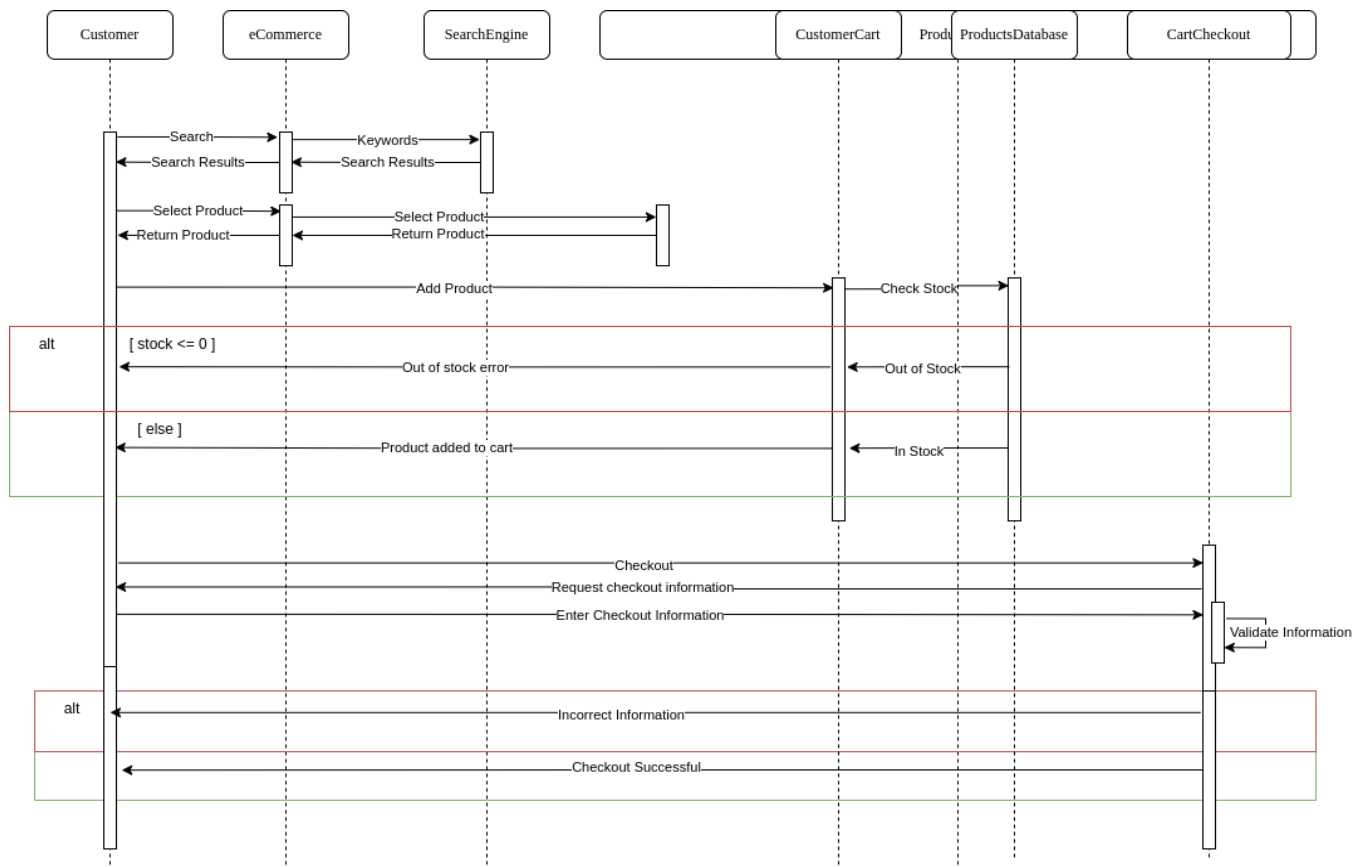


Ecommerce has been booming in Bangladesh, and especially with the pandemic, the demand for it has exponentially increased. A general case ecommerce runs as follows:

1. After a customer visits the site, they search for a product by typing its name which is passed to the SearchEngine
2. The SearchEngine then fetches the products from the ProductsDatabase and serials them in accordance to the relevance of the searched keywords and returns them to the customer
3. The customer selects an item which takes the user to the ProductPage
4. From the ProductPage, the customer adds the item to their cart which sends a request to the CustomerCart
5. After receiving the request, CustomerCart sends a request to the ProductsDatabase to check if the item is in stock, if the item is in stock, the product gets added to the CustomerCart otherwise an error is shown
6. Finally, the customer selects to checkout which sends a request to the CartCheckout where the customer has to enter their full name, email address, phone number and delivery address
7. If all the information has been entered correctly, a success message is shown, otherwise an error message is shown

Draw the sequence diagram for the above scenario



A customer can place an order online. For each item, the order can be sent to the customer either by courier or by regular delivery depending upon their membership type. The customers can be premium users or free users. Only the premium users will get the courier service. If the item is made up of glass, then it is dispatched by a careful distributor instead of regular. Both the users can pay by card or bkash, where the system sends a confirmation message. Optionally, if the member selected the notification option in the order, the business will send a confirmation note to the user.

Draw the sequence diagram for the above scenario.

