



Prototype 1

Simple Architectural Structure

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Software Architecture

2026-I

1. Objective

The objective of the first delivery of the project is to build a **vertical prototype** of a software system, based on an **initial architectural design**.

2. Requirements

2.1. Functional Requirements

- The domain and the functional approach for the software system must be defined by the team.
- The functional scope of the prototype must be defined by the team.

2.2. Non-Functional Requirements

- The software system must follow a **distributed** architecture.
- The software system must include at least one **presentation-type component** (a web front-end).
- The software system must include at least two **logic-type components**.
- The software system must include at least two **data-type components** (a relational database and a NoSQL database).
- The software system must include at least two different types of **HTTP-based connectors**.
- The software system must be built using at least two different general-purpose programming languages.
- The deployment of the software system must be **container-oriented**.

3. Delivery

3.1. Artifact

- Team
 - Name (1a, 1b, ..., 2a, 2b, ...)
 - Full names of the team members.
- Software System
 - Name
 - Logo
 - Description
- Architectural Structures
 - Component-and Connector (C&C) Structure
 - C&C View
 - Description of architectural styles used.
 - Description of architectural elements and relations.
- Prototype
 - Instructions for deploying the software system locally.

3.2. Submission Format

- The deliverable must be submitted via GitHub
- Steps:
 - Use the branch `prototype_1`.
 - In the folder `project/prototype_1`, create an **X** folder (where X = the team name [1a, 1b, ..., 2a, 2b, ...]), which must include:
 - The **artifact** in a README.md file.
 - The source code (and other configuration files) of the prototype.