**Unused Extension Module (UEM)**

**Example:** As shown in Listing 1, in PyTorch version 1.11, the TEST_DEPLOY_LIB.CPP file used Pybind11 to define an extension module named LIBTEST_DEPLOY_LIB [1]. This module bounds 9 C++ functions for use in Python. However, no Python files use this extension module. In PyTorch versions 2.0.1 and later, this extension module and the 9 C++ functions were removed.

```
1  PYBIND11_MODULE(libtest_deploy_lib, m) {
2    m.def("raise_and_catch_exception", raise_and_catch_exception);
3    m.def("raise_exception", raise_exception);
4    m.def("check_initial_state", check_initial_state);
5    m.def("get_in_another_module", get_in_another_module);
6    m.def("set_in_another_module", set_in_another_module);
7    m.def("get_bar", get_bar);
8    m.def("set_bar", set_bar);
9    m.def("get_bar_destructed", get_bar_destructed);
10   m.def("simple_add", simple_add);
11 }
```

Listing 1. Design Smell - Unused Extension Module

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[1] https://github.com/pytorch/pytorch/blob/v1.11.0/torch/csrc/deploy/test_deploy_lib.cpp[87-97]