Problem Statement
Design an Ultimate Frisbee System that is highly visible at night and reduces confusion regarding disc possession and score.

Background
Ultimate Frisbee is a stereotypical college sport but is gaining popularity with groups of all ages. Night Frisbee is the next iteration of Ultimate Frisbee.

Current Equipment
- Non-rechargeable batteries
- Glow-sticks
- Poor visibility
- Disc LEDs change color randomly

Night Fury Features
- RGB LED lighting
- Disc possession indicated by color
- Dropped disc flashes neutral color
- Rechargeable Li-Po batteries
- RFID communication
- Mobile Application
  - Game setup with NFC and USB
  - Score-keeping

Specifications
- Total Disc Weight: 208 grams
- Disc PCB Enclosure Size
  - Diameter: 2.25", Thickness: 0.5"
- Run Time
  - Disc: > 5 hours
  - Wristband: > 10 hours

Lighting Exploration
Overall:
- Control disc on right
- Projection selected for manufacturing ease and adequate lighting