CS21: INTRODUCTION TO COMPUTER SCIENCE

Prof. Mathieson

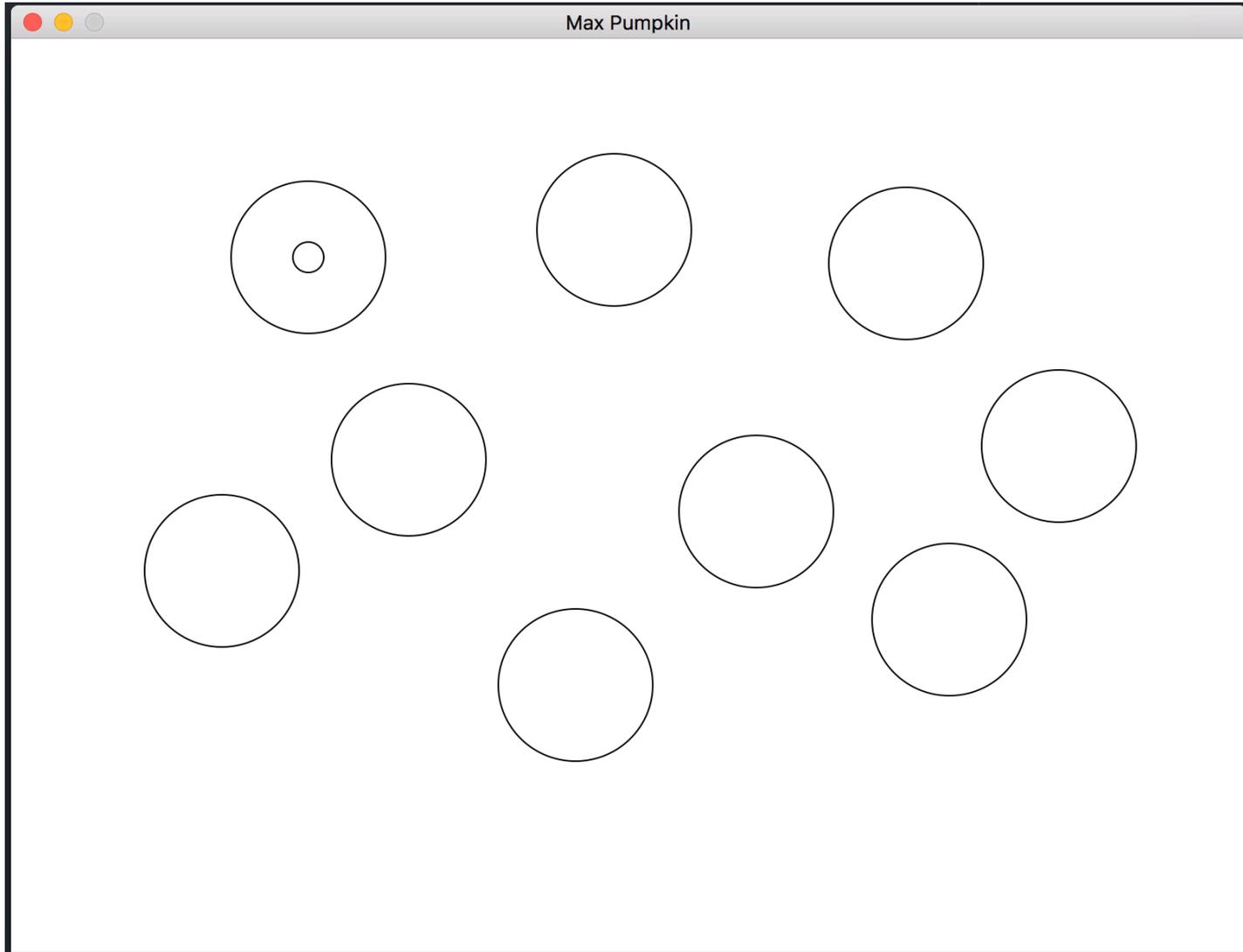Fall 2018

Swarthmore College

Outline Nov 2:

- Quiz 3

- Max pumpkin TDD

- Slicing and Assert (didn't cover in class)

Notes

- **Lab 7 TDD** due **Saturday** night (email me when you finish TDD!)
- Ninja session tonight 7-9pm (in this room)
- Office Hours **TODAY 3-5pm**

Max Pumpkin TDD

Example of TDD "output"

Assert

(optional topic, didn't cover but it is useful for debugging)

Assert

- A key word and a way of checking that certain conditions are met before proceeding
- Very helpful for debugging
- **AssertionError** is a type of error
- The expression after **assert** *must* evaluate to a **boolean**

```
>>> x = 7
>>> assert x < 10
>>> assert x > 10
Traceback (most recent call last):
  File "<stdin>", line 1, in <module>
AssertionError
>>> guess = input("> ")
> gladiator
>>> assert len(guess) == 9
>>>
>>> my_lst = [3,4,5]
>>> assert 3 in my_lst
>>> assert 7 in my_lst
Traceback (most recent call last):
  File "<stdin>", line 1, in <module>
AssertionError
```

Slicing

(didn't get to in lecture, but just a review of lab a few weeks ago)

Slicing (for sequences: list, string, range)

- Slicing produces a subset of the original sequence
- It does not change the original sequence

String example

```
>>> word = "Friday"
>>> word[3:6]
'day'
>>> word[:3]
'Fri'
>>> word[3:]
'day'
>>> word[:]
'Friday'
```

List example

```
>>> my_lst = [0,1,2,3,4,5,6,7,8,9]
>>> my_lst[3:6]
[3, 4, 5]
>>> my_lst[:3]
[0, 1, 2]
>>> my_lst[3:]
[3, 4, 5, 6, 7, 8, 9]
>>> my_lst
[0, 1, 2, 3, 4, 5, 6, 7, 8, 9]
```