Software Architect

Software Architecture

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Learning Objectives

By the end of this video, you will be able to
• Explain what important skills are required for a good software architect.
• Explain the three major types of activities conducted by a software architect.
• Explain the four main anti-patterns on what software architects do.
What Do They Have in Common?

Bill Gates

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Ray Ozzie

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A Conversation at OOPSLA 1992 Workshop

• Participant: “Mr. Beck, what is software architecture?”

• Kent Beck: “Software architecture? Well, it is what software architects do.”

  *Chuckles in the audience*

• Participant: “So then, what is an architect?”

• Kent Beck: “Hmm, ‘software architect.’ It’s a new pompous title that programmers demand to have on their business cards to justify their sumptuous emoluments.”

(Kruchten, 2008)
Important Skills of Software Architects

• “Software architects should design, develop, nurture, and maintain the architecture of the software-intensive systems they are involved with.”

(Kruchten, 2008)

Domain Knowledge

Software Development Expertise

Communication Skills
What Do Software Architects Do? (Kruchten, 2008)

**Getting inputs:**
- Stakeholders: Customers, users, product manager, etc.
- Technologies
- Other systems’ architecture
- Architectural practices

**Providing info:**
- Communicating architecture
- Helping other stakeholders

**Architecting:**
- Architectural designing
- Prototyping
- Evaluating
- Documenting
- ...

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- Architecting: 50%
- Getting inputs: 25%
- Providing info: 25%
Anti-patterns on What Architects Do (Kruchten, 2008)

- Gold plating
- Ivory tower
- Absent architect
- Just consultants

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References


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