

Functional Requirements

<https://docs.google.com/document/d/1FI2bZ3nHOD-c8ti6TUO3enkvk95sN-nQmOg7ApcTxNY/edit>

“War, war never changes”

Core requirements:

- Be able to simulate a conflict between two alliances of countries using a variety of constituent elements of war (including armies, various terrains, transport, military strategies, war phases and theatres) to dynamically and pseudo-randomly determine an outcome.
- Use the concept of GDP (Gross Domestic Profit) to manage the ebb and flow of the war
- Provide the user an option at the start of execution to decide between one of two execution modes.
- Simulation Mode
 - User can configure a simulation at the start (by configuration Countries and alliances)
 - The simulation is run, using console output to give the user a trace of how the war was won and by who
 - Conflict is to take place in the war theatres (which are of air, land or sea terrain) while the GDP of a country pseudo-randomly dictates the decisions a country makes on each turn of the simulation. These include raising, supplying and commanding armies, attacking transports, upgrading supply factories, joining alliances, or surrendering
- Decision Mode
 - User configures the simulation at the start as with Simulation Mode
 - User then creates their own Country, and at each turn of the war engine, is able to decide their Country's move (raising, supplying and commanding armies, attacking transports, upgrading supply factories, joining alliances, or surrendering) that turn

Optional requirements:

- Simulation Mode
 - Be able to request the format in which you want the War summary presented to you (ie: a user can choose between a line-by-line full trace, or a brief output outlining key events and the ultimate winner of the War)
- Decision Mode
 - A user can change the numerical statistics of any Army while they fight in the War Theatre to see how this affects the outcome of the War