Case study – Lakeshore Market Place

Suppose you want to sell any items online (like big eCommerce sites) – you have also decided that you will also allow other partners/companies to sell their inventory on your site. Your approach is to provide web service APIs for all functionalities that will provide access to your items that you will sell and to provide your partners to be able to add their inventories to be sold on your site using APIs.

1. Your web service functionalities to sell items would include functionalities such as:
    a. Search item database by product
    b. Accept buy order
    c. Accept Credit Card payment
    d. Ship orders
    e. Provide order status; Provide status of orders in progress
    f. Order Cancel
2. Allowing Partners to use your site to sell their products with functionalities such as:
    a. Need to register and create profile of partners
    b. Add product or products in market place
    c. Push orders that customers made to partners
    d. Get acknowledgement of order fulfilment
3. Features to make your APIs robust:
    a. ERROR Handling
    b. Exception handling
    c. Security features
        i. Authentication and Authorization - Adding username/Password
        ii. Identity - Adding API Key mechanism
        iii. Treat avoidance - Implementing SSL
        iv. Bonus – adding OAuth implementation
4. More features to consider:
    a. Accept Book Reviews
    b. Pickup locations
        i. Using Google Map API, plot possible locations for customers to pick-up instead of mailing books
    c. Integrate with PayPal for payment