Object Oriented Programming - Classes and Why Do We Need Them?

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Classes and Why Do We Need Them?

A Class

class Student:

Defining a new class

student = Student()

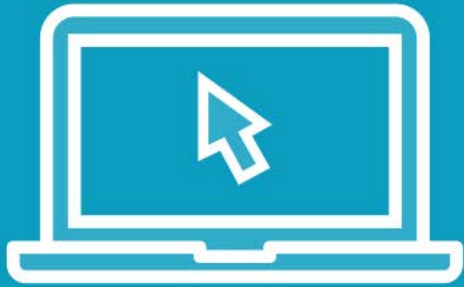Creating a new instance of a Student class

Class Instances

```
mark = Student("Mark")

james = Student("James")

jessica = Student("Jessica")


mark != james != jessica
```

Demo

Defining a Class in Python

Class and Instance Attributes

Comments

Single-Line Comments

```python
# Set the student name here

name = "Mark"


def add_student(name):

    last_name = ""   # Set as empty for now, pending feature
```

Multi—Line Comments

```python
def add_student(name, student_id=332):

    """
    Adds the student to the student list.
    :param name: string - student name
    :param student_id: integer - optional student ID
    """

    student = "Mark"

    ...
```

Summary

Writing Classes

Special Class methods

Overriding Class behavior