 4: Design computer 3d model Ghost frame & eye

Milestone 5: Construct the ghost

Milestone 6: Add electrical components

Milestone 7: Test all circuitry to make sure things work (breadboard)

Milestone 8: Programming arduino for eye movement

Milestone 9: Programming eye light

Milestone 10: Programming voice module

Milestone 11: Constructing magnetic table

Milestone 12: Wiring the magnetic table

Milestone 13: Programming the magnetic table

Milestone 14: Add magnetic system to ghost

Milestone 15: Build moving chassis for table with controller

Milestone 16: Programming the chassis to move around

Milestone 17: Programming the controller for the chassis

Milestone 18: Adding primer puddey to ghost

Milestone 19: Painting Ghost, Table, and Chassi

Milestone 20: Add reinforcements to ghost