

DS2000

11/12 - Tues.

Admin

- second chance Hw due 11/15 9pm (no late submissions!)

Agenda

1. classes + objects
2. building classes
3. Python

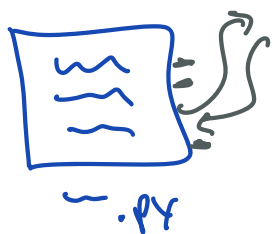
1. Classes + Objects

last week: DS
(Python)

this week: Programming
(DS)

object-oriented programming (OOP)
design (OOD) ~ CS3500

so far... procedural programming



1. gather data
2. computations
3. communicate

OOP ~ another approach
especially for big projects
meant to be intuitive
"real world"

objects ~ noun / thing

↳ have? do? → interact w/ other objects

1960s	1967	1970s
C	Smalltalk	C++
non-OO	OO	OO
	X	⋮

→ everything is Cool

procedural → OO

- procedural not gone! (but is more flexible)
- data types ~ int, string, float, bool

data structures — list, 2D list, dict

12. Building a class

goal for this week — write a card game

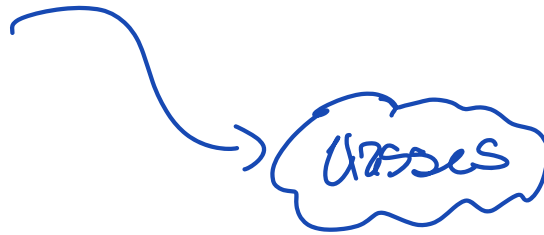
B/C OOP Approach: any card game!
??
O

what objects do we need?
what's common to card games?
How do objects interact?

} can put together
lots of games

Starting Point:

- 52 card deck
- 2 person game
- way to win/lose



	<u>card</u>	<u>deck</u>	<u>player</u>
<u>attrs</u>	suit value color?	52 cards	score 10
<u>methods</u>	play discard compare	shuffle deal remove 2 card	evaluate cards take card give card