

# Blood Bank Management System Component Diagram

The **component diagram for blood bank management system** is used to show how the parts of management work together to make the system operate correctly. A component diagram shows how the software's parts are organized and how they depend on each other. This diagram gives a high-level look at the parts of a system.

The components of a blood bank management system component diagram could be a part of software or hardware. They could be a database, a user interface, or something else that helps the blood bank system work.

## Blood Bank Management System Component Diagram in UML

A component diagram in the (UML) Unified Modeling Language shows how parts are wired together to explain the parts of the blood bank management system. They are used to show the structure of any kind of system.

The UML component diagram shows how the blood bank system comprises a set of deployable components, such as dynamic-link library (DLL) files, executable files, or web services. Using well-defined interfaces, these parts communicate with each other and keep their internal details hidden from each other and the outside world.

### Characteristics of Component Diagram:

- In component-based development, they describe systems that have a service-oriented architecture.
- It shows how the code itself looks.
- It can be used to focus on the relationship between the parts while hiding the specifics.
- Help stakeholders understand how the system being built works and how it will be used.

### Benefits of using Component Diagram

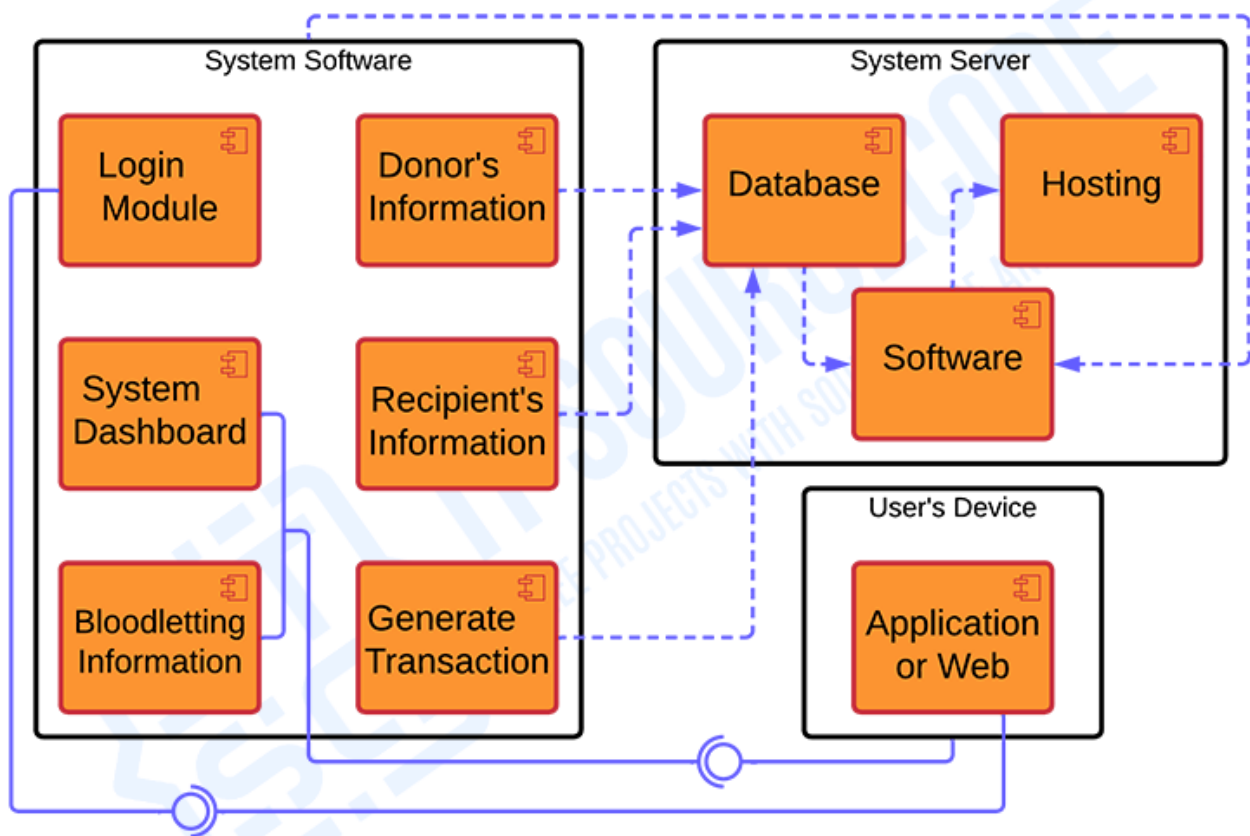
As complicated as it looks, the component diagram is very important when you're building your system because it shows how everything works together. Here are the benefits of designing the blood bank system component diagram:

- Imagine how the system looks in real life.
- Pay attention to the system's parts and how they work together.
- Pay attention to how the service behaves when it comes to the interface.

# The Component Diagram for Blood Bank Management System

This **component diagram of blood bank management system** is the illustration of the components of every hardware and software node. The component diagram below is a detailed illustration of the Deployment Diagram for Blood Bank Management System.

## BLOOD BANK MANAGEMENT SYSTEM



## COMPONENT DIAGRAM

*UML Component Diagram for Blood Bank Management System*

This component diagram shows the structure of the blood bank management, which consists of the software components and their interfaces, user information, and the database. Their dependencies explain how they work together. You can use component diagrams to show how

software systems work at a high level, or you can use them to show how each component works at a lower level, like in a package.

## **Blood Bank Management System Component Diagram (Explanation)**

The **Blood Bank Management System UML component diagram** explains the sketch of the required software and hardware components and the dependencies between them. These components are labeled to clarify their part in the system's operation. They were represented by symbols that explain their function and role in the overall blood bank management operation.

The component diagram of blood bank management system has 10 components with 3 main nodes from the system. The system software node has 6 components which are the login module, system dashboard, bloodletting information, donor's info, recipient's info, and generate transaction. The system server has 3 components which are the system software, database, and hosting. The user's hardware now has 1 component which is the Application or web.

This diagram shows several interfaces that are provided and required. The dependencies on each component are explained through the lines and arrows drawn in the diagram. The required and provided interfaces were declared by the line that has a circle with a semi-circle head.