Exceptions in Python

Exceptions are like a fancy

slow, but not true in Python. People will tell you they're

Old languages:

Look before you Leap

Python:

Easier to Ask Forgiveness than Permission

Types of exceptions:

- try/except/else/finally
- raise
- assert
- with/as

Exception formatting:

raise Exception("text description of the exception")

CIT-129: Python 2

- assert(Boolean), "text description of what may've failed"

or something that might throw an exception otherwise # code goes here, probably something w/ an assert except ExceptionType as e: # technically optional

can use e as variable, e.g. print(e) # what we do if an exception happens else: # optional

(with/as, or catching errors

w/finally)

to make termination easy

expected)

checking for weirdness (an assert to make sure all is as

but program shouldn't stop

a function won't be able to

perform as expected

error that should be logged

DB won't connect

file not found

Times to use exceptions:

exception, it'll bubble to the top (the "default exception handler")

and crash your program,

printing to console.

If you don't catch (except:) an

what we do if no exceptions happen finally: #optional

we do this whether or not there's an exception # often it's cleanup

with open('filename') as variable name: # do things with the file

Times to use exceptions:

- file not found
- DB won't connect
- but program shouldn't stop error that should be logged
 - a function won't be able to perform as expected
- assert to make sure all is as checking for weirdness (an expected)
- (with/as, or catching errors to make termination easy W/finally)

(the "default exception handler") exception, it'll bubble to the top If you don't catch (except:) an and crash your program, printing to console.

Exceptions in Python

Exceptions are like a fancy

slow, but not true in Python. People will tell you they're

Old languages:

Look before you Leap

Python:

Easier to Ask Forgiveness than Permission

Types of exceptions:

- try/except/else/finally
- raise
- assert
- with/as

CIT-129: Python 2

Exception formatting:

- raise Exception("text description of the exception") assert(Boolean), "text description of what may've failed"

or something that might throw an exception otherwise # code goes here, probably something w/ an assert except ExceptionType as e: # technically optional

can use e as variable, e.g. print(e) # what we do if an exception happens else: # optional

what we do if no exceptions happen

finally: #optional

with open('filename') as variable name: # often it's cleanup

do things with the file

we do this whether or not there's an exception

by Coral Sheldon-Hess