**Requirement:** an action/capability that is expected of a software/product to fulfill

**Feature:** a set of logical actions that needs to be performed in order to fulfill a part of a requirement

# Explanation:

**Requirement:** A specific function or service that the software provides. Requirements WILL NOT explain the implementation details, however, must clearly express what is expected from the function or service.

**Feature:** To realize a requirement, a set of logical actions have to be performed by the program, sometimes sequentially. These are features.

## Requirement example: Customers can login.

This is the login service. NOTE: This will NOT be mentioned as a requirement in the project proposal. There must be 5 requirements WITHOUT it. It is just provided as an example for understanding. Features include:

* Take username and password input from user.
* Match the username and the hash of the password with existing database records.
* If username and password match, forward to the login dashboard.
* If the username and password combination doesn’t exist, forward to the “forgot password” page.

## Requirement example: Customers can maintain a cart.

This is the cart service. To realize the cart service, a number of features have to be provided, for example:

* Add item to cart, if it is in stock
* Drop item from cart
* Compute & display the approximate delivery charge
* Display the cart, with the total price of items & delivery charge

## Other possible requirements:

* Delivery status tracking (for orders not completed).
* Online credit card payment service.

## What cannot be a requirement:

A requirement must provide a meaningful outcome, otherwise, it is not a requirement. For example, adding item to the cart is not meaningful if you cannot view your cart. Neither is taking username and password as input a meaningful action, if you cannot finally login.