Data Visualization:

Some Techniques

mpsm311 Electronic Projects for Artists

Types of data: ?

Static vs. Dynamic

Structured vs. Unstructured

Types of data: Static

- Census

- Image databases -Satellite maps

- Internet Server Logs

- Facebook Posts

Types of data: Static

How do we get it?

- Download (e.g. Project Gutenberg)

- Public Government records

- Facebook Posts

- "Data/Screen Scraping" (unscructured)

- API (Application Programming Interface) (structured)

Types of data: Dynamic

- Heartbeat

- Titter feeds

- Sensors generally (light temperature)

- Subscriptions (If This, Then that IFTTT)
                        `https://ifttt.com/`

Types of data: Dynamic

How do we get it?

- API (Application Programming Interface) (structured)

- Network Streams (remote Raspberry Pi's)

- Connected sensor streams -Arduino

Data formats:

- `.txt`   Text files

- `.tsv`   Tab Separated Values

- `.csv`   Comma Separated Values

- `.xml`   Extensible Markup Language

- `.JSON`   Javascript Object Notation

XML looks like this:

(example: note.xml)

```
<note>
<to>Tove</to>
<from>Jani</from>
<heading>Reminder</heading>
<content>Walk the dog.</content>
</note>
```

JSON looks like this:

```json
{
    "book":[
        {
            "id":"444",
            "topic":"Cooking",
            "author":"Julia Child"
        },
        {
            "id":"555",
            "topic":"Programming",
            "author":"Casey Reas "
        }
    ]
}
```