

## ASSIGNMENT NO: 7

**Aim:** Object Oriented Analysis and design using UML diagrams: Component diagram, deployment diagram using Open Source Tool.

The tasks we have to do are:

1. You will have to identify the main entities (objects) for this system.
2. You will have to find out the messages between these objects for communication diagram.
3. You will have to find the necessary attributes and functions that need to be associated with each object to implement the functionality mentioned above.
4. You will make a final comprehensive diagram showing all objects and their messages.

### Objectives

1. To learn the relationships and notions of Component diagram.
2. To learn the relationships and notions of Deployment diagram.

### Theory:

#### 1. Component Diagram:

- Describe Component diagram.
- Explain the different notations of Component diagram.

Following are the notations used to draw UML diagrams. It is added here for reference.

Notations	Description	Syntax

#### 2. Deployment Diagram:

- Describe deployment diagram.

- Explain the different notations of deployment diagram.

Following are the notations used to draw UML diagrams. It is added here for reference.

Notations	Description	Syntax

**Platform:** Microsoft Windows 7, Open Source draw.io tool or any UML design tool.

**Input:** Problem statement scenario.

**Output:** Component diagram, deployment diagram.

**Conclusion:** Hence, I learned to draw Component diagram, deployment diagram.

**FAQs:**

1. The term component is sometimes a difficult one to define. First provide a generic definition, and then provide more explicit definitions for object-oriented and traditional software. Finally, pick three programming languages with which you are familiar and illustrate how each defines a component.
2. What is a WebApp component?
3. Draw the deployment diagram **for the university information system**.
4. State the importance of deployment diagram.