

Category: **Industrial Design**

Product: **Smart Army Helmet**

Requirements:

1. Presentation (Submit Files by **Aug 30,2020**)

- Intro - 4 Slides
- Features - 5 slides
- Marketing - 2 slides
- Thankyou - 1 slide

2. 3D Model



Conventional Army Helmet

Hardware of SAM:

- Smart Features - Arduino Nano
 - Push Button interfaced with relay - once activated relay turns ON. 70
 - Motion Detection (ADXL335 - Accelerometer sensor) interfacing with Push Button 200

- Records movement once activated
 - Location Tracking (GPS) interfacing with Push button 800
 - Logs data once activated
 - Converts into path
 - Automatic Torch and rear lights + push button for override 200
 - RTC interfacing DS1307 80
 - SD card module 80
 - Battery 1600
- Structural Features
 - Adjustable size 150
 - Chin strap 150
 - Night Vision
 - Body is made of bullet-proof material 16000

Capabilities

- Time and position of Death/Zero movement can be accessed long after the helmet has been discharged.
- Fall detection system
- Route can be easily mapped along with time and distance
- Torch, rear lights and night vision for better focus
- Adjustable strap and bullet-proof body for maximum protection
- Battery powered for 1 days
- SD card encryption