



# Chapter 3: The Many Contexts of Software Architecture



# Chapter Outline

- Architecture in a Technical Context
- Architecture in a Project Life-Cycle Context
- Architecture in a Business Context
- Architecture in a Professional Context
- Stakeholders
- How Is Architecture Influenced?
- What Do Architectures Influence?
- Summary



# Contexts of Software Architecture

- Sometimes we consider software architecture the center of the universe!
- Here, though, we put it in its place relative to four contexts:
  - Technical. What technical role does the software architecture play in the system or systems of which it's a part?
  - Project life cycle. How does a software architecture relate to the other phases of a software development life cycle?
  - Business. How does the presence of a software architecture affect an organization's business environment?
  - Professional. What is the role of a software architect in an organization or a development project?



# Technical Context

- The most important technical context factor is the set of quality attributes that the architecture can help to achieve.
- The architecture's current technical environment is also an important factor.
  - Standard industry practices
  - Software engineering techniques prevalent in the architect's professional community.
- Today's information systems are web-based, object-oriented, service-oriented, mobility-aware, cloud-based, social-networking-friendly.
  - It wasn't always so.
  - It won't be so ten years from now.