

Course: CSE 110

Class Place/Time: STC 385 2:00 PM

Instructor: Briggs, Quinn

Date Observed: February 27, 2023

SCOT name: Hadley, David

Class Notes

SCOT Observations

- Matthew 7:12- Golden Rule.
- Creating a List
 - A list is a fundamental data structure in programming.
 - Python can create an empty list using square brackets.
 - We can also create lists with items already in them
 - Movies = ["toy story", "pride and prejudice"]

We can create lists if strings, numbers and many other things.

- In python it is possible to create a list with a mixture of things but this is a bad practice.
- It is good to have lists that only have one type of data so that your list has a clear purpose.
List names
- For lists it is good to use a plural noun to describe the list.
- This ensures that its clear to the programmer that more than one thing is being represented.
- Python can also create lists using the list() function
- For this reason, you should never use list as your descriptor.
Create a list with your 4 favorite fruits.

Liked the agenda at the beginning. Nice to know what is coming in the class.

Gospel. Loved that it was structured but allowed for general participation. Like that he said you don't have to understand everything at once. Said you will get used to knowing what brackets to

Difficult to keep up, but only because I am unfamiliar with the content

Like the clarifying questions to help understanding. "Why is this a bad practice?"

People were talking to one another at my table to clarify which made me feel really good about asking questions.

Liked the idea of practicing in class. (In my R class, I would think I understood the concepts but then got home and was missing something, I like that time was given to work through potential issues in class.)

- Dynamically adding to lists

Sometimes we don't know in advance what will be in the lists

If we need to add to a list programatically, we can use the `.append()` function like so:

```
Books = []  
books.append("1 Nephi")  
books.append("2 Nephi")  
books.append("Jacob")
```

Looping Through Lists

From our earlier study of loops, there are a few ways to loop over lists.

The first is called the "for each" method

We can also use the `enumerate()` function.

Remember that the computer will always start at position 0, not 1

List Reductions

One common use of a list is to "reduce: the list to a single number

This might be adding all the numbers together, finding the average, finding the smallest number, etc.

In the example below, I keep a running total which sums up all of the numbers

Start with a variable like SUM set to 0, and add each item in the list to that variable.

Felt like I had to get everything from the PowerPoint so I missed things that were being said by the instructor. Would be very nice to have these PowerPoints available on canvas or something.

Everything was very easily seen and heard from the back of class.

I think this is because I was not doing the practices, but I started to fade at this point. I like the practices however and think they are a good break point in the lecture.

I like that we are working through assignments in class, even if they are smaller versions of larger assignments that are done outside of classes. My biggest fear with coding is that I'll be stuck outside of class.