server017

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hot::features

- -> coded in **C++17**
- -> shared gameplay library with our client
- -> using proven open source libraries
- -> easily extensible

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shared::gameplay::library

- -> implements standardized datatypes
- -> implements operation validation and execution
- -> implements action generation
 - -> used by AI, server and client
- -> heavily tested using googletest

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open::source::libraries

- -> CLI11: popular commandline parser
- -> spdlog: logging library
- -> nlohmann/json: de facto standard JSON parser
- -> afsm: boost MSM inspired state-machine framework

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extensible::design

- -> designed as a state machine
- -> state machine specified using templates
 - -> validity checked at compiletime
- -> new states and events can be added easily
- -> layout evident just from transition tables
- -> interchangeable network layer, seperate from FSM

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development::practices

- -> git-flow workflow
 -> CI for every pull-request:
 - -> compilation using clang and GCC
 - -> unit tests
 - -> static code analysis
- -> code reviews for every PR

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architecture

- -> MessageRouter:
 - -> sends messages to clients specified by UUID
 - -> deserializes incoming messages, calls callback
- -> Server: main state-machine (FSM)
 - -> GameFSM: inner FSM, entered once game starts
 - -> ChoicePhase, EquipPhase, GamePhase