CS 209
Data Structures and Mathematical Foundations

02 / 05 / 2024

Instructor: Michael Eckmann

Today's Topics

- Questions/Comments?

- Continue Python review

  - Writing our own classes – finish the Deck class

class

- What does a class need to be instantiable (that is, to be able to make objects of that class type)?

class

- Think of a **class** as containing
    - Data (aka **instance variables**)
    - **Methods** (functions that work on one or more instance variables of one **object** of the class)
- An **object** is an instance of a class.
- Example:

    word = 'Skidmore'

    another_word = 'College'

- word and another_word are both objects of the class str.

class

- What is a constructor? What do we name it?
- How to we create instance variables?

class

- Let's continue writing the Deck class
  - We'll add cut, shuffle and deal methods

class

- Instance variables that start with __ (two underscores) are private otherwise they are public.

- The effect of private instance variable are they cannot be referenced via an object. Public instance variables may be referenced via an object.

Special methods / operator overloading

- Some special methods in classes
  - __str__   --- gets called by str(__)
  - __eq__   --- overloads the == operator
  - __gt__
  - __lt__
  - __ge__
  - __le__