

Module 1 - Lecture 6

Introduction to Objects



Review

- Command Line programs
- Reading in data
- Parsing data
- Writing data to the console



Objects!

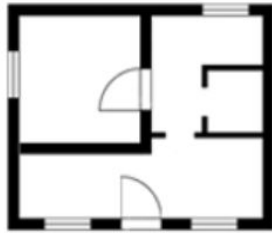
What is an Object?

An **object** is an in-memory data structure that combines state and behavior into a useful abstraction.



Classes

A **class** is a grouping of variables and methods in a source code file from which we can generate objects.



Blueprint

Class



Object



Object



Creating an Object

Declare:

```
House myHouse;
```

Instantiate and Initialize:

```
myHouse = new House();  
myHouse = new House("Red");
```

All in one:

```
House myHouse = new House("Red");
```

There is that **new** keyword again.



Strings

- They are an object, but they have a few unique characteristics.
 - Do not require the **new** keyword, but can use it.
 - Immutable
 - Are pooled by Java
- Like other objects, they have methods and properties that we can access.



Let's Code!

QUESTIONS?

