SWINBURNE UNIVERSITY OF TECHNOLOGY

SWE30010
Development Project 2: Design, Planning and Management

Lecture 2a
Architectural Design

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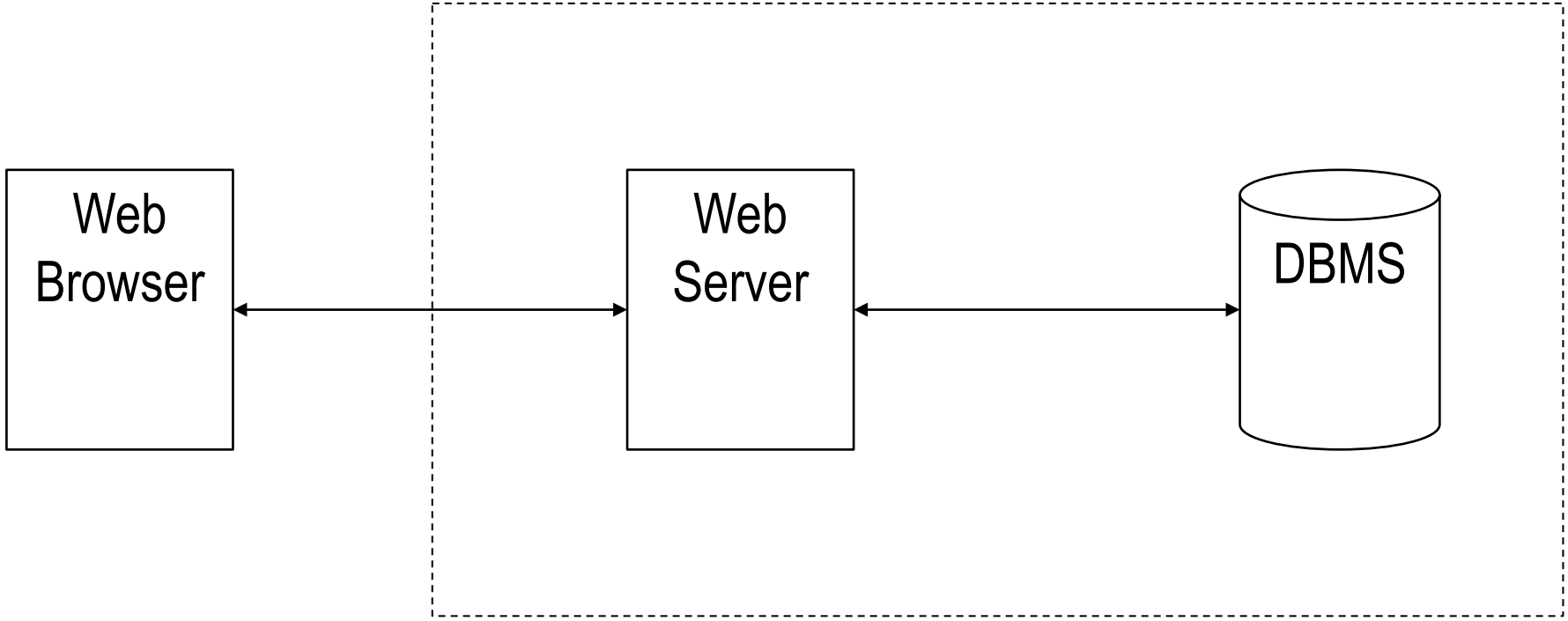
Roadmap

- Architectural Framework
- High Level Design

Architectural Framework

- Architecture – a “very” high level design outlining the general components of a system
- Example: Web application

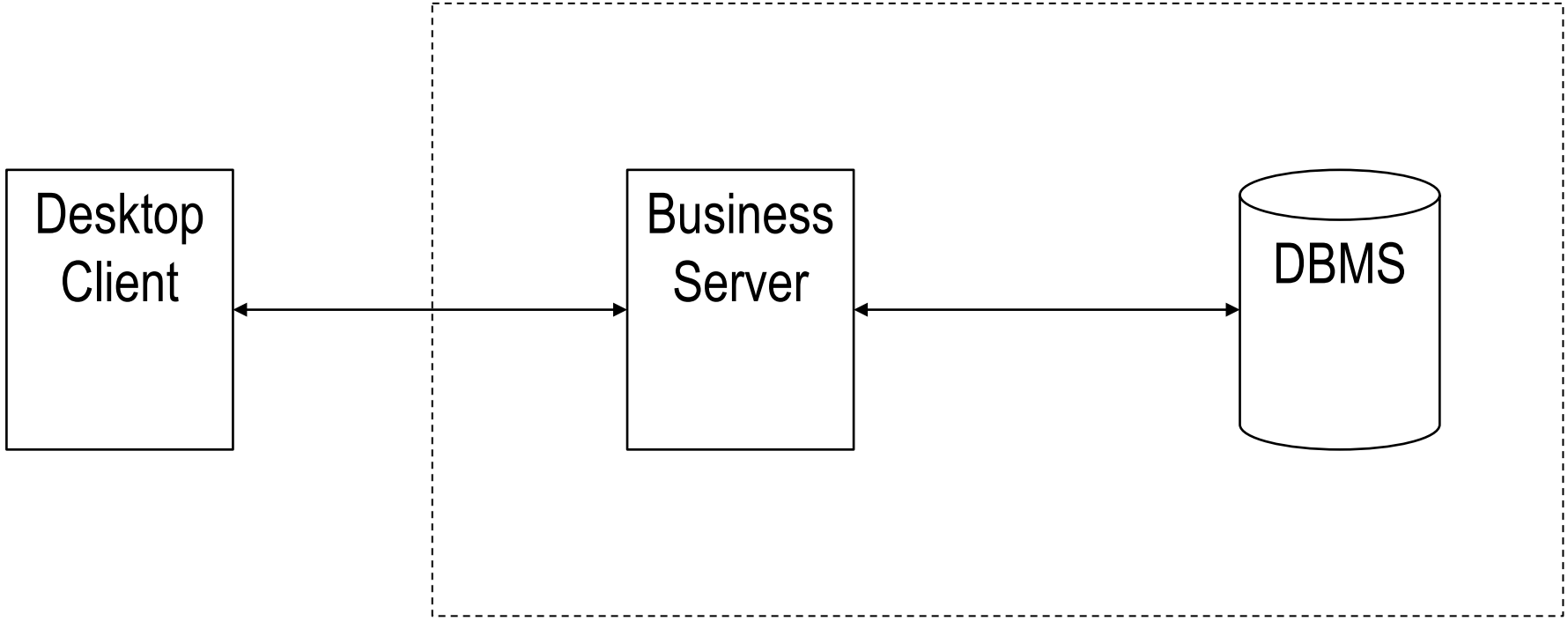


Architecture Framework – Desktop app

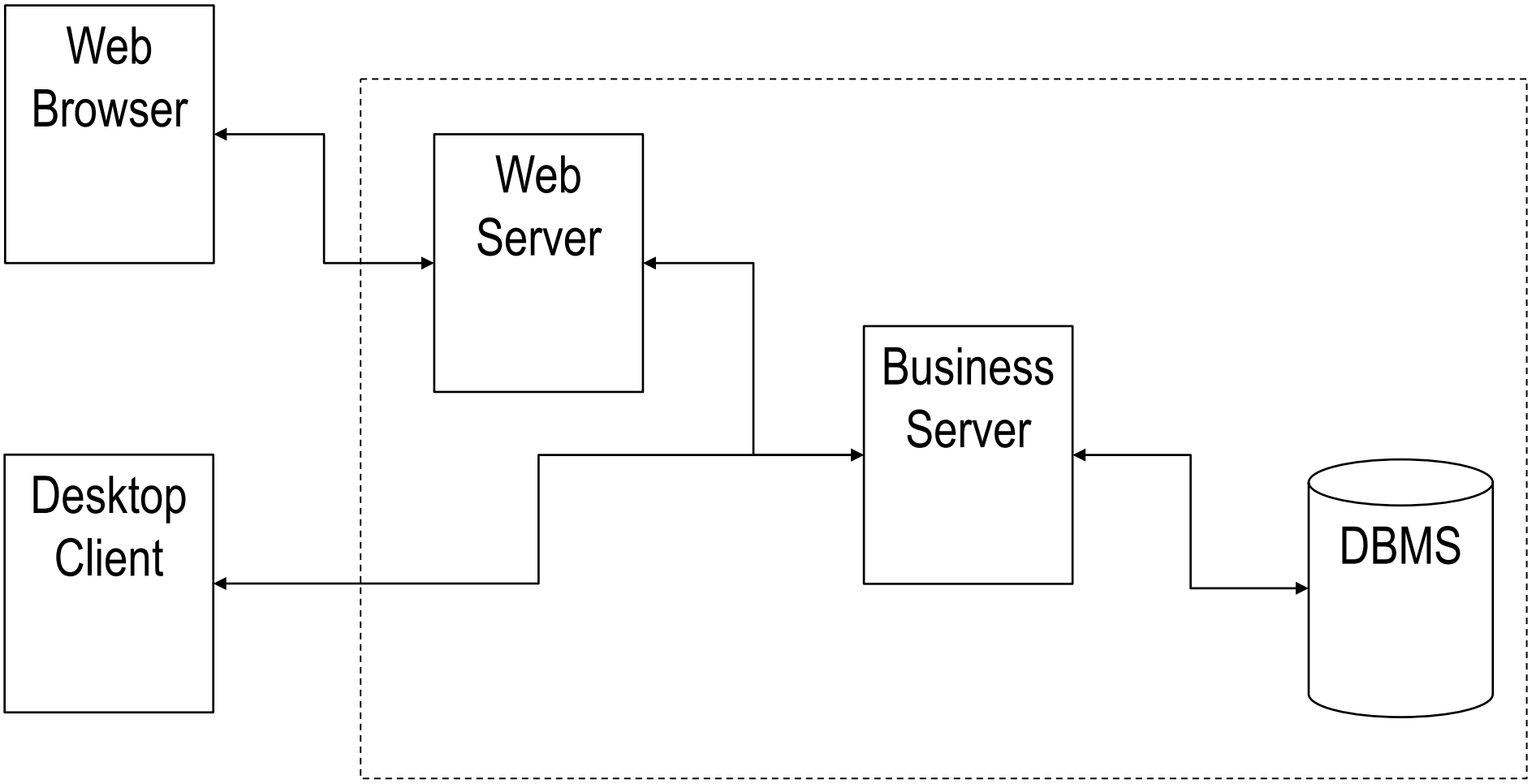
- Example: Desktop application (old days)

Architecture Framework – Desktop app

- Example: Desktop application

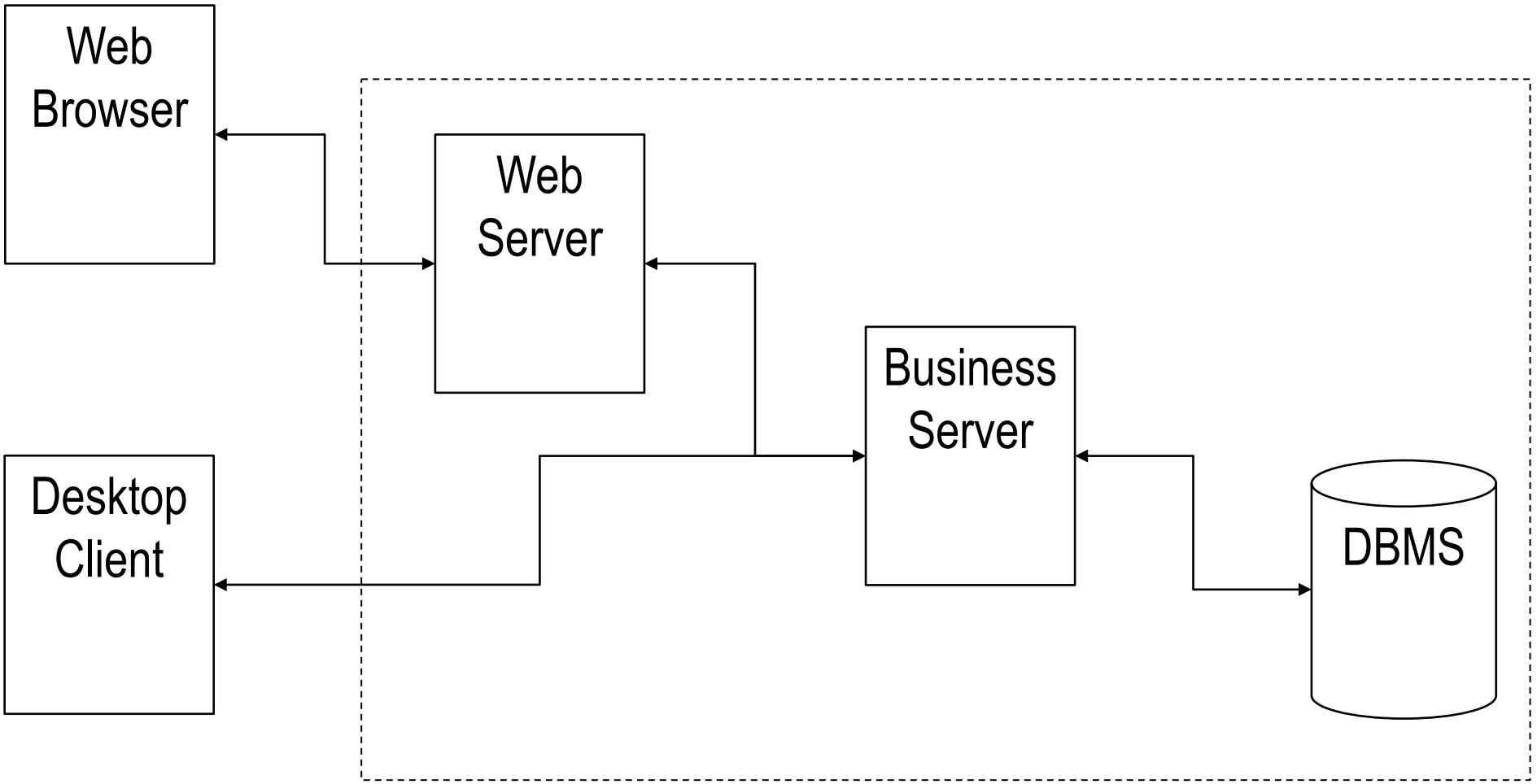


Enterprise Framework



Example – P.O.S. [Woolworths / Coles / …]

Example: Peer Review System (?)



High Level Design

- Software Components (e.g. classes / packages / namespaces)
- Where to put each software component
- How they interact to solve the business requirements
- Roles and Responsibilities of each software component

Design Principles (Recap)

- Strong cohesion
- Loose coupling
- Design with OO principles
  - Inheritance
  - Polymorphism
  - Information hiding
  - …

Design Pattern (Recap)

- Model View Controller (MVC)
- Façade