CSSE6400

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**Interesting Software is Complex** 

Many aspects to the design of its architecture.

#### **Architectural Design**

Managing technical complexity.

Question

How do you describe a complex architecture,

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**Answer** 

# **Architectural Views**

Only consider one aspect at a time.

- 4+1 Views [1]
  - logical, process, development, physical, scenario

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- The Open Group Architecture Framework (TOGAF) [5]
- ISO/IEC/IEEE 42010:2011 [6]

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    - address non-functional requirements
      - availability, reliability, scalability, throughput, ...

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    - address non-functional requirements
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- Scenario Demonstrate functionality delivered by architecture.
  - use case details
    - drive functional design of architecture
    - validate design of architecture
    - illustrate purpose of architecture

## Diagrams & Notation

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# Diagrams & Notation

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  - A thousand diagrams is just confusing.
- UML formal, well-defined language [7]
- C4 informal, simple structure [8]
- You probably don't want to know about alternatives.

Reading...

# "Architectural Views" Notes<sup>1</sup> [9]

<sup>&</sup>lt;sup>1</sup>Remember, I said you had to read the notes.

#### References

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Architectural views.

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