- [Architectures]: Explain? Types
    - [Enterprise architecture]: Explain
    - [Software architecture]: Explain
    - [System architecture]: Explain? EG? Components
        - [Technology architecture]: Explain
        - [Application architecture]: Explain
- [System Architecture patterns or style]: Explain? Properties? Benefits? Types
    - [Pipe and filters]: Explain
    - [Data-centric]: Explain
    - [Component-based]: Explain? EG
    - [Layered]: Explain
- [Combing system architectural patterns]: Explain

- [Web-based applications]: Explain
- [Software as a Service]: Explain? EG
- [Web-services]: Explain? EG
- [Interoperability]: Explain
- [Distributed architecture]: Explain? Types
    - [Client-server]: Explain
    - [Three-layer architecture]: Explain? Components
        - [View layer]: Explain
        - [Business logic layer/domain layer]: Explain
        - [Data layer]: Explain
- [Advantages of Internet deployment]: Explain
- [Disadvantages of internet deployment]: Explain

- [*Describe the *system* environment*]: Explain? Constraints? Architecture diagrams
    - [Location diagrams]: Explain
    - [Network diagrams]: Explain
    - [Deployment diagrams]: Explain

- [*Design the application components*]: Explain?
    - [Designing the application components boundaries]: Explain? Types of grouping
        - [Actors]: Explain? EG
        - [Shared data]: Explain
        - [Events]: Explain
    - [Designing the application components integration]: Explain

- [*Design and integrate the database*]: Explain
- [Relationship between Database and DBMS]: Explain
- [Difference between data administrator and database administrator]: Explain
- [Design the database]: Steps?
- [Distributed database architectures]: Explain? Methods
    - [Horizontal partitioning]: Explain

- o [Vertical partitioning]: Explain
- o [Data partitioning and data replication]: Explain
- [Methods to protect the database]: Explain