

# Application Architectures

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# Generic Application Architectures

- Application systems are designed to meet an organisational need.
- businesses have much in common  
→ their application systems also tend to have a **common architecture** that reflects application requirements.
- A generic architecture is **configured and adapted** to create a system that meets specific requirements.

# Use of Application Architectures

- As a starting point for architectural design.
- As a design checklist.
- As a way of organising the work of the development team.
- As a means of assessing components for reuse.
- As a vocabulary for talking about application types.

# Application Types

- Data processing applications
  - Data driven applications that process data in batches without explicit user intervention during the processing.
- Transaction processing applications
  - Data-centred applications that process user requests and update information in a database.
- Event processing systems
  - Applications where system actions depend on interpreting events from the system's environment.
- Language processing systems
  - Applications where the users' intentions are specified in a formal language that is processed and interpreted by the system.

# Application Type Examples

- Data processing systems
  - Billing systems; Payroll systems.
- Transaction processing systems
  - E-commerce systems; Reservation systems.
- Event processing systems
  - Word processors; Real-time systems.
- Language processing systems
  - Compilers; Command interpreters.

# We Will Inspect

- Graphical User Interfaces
- Web Service Foundations
- (Web) Content Management Systems
- User Interface & Web Design