

- 1) User:
 - a) Register, login, logout
 - b) Update/delete/add user information in account detail page.
 - i) Username – edit.
 - ii) Email – edit.
 - iii) UPS Account Name – associate with a UPS account and edit.
 - iv) Frequently Used Addresses – add, delete, and edit: A user can have multiple frequently used addresses.
- 2) View products in product detail page (no need login):
 - a) View products details including product picture, price, user ratings of products, the number of users who rated the product, description, category in product detail page.
 - b) View related products in every product detail page and can directly go to these related products' detail page by clicking these related products.
- 3) Search products (no need login):
 - a) Search products from all categories by entering a string (included in product name and description).
 - b) Search products from a specific product category by entering a string (included in product name and description).
 - c) Search products by category: get all products with a specific product category.
- 4) Rate products:
 - a) Users can rate products that are "delivered". Users can enter the rating page through the Historical Orders page.
 - b) The average rating of all users for a product and the number of users who rated the product will be displayed on the product detail page (default rating is 5).
- 5) Purchase products/checkout:
 - a) Direct purchase/checkout any product in the product detail page of that product.
 - b) Purchase/checkout multiple products at once via shopping cart.
 - c) Shipping address: Users can choose one of their frequently used addresses or add a new one. The new address that is added is automatically added to the user's account's frequently used addresses.
 - d) The checkout page will display the user's bill in detail, including purchase quantity, product unit price, subtotal, shipping fee, and total.
 - e) Users can choose from two payment options.
- 6) Shopping cart:
 - a) Users can increase the number of purchases for a specific product in the cart and remove a specific item from the cart.
 - b) Display information about each product in the shopping cart, including picture, name, unit price, and total price.
 - c) Show billing details for all items in the shopping cart. Billing will change as products are added, deleted, and the number of purchases is changed.
- 7) View, delete and search historical orders:
 - a) Search historical orders by package status ("Delivered", "Packed" ...)
 - b) Search historical orders by product name.
 - c) For historical orders with the status "delivered": users can rate them and delete them.

- d) For all historical orders: view all the details of a specific historical order including order information (such as tracking number) and product information.
 - e) User can also access the page of the product purchased by the order through the order detail page and historical orders page.
- 8) Warehouse dynamic allocation:
- a) Assign each package to the warehouse that is geographically closest to its destination.
 - b) We have set up three geographically evenly distributed warehouses in World.
- 9) Email system:
- a) Send an email to the user when they have made a successful purchase/checkout.
 - b) Subscription system sends notification emails when a user's subscription is successful, as well as notification emails for users about new products.
 - c) "Contact us" system sends the user a "contact us" success email when the user sends us a message through the website. We will respond to any messages sent to us via the website within 5 business days by email.
 - d) Send email notifications to users when orders are delivered.
 - e) When the destination address of a user's order is changed on the UPS side, we send an email to notify the user.
- 10) Other important services (no need login):
- a) Subscribe to newsletter for newly released products: Users subscribe by entering an email. When a website releases a new product, users can receive notification emails.
 - b) Contact us: Users can enable the website to automatically send messages containing questions, suggestions, and reviews to us. The email entered by the user is used to receive responses from us.
 - c) BGM: Our website provides various types of music as background music for shopping.
 - d) About Us, Get the App, FAQ, Return & Exchange, Shopping Guide...
- 11) Extra features implemented in cooperation with UPS:
- 1) Users can change the destination address of undelivered packages through UPS.
 - a) This new address will be saved in the frequently used address of the user's Amazon account for future use by the user.
 - b) Send an email to the user to notify them of the change in destination of the package to prevent the change from being made by someone other than themselves.
 - c) The order detail page will update the user's destination address.
 - 2) A truck can put multiple packages located in the same warehouse, which can save costs. Therefore, we (Amazon) need to determine if all the packages to be loaded on one truck are completed. When the packages are all loaded, we can send UPS the command to proceed to the next step.
- 12) UI design
- a) Template inheritance/extending: all my html inherits a base.html, so all pages have the same header section, footer section, features section, and newsletter section...
 - b) The header section allows users to quickly and easily access any page and perform any action including going to the home page, account detail page, shopping cart page, searching for products, getting all products in a specific product category, playing BGM, etc.
 - c) Home page creates a hero image with CSS.

- d) We have breadcrumb navigation on every page, except the home page, so user can quickly return to home page and get the main topic of the current page.
- e) All related products can be displayed by sliding left and right in the related products section of the product detail page.
- f) Convenient page jumping design, for example, on the product detail page can jump to the category page of that product.
- g) The images on the product detail page can be enlarged.
- h) Present user ratings of products using stars.
- i) The images on the product detail page can be enlarged.
- j) ...

13) Handle user input error, for example:

- a) All edit information pages will have some error handling and will display an error message to user if they fail. For example, invalid email when “contact us” and subscription, wrong password when login, a username that already exists when register, editing a name which is the same as other users...
- b) Limit minimums of both user ratings of product and purchase quantity are 1; Limit the maximum of user ratings of product is 5.
- c) When a user does not enter a destination address or payment method at checkout.
- d) ...