With an overview of what object-oriented programming should be about, details are needed to complete a program. This video will talk about fields and how a programmer should use them. There are different fields that a person can use to give details that can make up what their objects have as data, These are done using variables that every programming language uses and are simple to learn. This video will show integers and doubles, keywords used for numbers in Java and many other languages. There will also be a part on Strings as they will print out text for users to read on the console. Let's start this video and get you interacting with variables.

We can start of with integers and doubles, the ones that deal in numbers. These keywords are not the only ones that a programmer can use when dealing in numbers, but will be the ones I will be using for this video. Integers only work with whole numbers, which means that only 1, 2, 45, -160978 can be used when making an int variable. Then there is the double variable that can be used with real numbers. Real numbers are 12.0, 1.34, 8.69, -2.0 and other like numbers. These two give very good distinctions between the type of numbers they use. It is the difference like "How much water bottles?" and "How many is the computer worth?" that int and double are used for.

With this in mind, lets start to use this in an example. Here, we have a class that has a cat object. Lets now put in a couple of integers and some doubles. Now to have these as proper variables they will need identifiers, names that are not keywords so Java does not get confused. We will use teeth, claws, and eyes for the integers. Mainly because these physical attributes would have whole numbers for them. Now for the couple of doubles we have here, let's use fish and water. It will be an indication of how much fish a cat can eat and water they can drink. We will use these later when we add methods to this object.

Strings will be used to send out text and words that will be read on the console. Strings need to follow a set of rules for them to be used in programming or they program will get some errors. The main rule is that the text used for strings must be surrounded by double quotation marks, like so. Concatenation is when you add a plus sign between what you intend to print, as what I will show you here. This will add say numbers or previously made integers to the printed text, and will also add some more text if need be. So we can use this statement in the same line, however make sure that there is a space from the quotation mark. If there is not one, you can end up with a line of text printing out like so.

Okay so we can add more to the class that we were building before. Let's add a couple of String variables. And we can initialize them right away as well. Lets have purr set as Purr, and m set as Meow. For these other two, I am going to show you that identifiers can have weird names. The underscore scre underscore ech will be Screech, and the $h will be Hiss. These identifiers show off all the legal ways that they can be made. These variables will be used later when we set up the methods and will become clearer as to why this is the setup I chose.

So now we have some details for our cat object. We have fleshed out just some of what can be in it, and if you want to add more go ahead. I am giving a blueprint for this object on how I would start it, so go ahead, be free, and make some of it your own. That is how you will truly learn to make your own programs. And with these new fields in play, you can now add whatever details you wish to do. Fill out more, make better descriptions, add fur, age, color, this is the power of programming. My best wishes to you, I will teach you what I know and send you off from there.