IoT resource tree representation for massive data set

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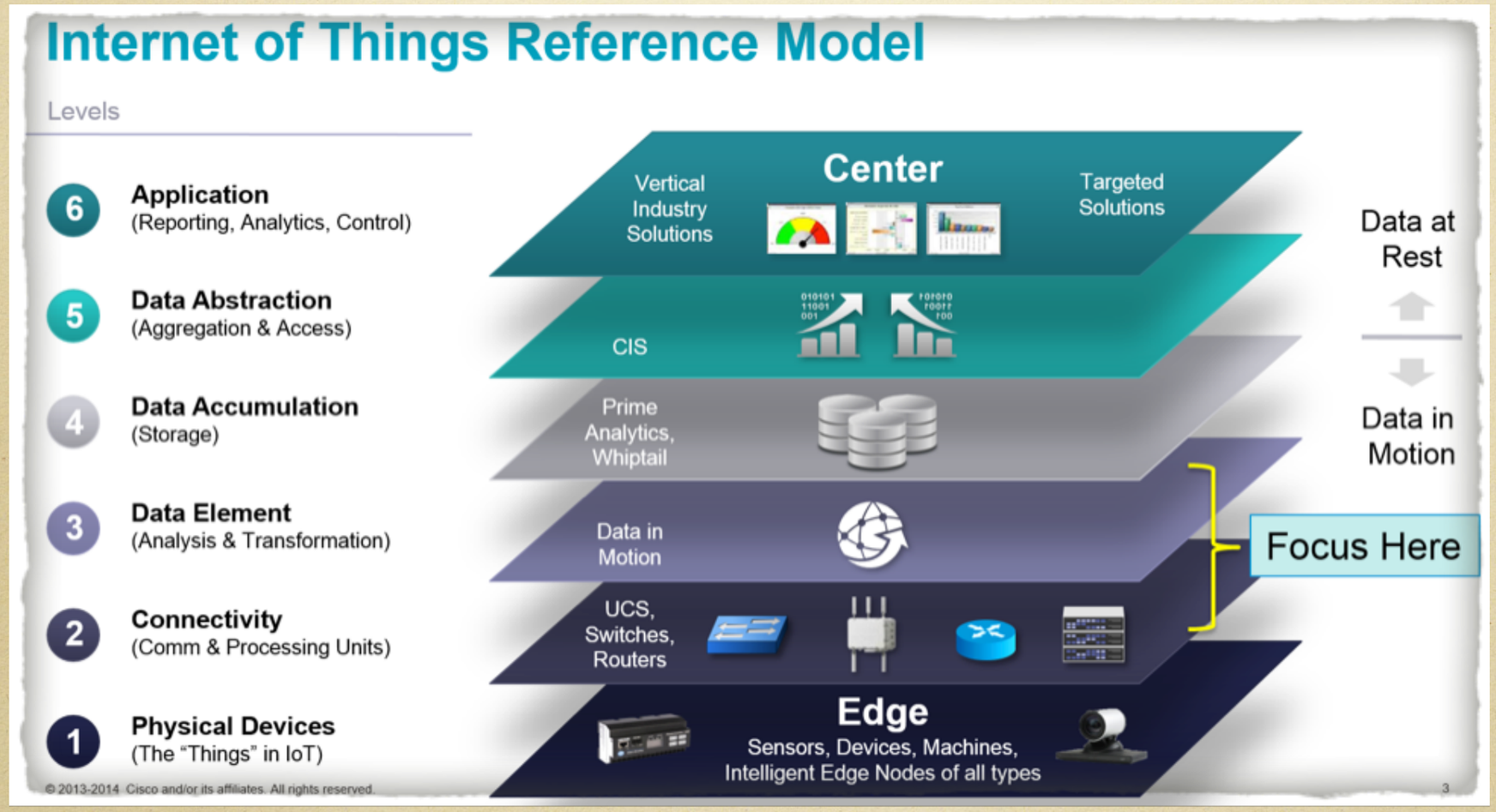
What is IoT

- Internet of Things: information originating from a multitude of devices whose information is pooled and queried by applications.



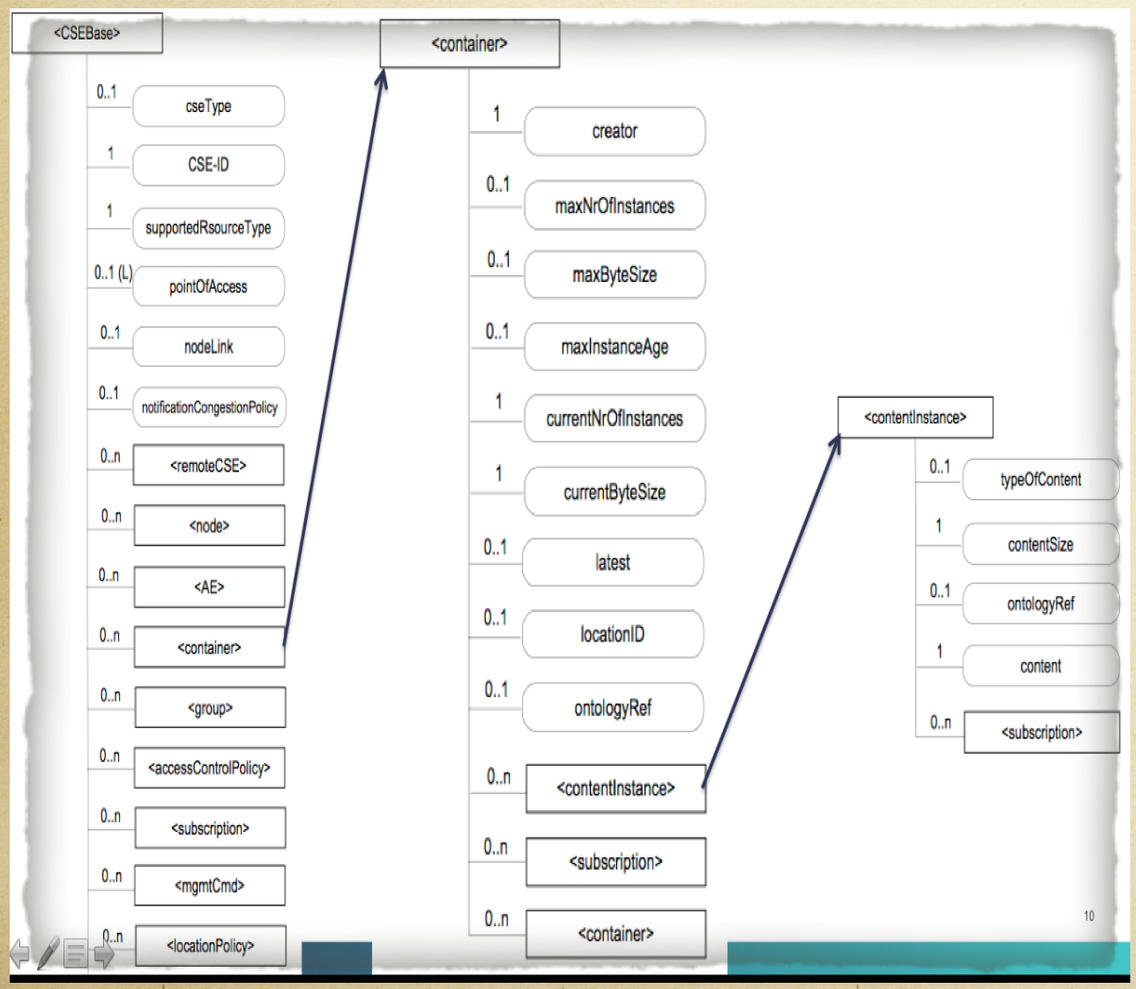
Source:

Goals of the project

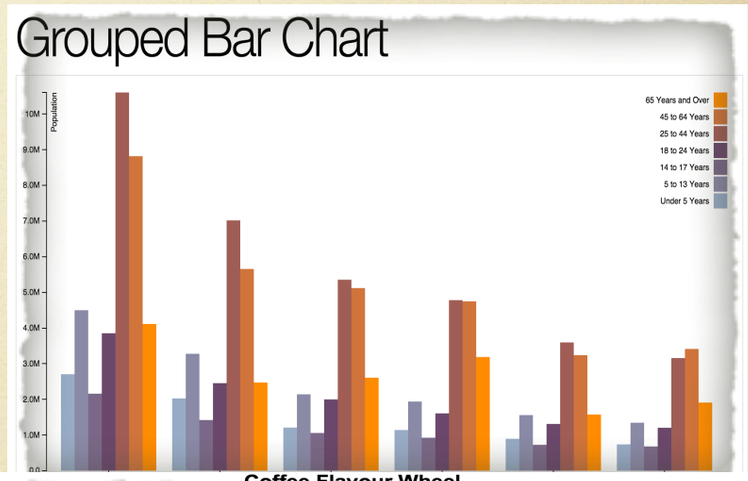
- Visualization : represent 10 million+ nodes
- Latency Optimization : a quick response time on the client-side.
- Data Management : Create Update and Delete nodes from the tree

Work towards a better visualization

- Data Structure: a hierarchical resource tree

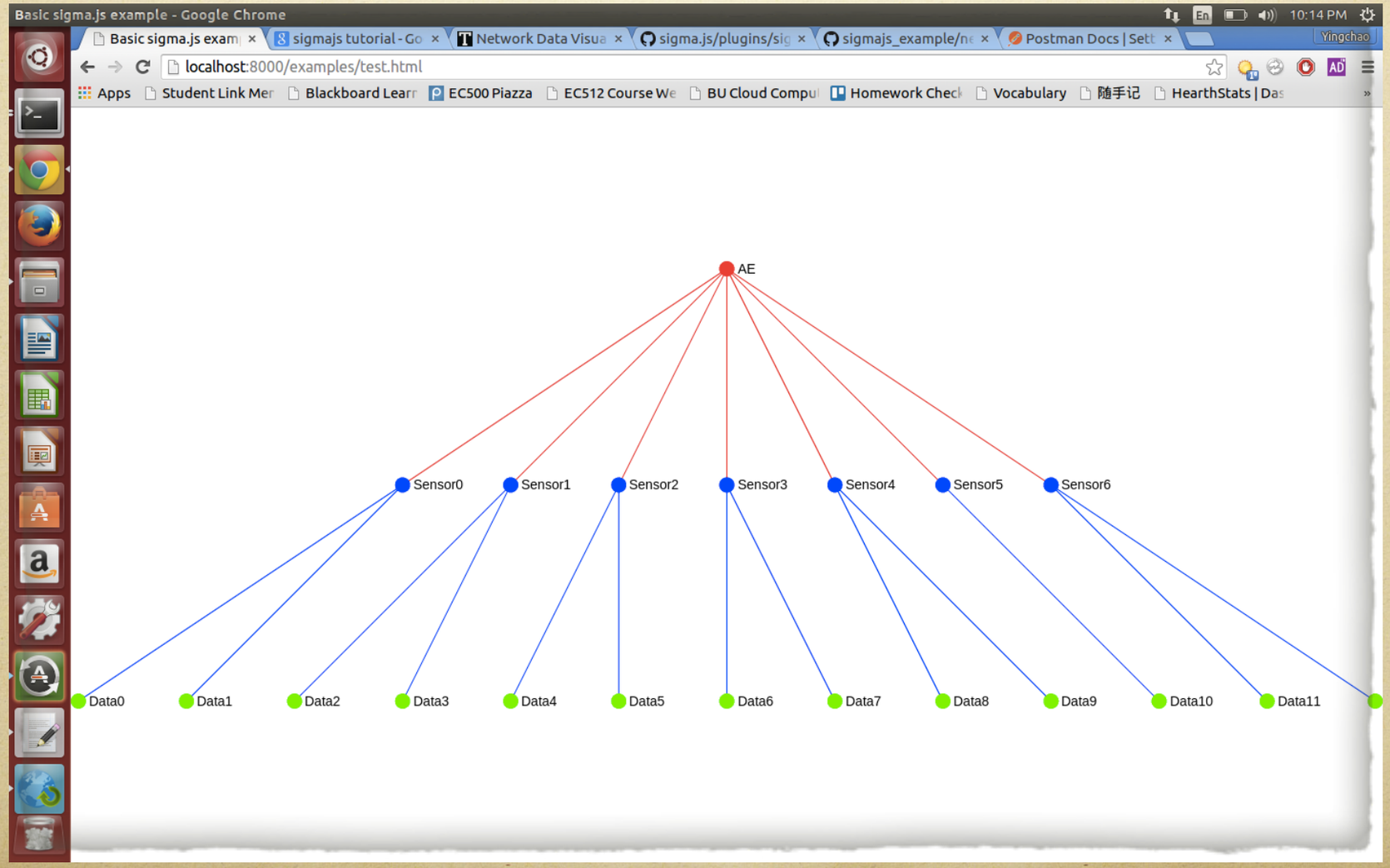


- Visualization Libraries:
  - D3.js/Yang.js/Sigma.js



Solution Concept

- Layer 1: visualization of AE and containers using sigma.js
- Layer 2: visualization of contentInstances



Work for the next Sprint

- Get the visualization of the whole tree

  - Generate dev tree using looped CRUD
    - syntax still evolving (weekly)

  - Retrieve the data in JSON format
    - either pipe or encoding JSON file

  - Implement “dynamic” data in Sigma.js via JSON