

COMP
110

LS 23 - Object Oriented Programming

Object Oriented Programming

Lets you create new objects in your program.

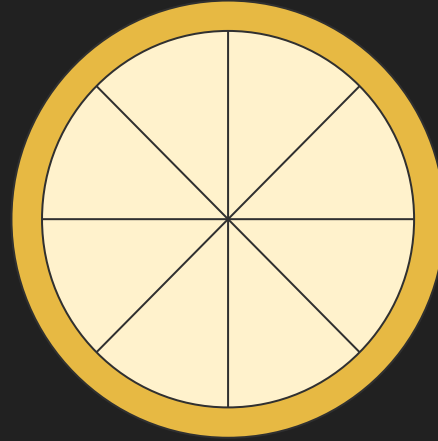
“Type” ~> “Class”

“Data/Variables” ~> “Attributes”

“Functions” ~> “Methods”

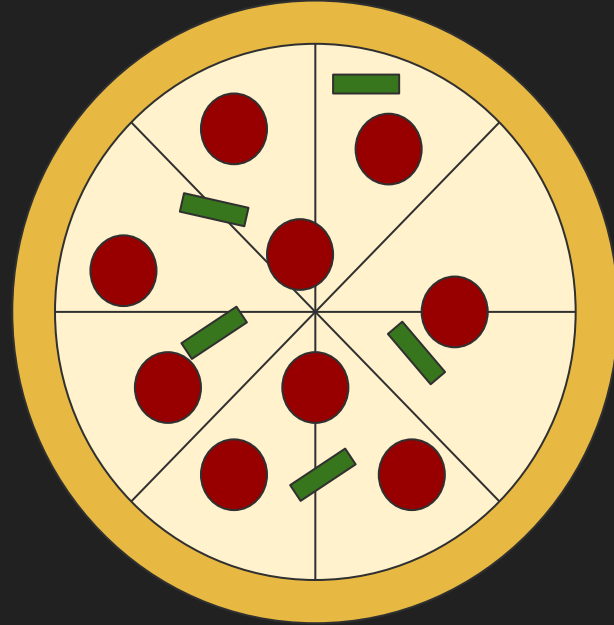
Example: Pizza

size: small toppings: 0 gluten free: no



Example: Pizza

size: large toppings: 2 gluten free: yes



Attributes

- variables that belong to each instantiation of the object
- Syntax:

`<attribute name> : <type>`

`gluten_free : bool`

Constructor

- Method that defines what happens when new object is created
 - Signature Syntax:

`def __init__(self, <other parameters>):` *Essentially returns `self`

- Instantiation:

`<class name>(<arguments>)`



Methods

- Functions that belong to an object •

Calling a method: `price(my_pizza)` ~>

`my_pizza.price()` • Defining a method:

```
def <method_name>(self, <other parameters>) -> <return type>:
```

```
def price(self) -> float:
```