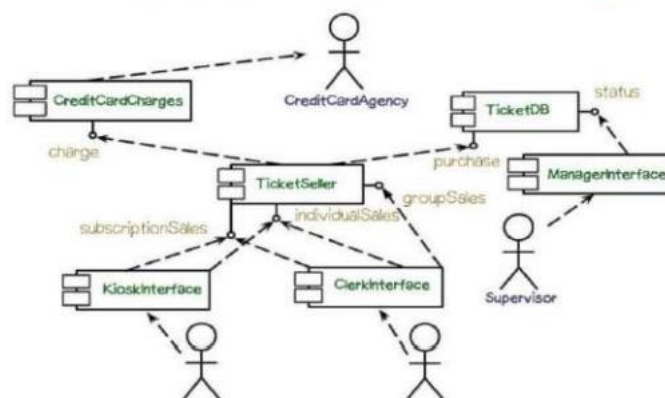


## Lab 7: Draw the component diagram

A component is something required to execute a stereotype function. Examples of stereotypes in components include executables, documents, database tables, files, and library files. Components are wired together by using an assembly connector to connect the required interface of one component with the provided interface of another component. This illustrates the service consumer - service provider relationship between the two components. An assembly connector is a "connector between two components that defines that one component provides the services that another component requires. An assembly connector is a connector that is defined from a required interface or port to a provided interface or port." When using a component diagram to show the internal structure of a component, the provided and required interfaces of the encompassing component can delegate to the corresponding interfaces of the contained components.

A delegation connector is a "connector that links the external contract of a component (as specified by its ports) to the internal realization of that behavior by the component's parts." [1] The example above illustrates what a typical insurance policy administration system might look like. Each of the components depicted in the above diagram may have other component diagrams illustrating its internal structure. component is represented by a rectangle with either the keyword "component" or a stereotype in the top right corner: a small rectangle with two even smaller rectangles jutting out on the left.

### Example Component Diagram



The lollipop, a small circle on a stick, represents an implemented or provided interface. The socket symbol is a semicircle on a stick that can fit around the lollipop. This socket is a dependency or needed interface. The component diagram notation set now makes it one of the easiest UML diagrams to draw. Figure 1 shows a simple component diagram using the former UML 1.4 notation; the example shows a relationship between two components: an Order System component that uses the Inventory System component. As you can see, a component in UML 1.4 was drawn as a rectangle with two smaller rectangles protruding

from its left side. Conclusion: The Component diagram was made successfully by following the steps described above. Output: Component diagram for Library Management System:

