Distributed Systems

Lesson 4
RMI: Adding the DB Tier

University of New York in Tirana
Master of Science in Computer Science
Prof. Dr. Marenglen Biba

Lesson 4

01: Introduction
02: Architectures
03: Processes
04: Communication
05: Naming
06: Synchronization
07: Consistency & Replication
08: Fault Tolerance
09: Security
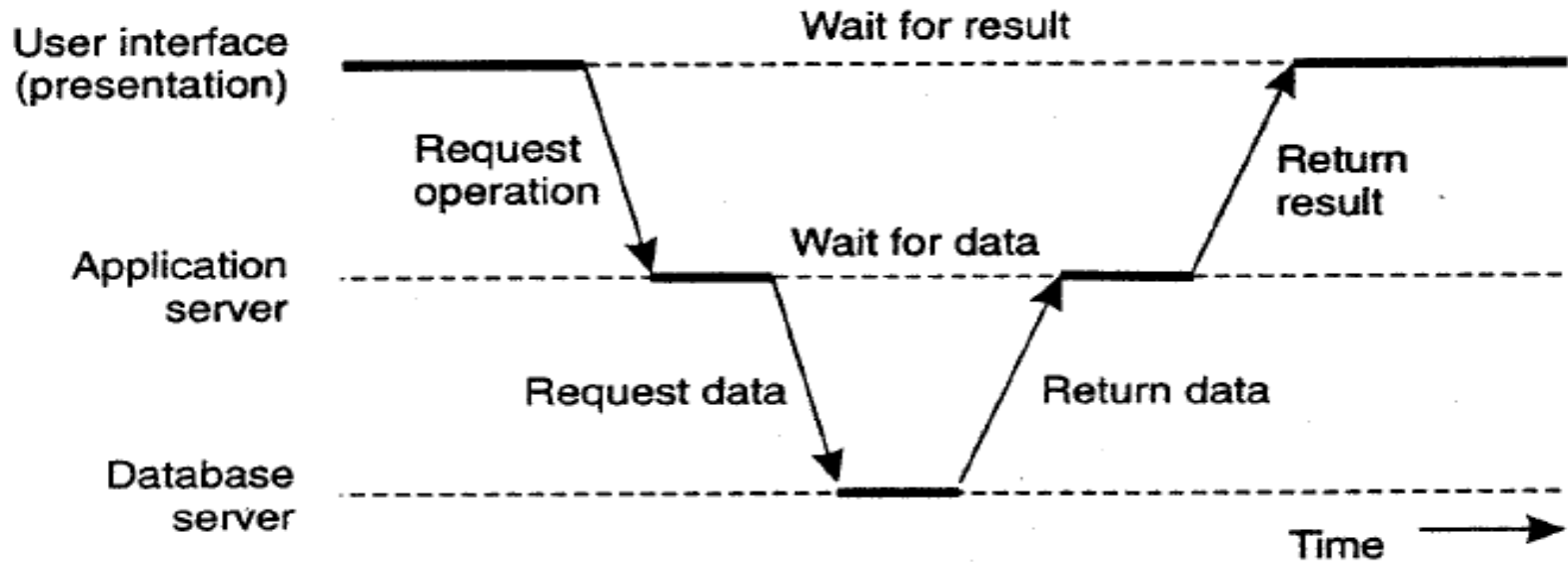10: Distributed Object-Based Systems
11: Distributed File Systems
12: Distributed Web-Based Systems
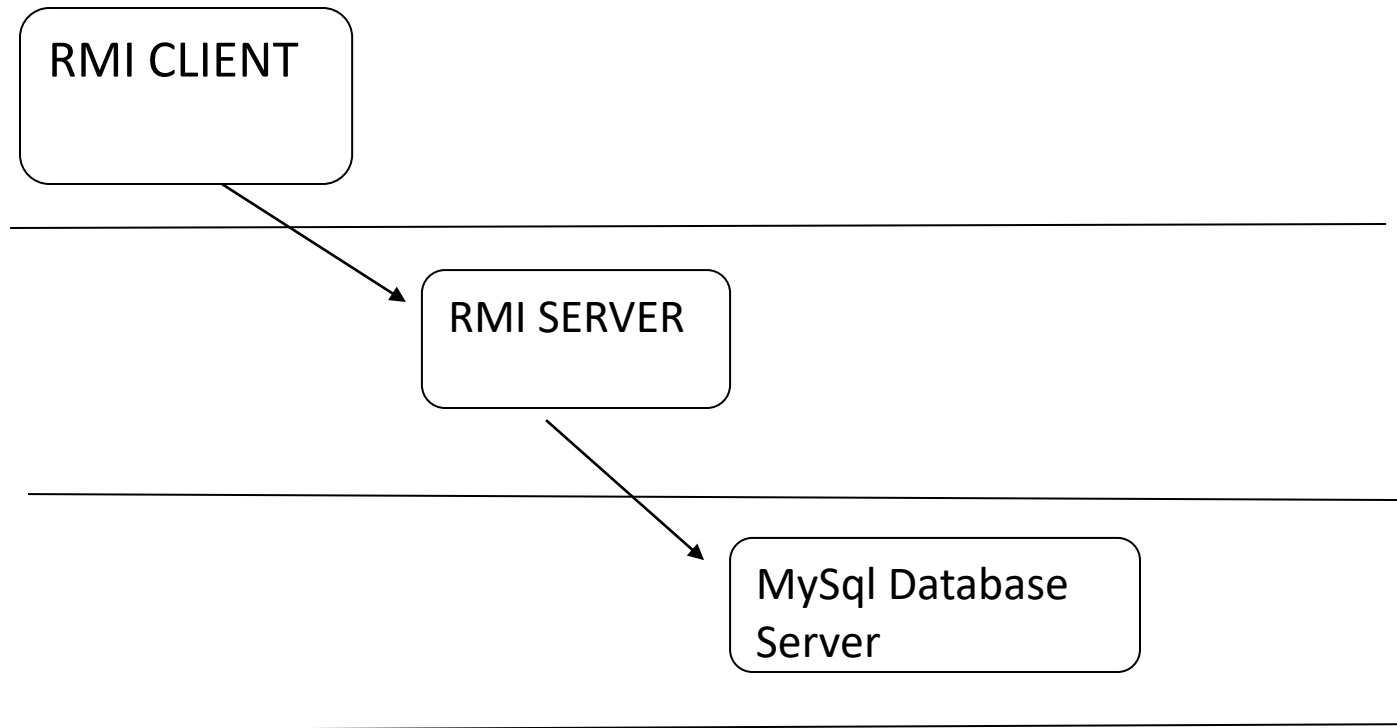13: Distributed Coordination-Based Systems

RMI + Database Server

- Last lesson: how to develop RMI client and server and how to call the server from the client.

- Today: how to introduce the database server and call it from the RMI server.

- Next class: how to develop a GUI for the RMI client and call the RMI server that reads all the bank data from the database server.

Three-tiered Architecture

Three tiers

RMI CLIENT

RMI SERVER

MySql Database Server

Practical Session: RMI + Database Server

- Refer to the Lab manual given in class for step-by-step instructions on how to develop your RMI application.

Steps

- Introduction of the database server

- Set up of MySQL

- Creation of database for bank application

- Test program for DB manipulation

- Development of banking application with RMI server and database access.

Readings

- Readings
  - Distributed Systems, Chapter 10
    - Sections 10.3.3 and 10.3.4

- Lab Manual on RMI-3 Tier given in class