

Project Framework

Requirements

- Objects
 - Website/Server
 - Electronic Devices (Computer/Phone)
 - Payment System
 - Price Related Data
 - Users/Developers
- Services
 - Shopping Cart
 - Search Bar
 - Price History
 - Price Trends
 - Price Drop Alerts
 - Product Review Service
 - Product Specs/Data
 - Easy To Use UI
 - Trending Products
 - Displaying Product Images
- Constraints and Performance Criteria
 - Network connection for online store
 - Review service depends on the customer feedback
 - Price history may require lots of data storage
 - Secure Transactions
 - Aesthetic Design Of Website
 - Proper Payment Calculations
 - Increased Loading Times
 - Exchange/Return Policy
 - Scam/Fraud Prevention

Page Features

General Info

- All pages will contain a top bar, nav bar, and a footer

Top Bar

- Social Links
- Logo (Links to home page)

Nav Bar

- Contains links to the main pages (Products, Sale, Placeholder #1, Placeholder #2, Contact)
- Search Bar On Right Side next to shopping cart
- Shopping Cart ar right side

Footer

- Contains links to the information pages (Contact Us, Returns, Order Status, Shipping and Delivery, Company Details)
- Displays the copyright info
- Social links

Web Pages

Home page

- Displays Products of varying categories
- Displays trending products module somewhere on the page

Company Details page

- A page displaying the bios of the developers and our group (Can adapt existing)

Shipping and Delivery page

- Made up shipping and delivery information
- Shipping times for local or international
- Shipping providers
- Duties and taxes
- Express shipping

Order Status page

- Simple page asking the user to submit their order number and email to check their order status

Returns page

- Simple page detailing our return policy
- Contains a button “Return a product”

Contact Us Page

- Lists fake contact information for our company
- Address
- Email
- Phone

Products sorting page

- Complex page that displays all of our products
- Contains a sidebar with sorting options
- Button to change how many products are displayed
- The bottom of this page will display the trending items module

Sale items page

- Very similar to products sorting page but contains products that are marked down in price
- Markdowns should be signified by showing old price crossed out and sale price in red
- Could also display percentage off sale
- The bottom of this page will display the trending items module

Product page

- This will be a single page that will be used to display products when they are clicked on
- Cookies will be used to preserve the product selection that was made in the products sorting or sale pages
- Displays product picture, price, specs, and other relevant info
- Contains button for signing up for price drop alerts
- Contains an add to cart button
- Underneath this info there will be the price history graph
- Under the price history graph there will be the review generator
- The bottom of this page will display the trending items module

Shopping cart page

- Displays products that are currently in the shopping cart
- Totals price of the items using the price calculation module
- Contains a button that links to the checkout page

Checkout page

- Form that asks for all relevant customer info(Name, Address, CC, Phone, Etc)
- Form validation should check if the info is correct and should update on keypress
- Confirm Purchase button

Order confirmation Page

- Displays purchased items and order number
- Order numbers should be generated from the hash code module
- Displays estimated shipping time
- Gives a thank you for your purchase message

Modules (JS Functions)

- **API Module**
 - Returns products based on different queries
 - Use best buy API

- **Price History Module**
 - Randomly generates a list of x,y points
 - x,y points should start at current price as a baseline and work backwards to create a history
 - Price fluctuations should be reasonable
 - Updates the graph with the required points and displays the price information
 - Can try to use chart.js for this
- **Review Generator Module**
 - Contains a list of random prefixes and suffixes of reviews (Ex. This [product] is the greatest!) and generates random reviews using these parts
 - Should generate reviews based on the product name and in a predictable fashion so that the reviews are always the same for each product.
- **Shopping Cart Module**
 - Accepts product orders
 - Updates shopping cart icon with number of products
 - Creates or deletes cookies based on product name or some other code
 - Generates an order number
 - Calculates price and tax
- **Validation Module**
 - Validates a credit card
 - Validates entered address info
 - Postal code should be in proper format
 - Phone number should be in proper format
 - Ensures that the email is in the proper format
- **Trending Items Module**
 - Should create an element that displays items it pulls from the api as trending
- **Price Drop Alert Module**
 - Should create a pop out window that displays a form for a user to input their email and sign up for price drop alerts

Sprint Planning

Legend

Page

Module

Deliverable

Other

Sprint #1 Oct 16 - Oct 22

- Navbar And Footer page
- Company details page
- shipping and delivery page
- order status page
- returns page
- sale items page
- API module
- Data Flow Diagram
- Class Diagram
- Entity-Relationship Diagram
- Gantt Chart

Sprint #2 Oct 23 - Oct 29

- products listing page
- product display page
- homepage
- Work Breakdown Structure
- Task Allocation Chart
- PERT Chart
- Use-Case Diagram
- Risk Assessment Table and Risk Assessment x,y Chart

Sprint #3 Oct 30 - Nov 5

- shopping cart page
- shopping cart module
- review generator module

- checkout page
- order confirmation page
- Unknown New Deliverables

Sprint #4 Nov 6 - Nov 12

- Price history module
- Price drop alerts module
- Update all pages for accessibility features
- Unknown New Deliverables

Sprint #5 Nov 13 - Nov 19

- Trending items module
- Validation module
- All pages should get a CSS makeover to build a consistent style
- Unknown New Deliverables

Sprint #6 Nov 20 - Nov 26

- Final CSS walkthrough for all pages
- Testing for all modules
- Testing all pages for mobile and desktop versions

User Stories

As a single mother, I want a way to see the history of a product's prices so I know I am getting a good value.

- Complete **price history module**. It should generate prices and create the html for the chart element, as well as basic css styles

As a low income student I want to receive price drop alerts so that I can get products on sale.

- Create a **price drop alerts module** button with a pop out window that asks for email. Create the JS to allow for the popup to work and create a way to close the window and submit.

As a commercial buyer, I want to see detailed product specs so that I can buy the right products for my employer.

- c. Create the main **product display page**

As an affiliate marketer, I want to see which items are currently popular so that I know the best products to buy and review.

- d. Create a **trending items module** that pulls products from the api and adds them to a vertical or horizontal element, such as in the sidebar or the bottom of the page

As a senior user, i want a checkout process that is easy to use so that i can make purchases without the help of my children

- e. Create the **shopping cart, checkout, and order confirmation pages**, as well as their basic layouts with CSS. This page should be easy to navigate with large UI elements for ease of understanding. Everything should be labeled and instructions provided
- f. Create the **shopping cart module**
- g. Create the **validation module**

As a video creator, I want a website with good user reviews so that I can buy the best product available for my projects.

- h. Create a user **review generator module** that generates user reviews based on a product name, and creates the html elements. Also create the CSS for the review section

As a visually impaired user, I want a website that is easy to navigate so that I can use it by myself.

- i. Go back over all pages and update HTML and CSS so that it is optimized for screen readers, as well as incurring that all UI elements are easily navigated

As a business owner, I want a good search feature so that I can find products without wasting too much time.

- j. Create the main **products listing page** and complete the basic style and layout in css and HTML. Create a search area and sorting buttons for this page that will call the API for new products

Spikes

- k. Complete task bar and footer and add to all pages
- l. Complete basic layout on information pages (**Company details, shipping and delivery, order status, returns**) Including basic CSS
- m. Create the **API module** that receives requests from various pages and returns products from various categories. This module should return html elements containing the products
- n. Create the **sale items page**
- o. Update **homepage** to contain links to other pages, and complete styling and layout for this page.