Programming

Dealing with the unknown

- User's input
- User's system
- System's failure
- Fallback (timeout,

Ways to think

- Conditions
  - If / else
  - In control
- Often you won't be in control

Exceptions

- A program terminates when it encounters an error
- Syntax error VS Exception Error

Exceptions in Python

- All exceptions inherit from the base class Exception

- Exceptions "bubbles up"

- Try / Catch / Finally blocks

```
try:
    # do something
    # protect it with a try block
catch Exception as e:
    # do something with exception
    # stabilize the program
finally:
    # whatever happens, goes here
```

Examples

Raise

- `raise Exception("I'm raising an exception")`
- Inherit from Exception
- `raise ValueError("I'm raising an exception")`

Example

Exercice

- Create a function that takes a question, a response and a number of seconds

- Do a while loop, if the response is valid, the user wins

- The user can try as long as the time stays within the number of seconds

- If there is the time is up, raise an exception named "ItWasTooLongException"