Product

* Name
  + Must be from 3-100 characters.
  + Must not contain HTML.
* Description
  + Must be less than 250 characters.
* Status
  + Draft
  + Published
  + Retired

Inventory

* Product ID
* Quantity
  + Must be greater than or equal to 0.

Add Product (catalog/products/add)

* Adds a product to the product catalog so that a user can search for it and it can be added to a cart, purchased and/or shipped.
* Input
  + Name
    - Must be unique.
  + Description
* Output
  + Product ID
* Event
  + Product Added Event
    - Id
    - Name
    - Description
* Post Conditions
  + A product with the name and description are added.
  + The product can be found in Search Products.

Stock Product (shipping/products/stock)

* Requests that stock be added for a given product.
* Input
  + Product ID
  + Quantity
    - Must be greater than 0.
* Output
  + Product Stocked Event
    - Product ID
    - Quantity
* Post Conditions
  + Inventory is increased by quantity.

Send Notification

* Sends a notification to all subscribed listeners.
* Input
  + Product ID
  + Quantity
    - Must be greater than 0.
* Output
  + Product Shipped Event
    - Product ID
      * Must have inventory with that product ID.
    - Quantity
      * There must be sufficient quantity.
* Post Conditions
  + Inventory is reduced by quantity.