

Online shopping component diagram

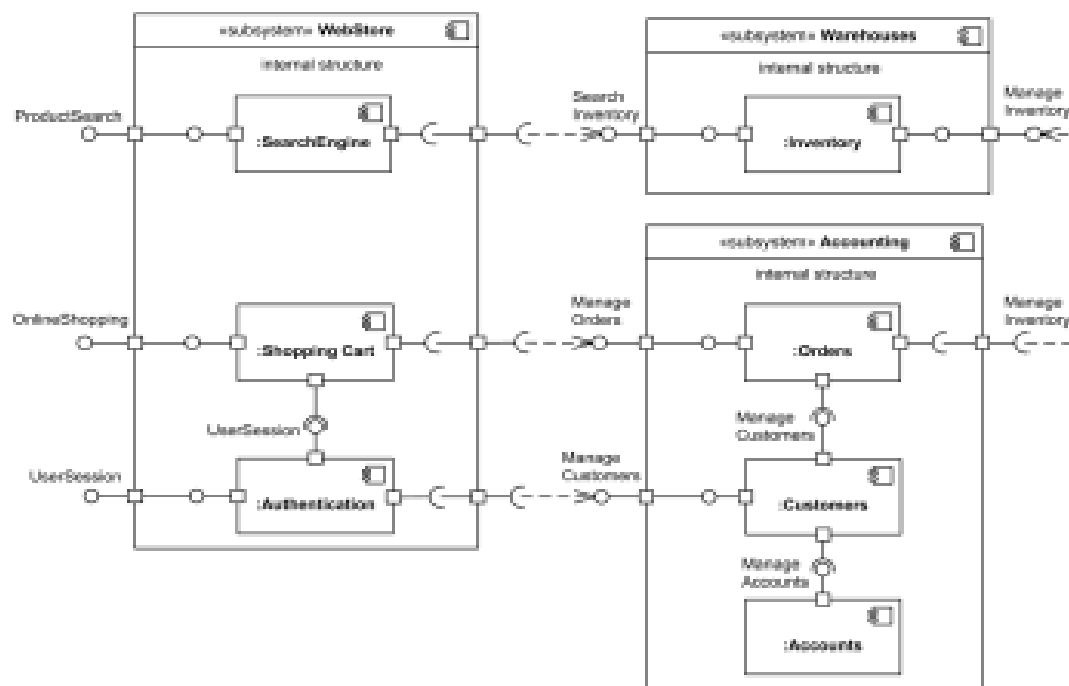
Purpose: An example of a component diagram for online shopping.

Summary: The diagram shows "white-box" view of the internal structure of three related subsystems - WebStore, Warehouses, and Accounting.

WebStore subsystem contains three components related to online shopping - Search Engine, Shopping Cart, and Authentication.

Accounting subsystem provides two interfaces - Manage Orders and Manage Customers.

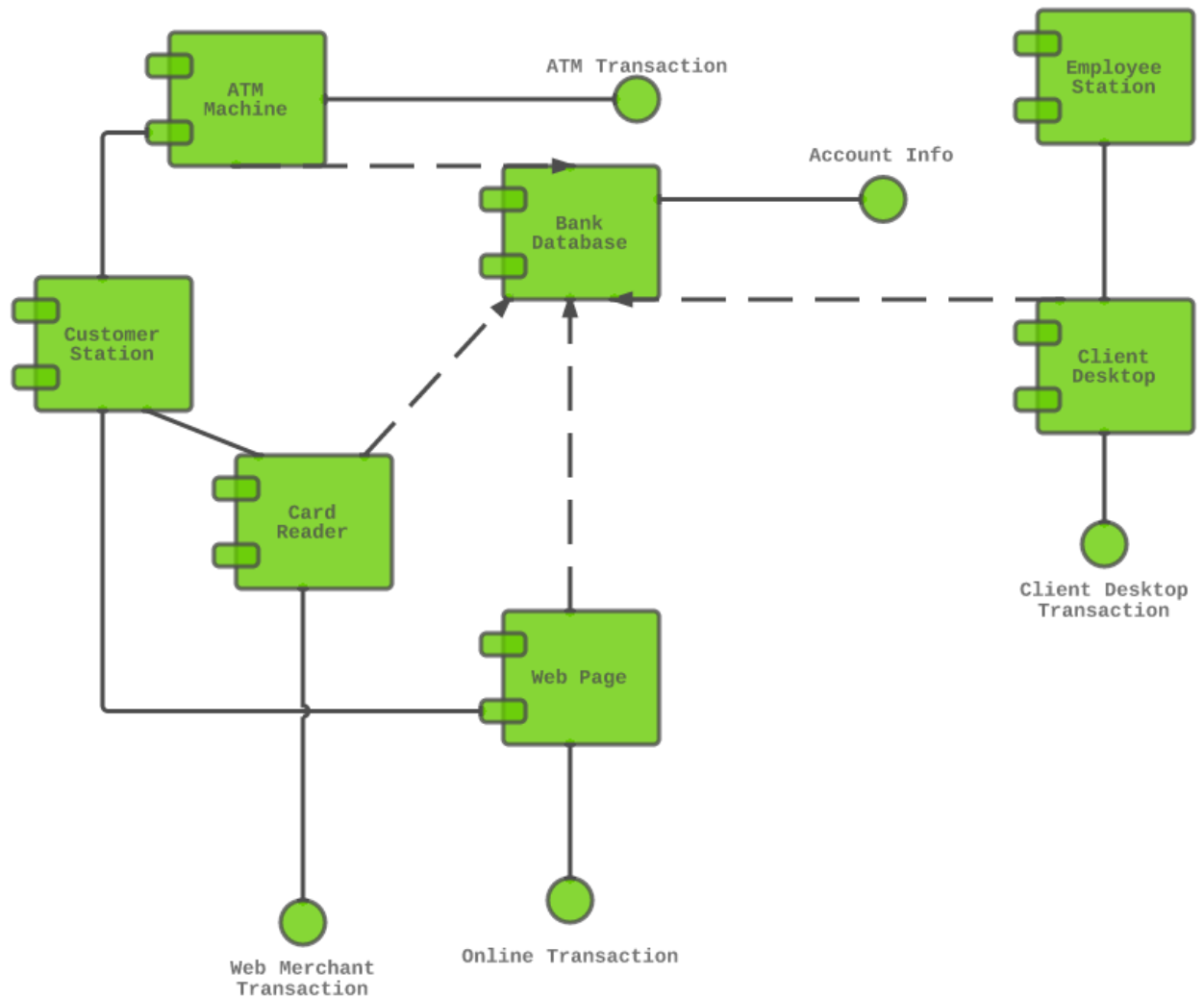
Warehouses subsystem provides two interfaces Search Inventory and Manage Inventory used by other subsystems.



Component diagram for ATM system:


In the diagram below, each component is enclosed in a small box. The dotted lines with arrows show how some components are dependent on others. For example, the card reader, web page, client desktop, and ATM system are all dependent on the bank database.

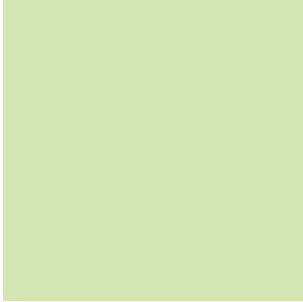



The dotted lines with circles at the end, known as “lollipop” symbols, indicate a realization relationship.

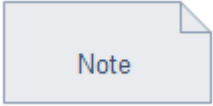
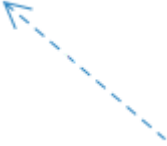


Component diagram shapes and symbols

Component diagrams range from simple and high level to detailed and complex. Either way, you'll want to familiarize yourself with the appropriate UML symbols. The following are shape types that you will commonly encounter when reading and building component diagrams:

Symbol	Name	Description
	Component symbol	An entity required to execute a stereotype function. A component provides and consumes behavior through interfaces, as well as through other components. Think of components as a type of class . In UML 1.0, a component is modeled as a rectangular block with two smaller rectangles protruding from the side. In UML 2.0, a component is modeled as a rectangular block with a small image of the old component diagram shape.

Symbol	Name	Description
	Node symbol	Represents hardware or software objects, which are of a higher level than components.
	Interface symbol	Shows input or materials that a component either receives or provides. Interfaces can be represented with textual notes or symbols, such as the lollipop, socket, and ball-and-socket shapes.
	Port symbol	Specifies a separate interaction point between the component and the environment. Ports are symbolized with a small square.
	Package symbol	Groups together multiple elements of the system and is represented by file folders in Lucidchart. Just as file folders group together multiple sheets, packages can be drawn around several components.

Symbol	Name	Description
	Note symbol	Allows developers to affix a meta-analysis to the component diagram.
	Dependency symbol	Shows that one part of your system depends on another. Dependencies are represented by dashed lines linking one component (or element) to another.