1. Supposed you are developing an e-commerce website and it contains several components. The website component contains five components that are: database, product catalog, inventory, cart, and invoice. The Database component provides an interface, storeInformation, that is required by the product catalog component. Product Catalog component provides an interface, productInformation which is required by the Inventory component. Database component requires the stockDetails interface which is provided by the Inventory component. Product Catalog component provides another interface, readProductDetails which is required by both the Inventory and Cart components. The inventory component provides an interface called syncDB which is dependent on database updates from the Database component. The inventory and cart components both provide an interface called readCustomerBill which is required by the Invoice component. There are three components outside the Website component. They are payment gateway, vat, and tax. Cart, Invoice, and Inventory components provide inventoryStatus, customerInvoice, and cartStatus interfaces respectively and all of these are required by the Payment Gateway component. The Payment Gateway component also requires vatAmount from the Vat component and taxAmount from the Tax component.

Draw a component diagram based on the above scenerio.

Suggested solution:

