Apparatus Features

The current list of features includes:

- A complete Unreal Engine integration of the data-oriented workflow. Both C++ and Blueprint development is supported.
- ECS itself provides for some strong architectural and general development benefits as it's less prone to coupling and a lot more dynamic in its nature. It's also close to hardware and is cache-friendly by design.
- Assign and customize your Trait/Detail blocks right from the Details Panel in Unreal Editor.
- A dedicated user-friendly Blueprint node is provided as a center of Mechanic evaluation.
- A versatile Component-including and Component-excluding filtering for the Mechanics.
- Bitwise Flagmark filtering support for a boolean-based state approach.
- Multiple Details of the same class on a single Subjective are supported. All of the available Detail combinations are processed in the operating body.
- The Detail classes can be inherited for extra modularity and flexibility. Just create a common Mechanic with a common ancestor in the filter.
- Dedicated in-Editor user experience touches for some clear reading, validation and overall ease of use.
- Several performance optimizations: caching, fast bit-array lookups, manual Belt assignment.
- Full concurrent (multi-threaded) iterating support with a dedicated compile-time Solid semantic.
- An elegant and versatile custom networking solution built upon the Unreal's replication and RPC functionality.
- Steady-ticking implementation for some extra stability of your game frame-dependent logic.
- Thoroughly documented API with a dedicated user manual wiki pages.