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Homework 2 Design Document

In order to test the code which is represented by the UML attached the following will be done. First the Gear interface must be tested as the character relies on the Gear interface and if the gear interface doesn't work then the character interface in turn does not work as intended. Each gear type should be tested to ensure that it can be constructed and constructed properly, this means creating and testing multiple pieces of gear from each class. The tests should also make sure the combine function works correctly, this is important to test that the naming convention does not fail on the combine and that the combine function makes sure that only gear of the same type will be combined. Headgear should be tested to make sure that it may only have defensive stats and hand gear should be tested to assure that only attack stats may be granted. Once the gear has been fully tested, make sure each function returns the intended results and the combine function works within the parameters given in the problem statement the tests should move on to the character class.

For the character class the tests must make sure that all of the rules which were provided in the problem statement are followed. This means there must be tests to make sure that a character cannot be over equipped with gear from any gear slot. That the combination rules are followed correctly. The tests should show that exceptions are thrown when necessary and that the character class functions correctly otherwise. Tests should include: tests to show that the attack and a defense of a character are correctly modified by the gear that is equipped. Once character has been shown to work as intended the driver class can be tested to assure that it works as intended.

The driver class must be required to output each character sheet correctly as intended. The tests should also showcase that the battles print out the correct output for the 2 characters provided. This means making sure that the character who should of won is declared the victor at the end.

