10, 50, pune, sunbeam
raw data — meaningless
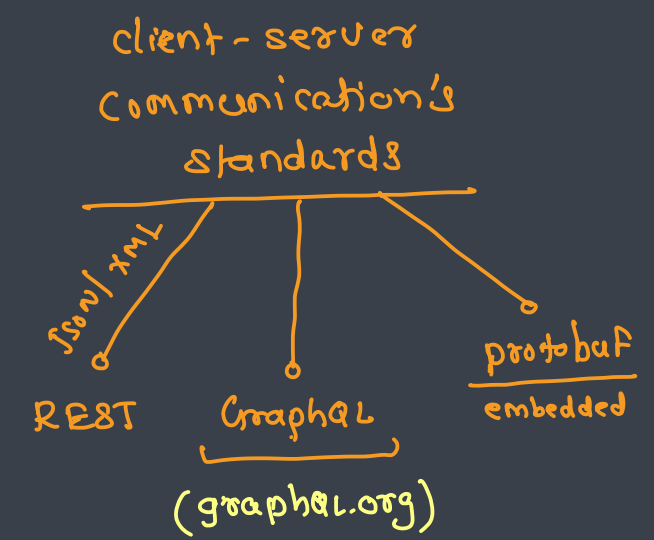⇓
structure
⇓

XML
<person>
<age> 50 </age>
<comp> sunbeam
    <\comp>
    :
<\person>

JSON
{
    "age": 50,
    "comp": "sunbeam",
       :
}
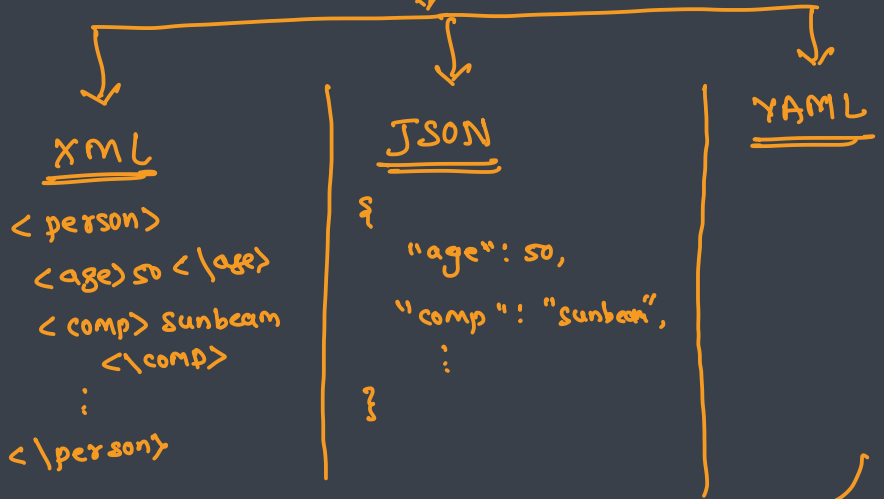
YAML

information
(meaningful)

client-server
communication's
standards

Json/xml
REST

GraphQL
(graphal.org)

protobuf
embedded

YAML

Overview

- YAML is the abbreviated form of "YAML Ain't Markup Language"

- It is a data serialization language which is designed to be human -friendly and works well with other programming languages for everyday tasks

- It's often used as a format for configuration files

- It's also easy to for humans to read, which is why it's a good choice for configuration

- It is useful to manage data and includes Unicode printable characters

Features

- Matches native data structures of agile methodology and its languages such as Perl, Python, PHP, Ruby and JavaScript
- YAML data is portable between programming languages
- Includes data consistent data model
- Easily readable by humans
- Supports one-direction processing
- Ease of implementation and usage

Basics

- YAML is case sensitive

- The files should have **.yaml** or **.yml** as the extension

- YAML does not allow the use of tabs while creating YAML files; spaces are allowed instead

- Comment starts with #

- Comments must be separated from other tokens by whitespaces

Scalars

- Scalars in YAML are written in block format using a literal type

- E.g.
    - Integer
        - 20
        - 40
    - String
        - Steve
        - "Jobs"
        - 'USA'
    - Float
        - 4.5
        - 1.23015e+3

Mapping

- Represents key-value pair

- The value can be identified by using unique key

- Key and value are separated by using colon (:)

- E.g.

  → string

  name: person1
  address: "India"
  phone: +9145434345
  age: 40

  ← integer

  hobbies:
  - reading   } sequence   } mapping
  - playing

Sequence

- Represents list of values
- Must be written on separate lines using dash and space
- Please note that space after dash is mandatory
- E.g.

  # pet animals
  - cat
  - dog

  # programming languages
  - C
  - C++
  - Java

Sequence

- Sequence may contains complex objects

- E.g.
    - products:
        - title: product 1
          price: 100
          description: good product

        - title: product 2
          price: 300
          description: useful product