

OOP: 3-day, dungeon_dudes - design
WO1 Michael Yockers
October 11, 2023

Sections

- Overview
- Requirements
- Data Flow
- UML Diagram
- Design Choice
- Constraints
- Assumptions

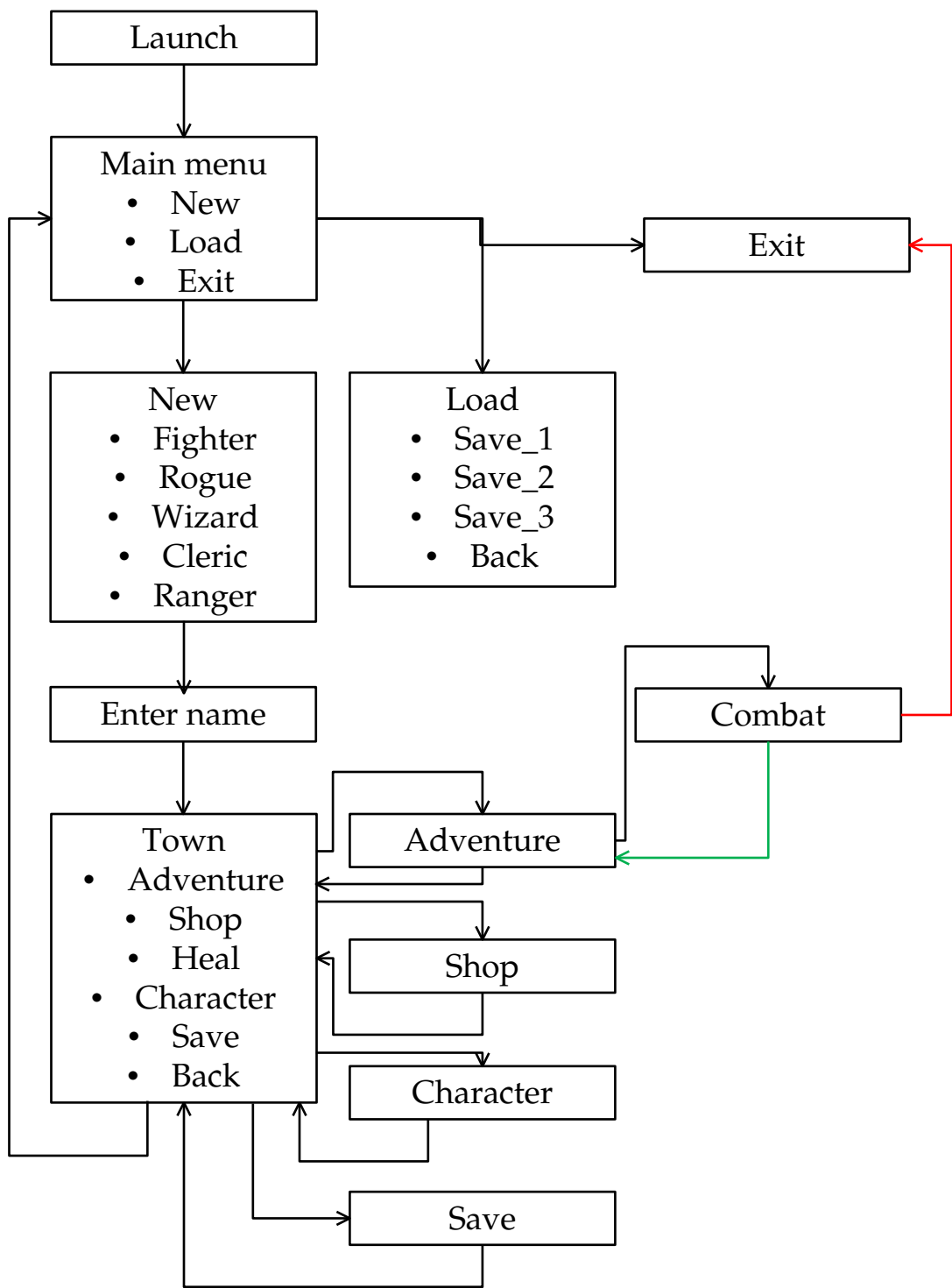
Overview

This project is derived from the 'Monster' module. There are 3 subclasses within the Elemental class, with minor changes between different types of Elementals based on their levels.

Requirements

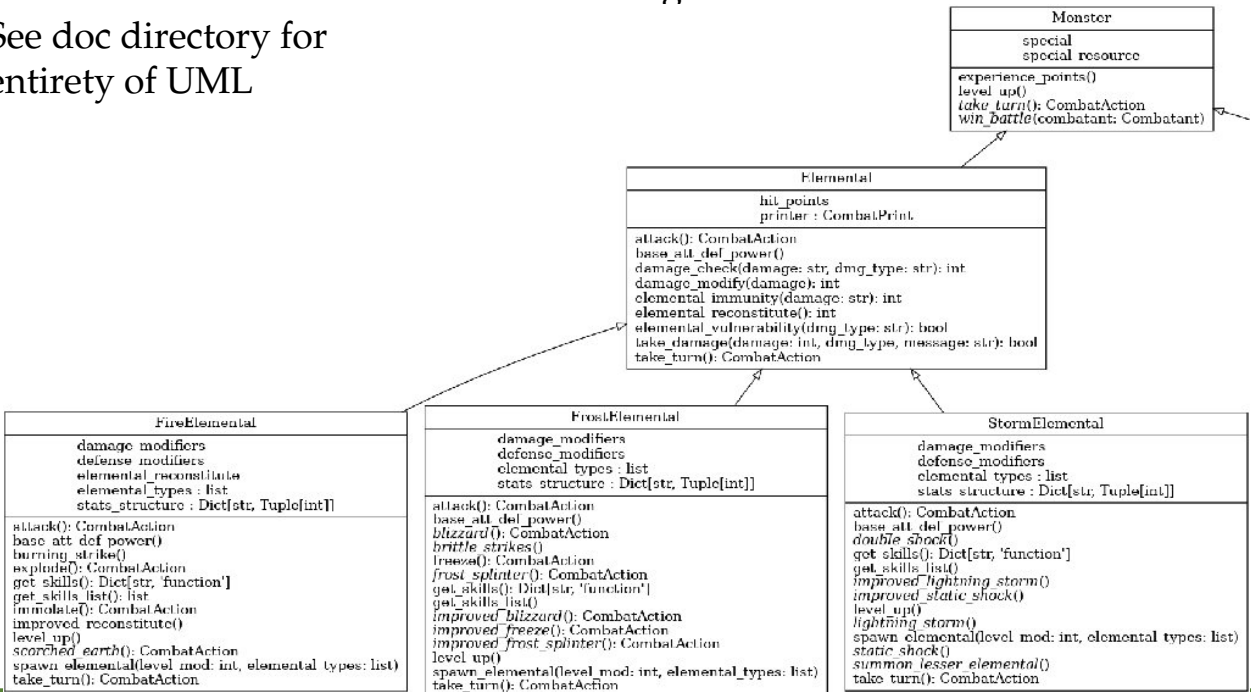
- Project must make a reasonable attempt to employ type hinting
- Project must pass mypy type checking with no warnings or errors
- CombatPrint must be utilized to display an appropriate message for every combat Action performed
- 'LimitedDict' data type must be used when appropriate
- Module must be detected by the game and loaded into the game seamlessly at runtime
- Monster modules must correctly implement logic for determining turn attacks
- Monster modules must correctly implement logic for determining monster subtypes and variation
- All combat math must be calculated correctly
- All CombatActions must be correctly constructed and passed to the encounter
- CombatPrint must be appropriately utilized to display combat message and information

Data Flow



UML Diagram

See doc directory for entirety of UML



Design Choices

- Not much to design; forced to work within constraints of class and ABC
- Pull as much from existing classes

Constraints

- No third party libraries
- No altering outside of assigned class, else incur wrath
- Only 3 days...

Assumptions

- Source code is generally, bug-free