

Topic # 06
“Software Architecture Design”
Homework Assignment
(Ch. 9)

- 1) **This is REQUIRED HW assignment.**
- 2) **This HW is intended to help you to practice with SE Architectures.**
- 3) **There is NO NEED to email your results to instructor.**
- 4) **This HW is aimed at your partial preparation for the Midterm.**

Topic 06: Homework Assignment

- *) A hint: create a list of about 20 well-known software applications that you actively use, and try to classify their architectural structures them in accordance with learned SW Architectural Models.

Part # 1 : Ex. 9.2. (p. 274):

For each type of SW architecture below identify 2 examples of well-known commercial software systems (applications) that are well described by 5 basic types of software architectures including:

1. Data-centered architectures
2. Data-flow architectures
3. "Call and return" architectures
4. Object-oriented architecture
5. Layered architectures

Provide a brief justification of your selection.

Part # 2:

For each type of innovative SW architecture below identify 2 examples of well-known commercial software systems (applications) that are well described by:

1. Client-server architectures (not data-centered) – services are in the center
2. Peer-to-peer architecture
3. Plug-in (add-in) architecture
4. Distributed computing (cloud computing, GRID computing) architecture