



Practical No: 8

- Aim: To draw the environmental view diagram: Deployment diagram.
- Theory:
 - UML Deployment Diagram:
 - The deployment diagram visualizes the physical hardware on which the software will be deployed. It portrays the static deployment view of a system. It involves the nodes and their relationships.
 - It ascertains how software is deployed on the hardware. It maps the software architecture created in design to the physical system architecture, where the software will be executed as a node. Since it involves many nodes, the relationship is shown by utilizing communication paths.
 - Purpose of Deployment Diagram:
 - Following are the purposes of deployment diagram enlisted below:
 1. To envision the hardware topology of the system.
 2. To represent the hardware components on which the software components are installed.
 3. To describe the processing of nodes at the runtime.

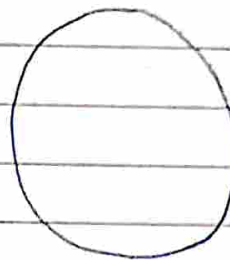
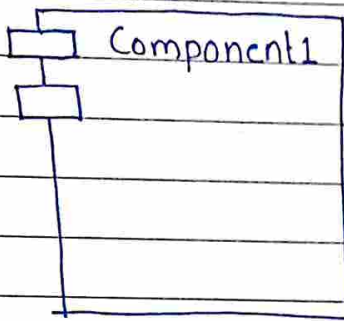


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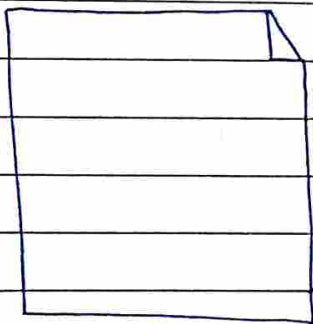
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- Symbol and notation of Deployment diagram:
 - The deployment diagram consist of the following notations:

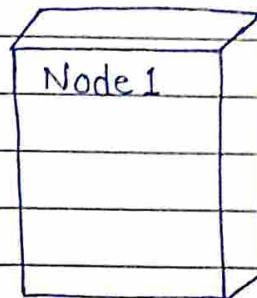
1. A component
2. An artifact
3. An interface
4. A node



Interface 1



Artifact 1



- How to draw a deployment diagram ?
 - The deployment diagram portrays the deployment view of the system. It helps in visualizing the topological view of a system. It incorporates nodes, which are physical hardware. The nodes are used to execute



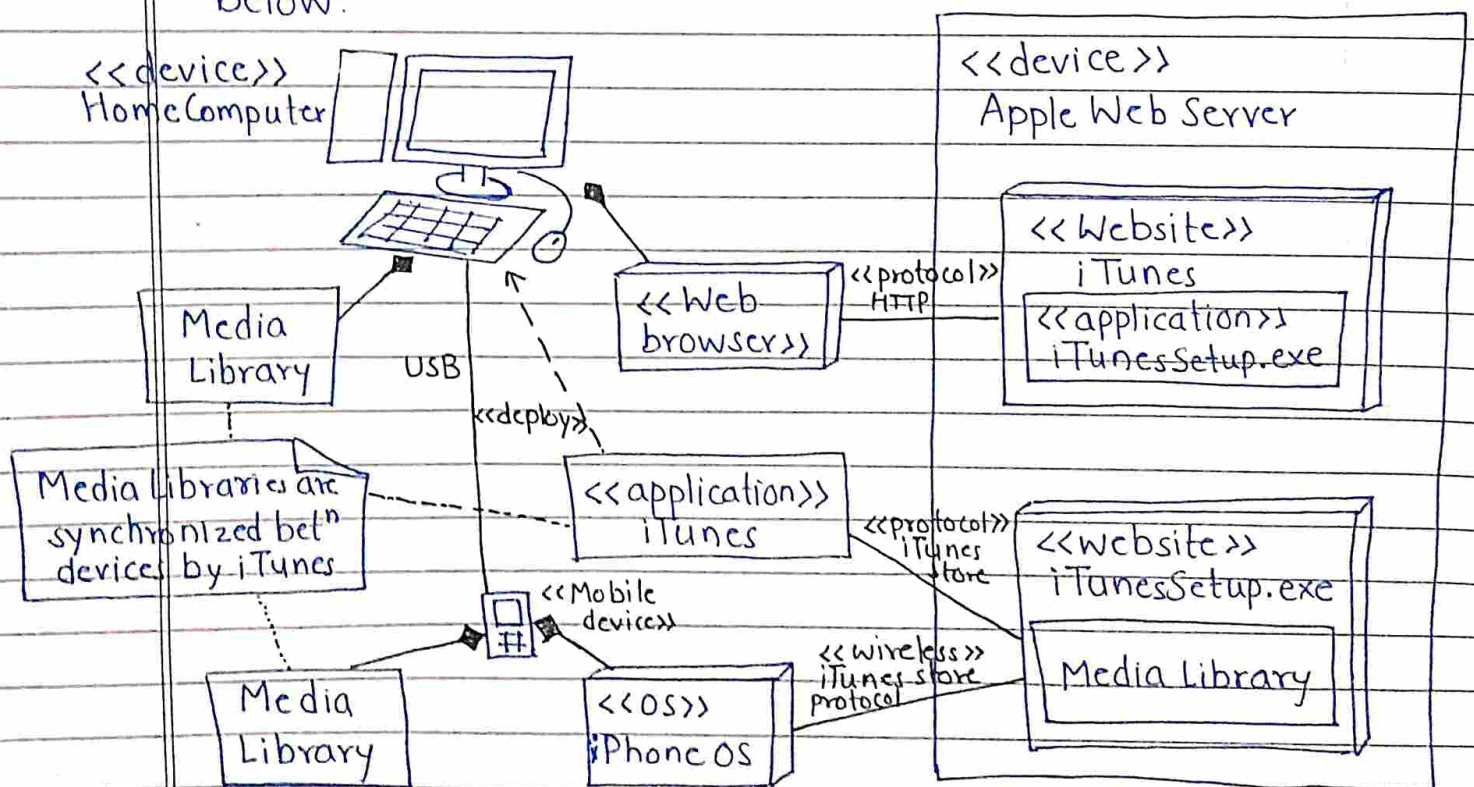
the artifacts. The instances of artifacts can be deployed on the instances of nodes.

- Since it plays a critical role during the administrative process, it involves the following parameters:

1. High performance
2. Scalability
3. Maintainability
4. Portability
5. Easily understandable

• Example of a deployment diagram:

- A deployment diagram for the Apple iTunes applⁿ is given below:





• When to use a deployment diagram?

- Deployment diagrams can be used for the followings:

1. To model the network and hardware topology of a system.
2. To model the distributed networks and systems.
3. Implement forwarding and reverse engineering processes.
4. To model the hardware details for a client/server system.
5. For modelling the embedded system.