LESSON 7 — MODULES + SOME STANDARD LIBRARY

MODULES ARE THE BASIC UNIT OF ENCAPSULATION IN PYTHON!

'import this' → namespaces

Create an smath.py module ("serious math for serious people") with some public functions and constants

↑ docstring!

Go over importing the module and various forms of import syntax

→ Public and private module attributes / functions → underscores and __all__

→ Run dir() on the module → look at '__name__'

→ Talk about modules being run once, add a print statement, discuss use of name.

↳ Discuss if '__name' == "__main__" trick!

→ Where are modules located? → current dir → installed dir → PYTHONPATH

↳ Note that a module doesn't have to be a file, can be from DB, stdin, etc... beyond the scope of this course!

STYLE! Avoid possibility of uncaught exceptions on import.

NOW ~~TO~~ TOUR THE STANDARD LIBRARY

↳ go to reference page, discuss

datetime → Go over datetime, timedelta objects utcnow(), timezone awareness, printing and reading formats.

pprint → show off with a dict containing a list

math → "from math import *" ← interactive calculator

random → seeding, usage, warn about crypto!

os → do some file / directory operations

sys → look at argv, exit(), sys modules, path, platform, version