**Military Hardware DatabaseV1.0**

**(MHDB V1.0)**

Functional Requirements

1. User shall be able to select 1 or 2 pieces for viewing or comparison.
   1. If 2 are selected for comparison, data on each piece shall be shown side by side.
2. System shall display an example image of each piece of equipment when viewing or comparing.
3. System shall display relevant specifications of each piece of equipment when viewing or comparing.
4. System shall allow for higher/lower color coding for each specification when comparing equipment.
5. User shall be able to exit at any time.
6. User shall be able to return to equipment selection at any time.
7. User shall be able to filter by equipment category.
8. Equipment shall be separated out into multi-level categories, with both Top-level, and Sub Categories.
   1. Small Arms
      1. Pistols
      2. Submachine Guns
      3. Rifles/Carbines
      4. Shotguns
      5. Machine Guns
      6. DMR/Sniper Rifles
      7. Anti-Material Weapons
   2. Artillery
      1. Mortars
      2. Howitzers
      3. Rocket Artillery
      4. Air Defense
   3. Vehicles
      1. Trucks
      2. APCs
      3. IFVs
      4. Tanks
   4. Fixed-Wing Aircraft
      1. Fighter
      2. Ground Attack
      3. Gunship
      4. Bomber
      5. Transport
      6. Command and Control
      7. UAV
   5. Helicopter Rotorcraft
      1. Attack
      2. Transport
      3. Utility
      4. Observation
   6. Ships
      1. Aircraft carriers
      2. Amphibious Warfare
      3. Cruisers
      4. Destroyers
      5. Frigates
      6. Submarines
9. Equipment lists within categories shall be sortable based on primary information.
10. Users shall have the ability to perform a general search which shall search all Top-Level and Sub categories based on user input.

Non-functional Requirements

1. View and Compare History
   1. System shall remember the last 20 pieces viewed or compared until the application is closed.
2. Category comparison enforcement
   1. System shall prevent comparing two pieces of equipment from different Top-level categories.
   2. System shall notify the user of the error.
3. Comparison Limit
   1. System shall enforce a comparison limit of 2 pieces at a time for display purposes.