

JavaScript as a second
language

```
let languageWeUse = 'JavaScript'
```

```
if (intimidating == true) {  
    dontPanic('about it')  
}
```

Types of languages

- natural languages (English, Mandarin)
- formal languages
 - symbolic (math, logic)
 - computer languages (JavaScript, Python)
- constructed languages (Esperanto, Klingon)

Parts of speech

Parts of speech

- noun: a thing
 - proper noun: a specific, named thing
- verb: an action
- adjective, adverb: modifies a noun, verb
- conjunction: used to combine words and phrases
- preposition: determines how one noun relates to another
- interjection: a word used to express emotion

Programming

- noun ⇨ variable
 - proper noun ⇨ object
- verb ⇨ function
- adjective, adverb ⇨ declaration
- conjunction ⇨ control flow
- prepositions ⇨ operator
- interjection ⇨ errors and promises

Document structure

- phrase: a group of words forming a unit
- sentence: one or more phrases to describe an event/concept
- paragraph: one or more closely related sentences
- punctuation: used to delineate phrases, sentences, etc.
- section: a group of related paragraphs, usually under a subhed
- essay, story: a relatively short document comprised of only paragraphs or sections
- chapter: a group of related sections within a larger document
- book: a lengthy document consisting of related chapters
- library: a collection of books, often for checkout

Software structure

- phrase ⇨ expression
- sentence ⇨ statement
- paragraph ⇨ block
- punctuation ⇨ symbols, white space
- section ⇨ section
- essay, story ⇨ script
- chapter ⇨ component
- book ⇨ application
- library ⇨ library

Object-oriented
programming

Classes

- In natural languages the *individuals* described by proper nouns are often called a *kind* of thing. The members of a *kind* typically have a common set *attributes* (e.g. age) and *capabilities* (e.g. speak).
- In object-oriented programming (OOP) *objects* have *classes*. The *members* of those *classes* have a common set of *attributes* (variables) and *methods* (functions).

Subclasses

- In natural languages, within one *kind* of thing can be multiple more specific *kinds* of thing. For example, Great White Sharks are a kind of shark. A church is a kind of building. A pomeranian is a kind of dog.
- In computing we call that a *subclass*. Subclasses *inherit* their parent class's attributes and methods, but can add new ones and remove or modify existing ones.

Lab #1

Create a github.com
account

create an

observab1ehq.com account

daniel.buzz/data-journalism

Click on Lab 1