Agenda

- APT’s and Large Assignment
- Course topics overview
- What is a function?
- APT demo (what is the Green Dance?)
- Eclipse demo
# Course topics

- Variables
- Types and values
- String
- Function
- For loop
- If
- While loop
- Lists
- Set

- Tuples
- Dictionaries
- Sorting
- Recursion
E-mail example

1. http://www.pythontutor.com/visualize.html#
2. Copy Emial function and step through slowly
3. Change companyDomain to “ajaxInc.com”
4. Change function to
   emailGen(name, lastname, year) so that this call
   emailGen(“Peter”, ”Lorensen”, ”1993”) prints
   PeterLorensen93@ajaxInc.com
Nathan Myhrvold

• Who is he?

We invent for fun. Invention is a lot of fun to do. And we also invent for profit. The two are related because the profit actually takes long enough that, if it isn't fun you wouldn't have the time to do it.

Computer programs

User

Database
Program full of functions

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Start() --> Function()
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Function() --> Function() --> Function() --> Function() --> Function()
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Peter Lorensen
Function details

name can be anything

Functions always has ()

0 or more arguments

def name(...argument1, argument2, ...):
    code....
    code...
    return value1, value2, ...

Must indent code

0 or more return values
def emailGen(name, year):
    companyDomain = "ajax.com"
    firstName = name  # Assigning the incoming name to my own variable
    strYear = year    # Assigning the incoming year to my own variable

    intYear = int(strYear)  # Converting from str to int
    intYear = intYear - 1900  # Removing the 1900 from the birth year so that only two digits is left
    strYear = str(intYear)  # Converting back to string type

    email = firstName + strYear + "@" + companyDomain

    return email

# Calling the function above with different names and years. Note the year is a string.
print emailGen("Peter", "1993")
print emailGen("Ola", "1991")