MongoDB Atlas Credentials:

Problem Statement:

Authentication

    a. Implement authentication to enable a user to :
    b. Sign Up for an account
    c. Login to their account

User Profile:

    d. Users should be able to :
        i. Edit their profile information such as delivery address from the profile page
        ii. View a list of their ordered items
        iii. View items in their items in their cart and wishlist.
        iv. Use the OAuth protocols, to connect with Ashoka Google Accounts or Facebook Accounts
        v. Add multiple addresses. (Home, office etc)

Wishlist:

    e. When a certain item strikes our user's fancy, you have to build a wishlist that can:
        i. Store the item in a personal wishlist, for later.
        ii. Keep a counter on the product to show how many people are interested.
        iii. (Optional) Sending alerts to the users when the prices go down.

Cart:

f. Users should be able to add items to their shopping cart, which are stored there until the user does not finish buying the order. An icon, on top of the page, should show the number of items inside the person's cart. It may be implemented with the help of cookies, or be stored in the database.

g. In essence, users should be :
- Able to add items to the cart
- Add a quantity (+, -) feature.
- Remove items from the cart
- Move a cart item to a wishlist
- After a purchase is completed, the cart is cleared.

Search and Filtering

This is one of the core features of the website, and users should be able to search and filter through the products, in as many ways you can think of :

- Autocomplete feature when a user types in more than 2 characters in the search bar.
- Custom Filtering based on how comprehensive your database is
- Brownie points : Fuzzy matching of search queries

Product Database

Implement a database in which details of the product are stored. A few things you might want to add here are Product ID, Name, Description, Category, Rating, Number of Reviews, and Price.

The user should have the ability to :

- Check out all available products on the 'View Products' Page, along with buttons to add to cart and wish list.
- Show product reviews written by other customers
- Photos of the product
- Brownie points : "Verified Buyer" and "More like this" (Recommendation Engine)
- Verified buyer and stuff. (Optional)

Additional Information

- The cart entries need to be deleted for a user, when the user buys it.

- Maintain a reviews and ratings database separately, and calculate average ratings
- The buy option will have to be mocked, since you won't be able to integrate with a payment gateway without lots of documentation.
- If you log all your transactions database, you can easily implement 'My Orders' or the 'Verified Buyer' features.

Don't spend a lot of time designing the frontend, to make it pixel perfect. Yet, would encourage you to play around with it.

Design Process:

1. Find out the target audience.
   - Computer People. , Gamers, Wholesale office, students.
2. Problem Statement.[What are you selling?]
   - Computers and Accessories and peripherals (Headphones)
     - Categories
       - Gaming Oriented
       - Wholesale
       - Parts
       - Peripherals
3. Solution Space.[How are you selling? Are we a B2C? or B2B?]
     - B2C.
     - One Hour Delivery. (Link up with the nearest stores)
     - Door-to-Door delivery
     - COD, Online payments
     - TBD: Manufacturers or Middle men

4. User Persona - Optional
5. Create a site map: Flow of the website. [Flowchart]
   - Done.

6. The lo-fi wireframes. [Black white version of the almost final thing. No font, size, colours, themes. Only functionality] [Adobe XD or Balsamiq]
   -
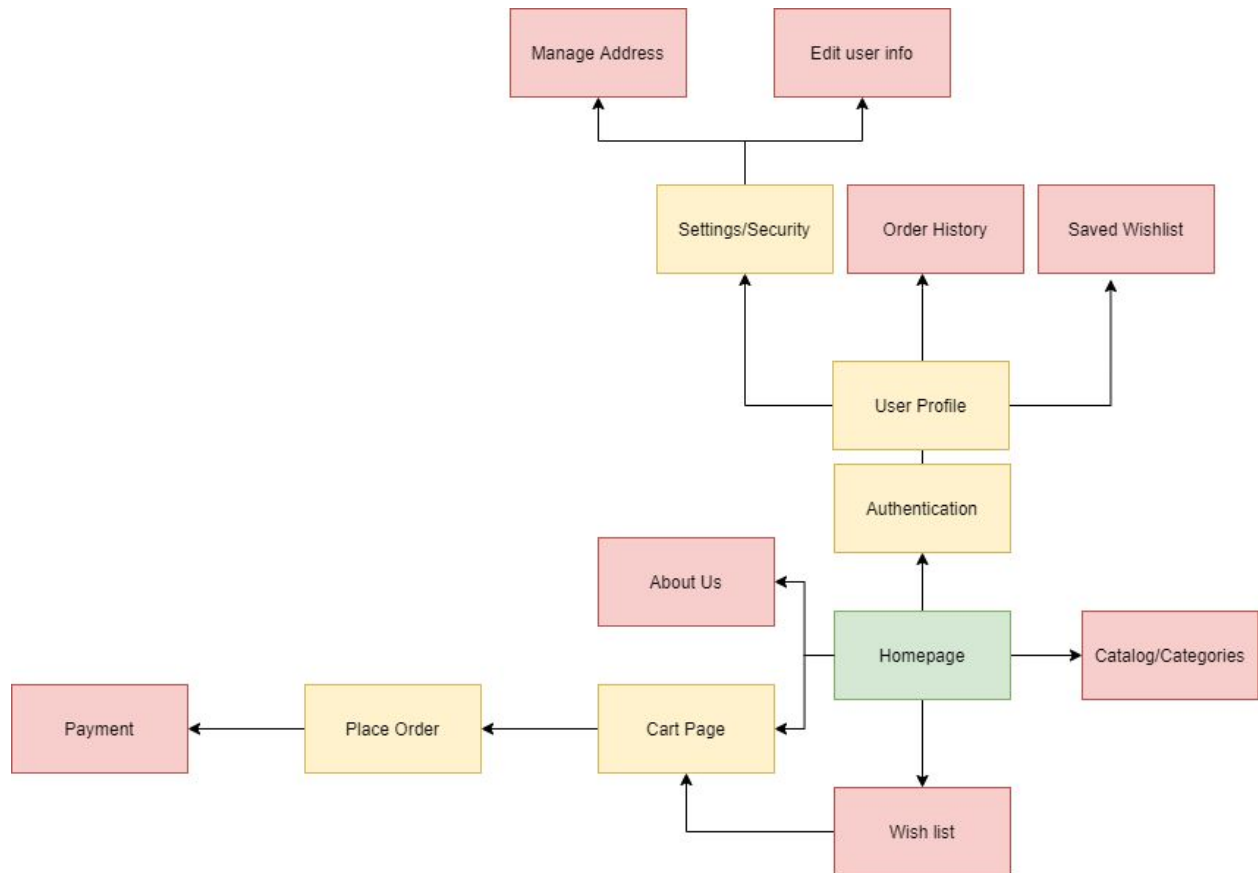7. Hi-fi wireframes. [Themes, colours, positionings, fonts, sizes] [Adobe XD]

https://colorlib.com/wp/template/onetech/
https://codepen.io/

Flowchart:

(Compiled by Aarav)

(Link: https://app.diagrams.net/#G1W8vs_ejIy2wU_XoSwBf7ZA8pqUFWItEG)

(Compiled by Aarav, Khushi, Argha)

1. Homepage:

    a. Search Bar (Users should be able to search and filter through the products, in as many ways you can think of, Autocomplete feature when a user types in more than 2 characters in the search bar. Custom Filtering based on how comprehensive your database is. Brownie points : Fuzzy matching of search queries)

    b. Cart

c. Login and Signup
d. Account
e. Wishlist
f. Navbar: Home, About, Categories, Optional(Deals,,)
g. Spotlight (4-5 products)
h. Optional: Carousel

2. Wishlist:
a. Products they have added.
b. Add to cart option
c. Keep a counter of people interested in the product. (People who've added the product in their carts or wishlists)
d. Alert when the prices (Optional)
e. Optional: Multiple wishlist.

3. Cart Page:
a. Increase/decrease quantity
b. Delete product
c. Optional: 'Similar to this'
d. Move item to wishlist
e. Place order

4. Place order page + Payment:
a. Pick address (shipping and billing different? optional)
b. Pick payment option
c. Finish purchase. 'Buy'

5. About Us:
a. Description about the company.
b. Team members
c. Contact

6.Authentication:

    a. Log in
- i. Username field
- ii. Password field
- iii. Forgot password
- iv. Google sign in.
- v. Facebook sign in.

    b. Register
- i. Username
- ii. Email
- iii. Password
- iv. Confirm Password
- v. Email
- vi. Google/Facebook Sign up

7.User Profile:

    a. Edit profile: Delivery address, personal details.
    b. Past Orders
    c. View cart items and wishlist

Miscellaneous:

Questions for TF:-
1. Manufacturers or Middle-man ?

MoSCoW

1. Must
2.
3. Should
4.
5. Could
6.

7. Won't
    a. B2B

Links for wireframes:
1. https://www.behance.net/gallery/96622639/Grocery-and-Gardening-ecommerce-Website?tracking_source=search_projects_recommended%7Cecommerce%20web%20wire%20frame
2. https://www.behance.net/gallery/59254379/Nona-Home-E-commerce-Website?tracking_source=search_projects_recommended%7Cecommerce%20web%20wire%20frame
3. https://www.behance.net/gallery/60190949/Hardware-Store-Website-Redesign?tracking_source=search_projects_recommended%7Ce%20commerce%20web%20wire%20frame%20hardware
4. https://www.behance.net/gallery/41015493/Triumph-Motorcycles-Website?tracking_source=search_projects_recommended%7Ce%20commerce%20web%20wire%20frame%20computer
5.

Resources:

1. Difference between a framework and a library: https://www.freecodecamp.org/news/the-difference-between-a-framework-and-a-library-bd133054023f/#:~:text=The%20technical%20difference%20between%20a,in%20charge%20of%20the%20flow.
2. Why use Javascript? Pretty abstract but good enough: https://medium.com/better-programming/what-makes-javascript-javascript-b9ab51ad983a
3. https://docs.angularjs.org/guide/introduction#:~:text=AngularJS%20is%20a%20structural%20framework,would%20otherwise%20have%20to%20write

4. Javascript Resource: https://developer.mozilla.org/en-US/docs/Web/JavaScript/A_re-introduction_to_JavaScript

5. To-do List App using MERN:

a. Video: https://www.youtube.com/watch?v=7CqJlxBYj-M
b. Blogpost: https://medium.com/@beaucarnes/learn-the-mern-stack-by-building-an-exercise-tracker-mern-tutorial-59c13c1237a1

6. GitHub Tutorial: https://rogerdudler.github.io/git-guide/
7. Node Js vs Python: https://www.freecodecamp.org/news/nodejs-vs-python-choosing-the-best-technology-to-develop-back-end-of-your-web-app/
8. Basic Branching and Merging: https://git-scm.com/book/en/v2/Git-Branching-Basic-Branching-and-Merging
9. 5 Min video on Redux: https://www.youtube.com/watch?v=np8A_aW7Pew
10. HTML Course: https://www.youtube.com/watch?v=UB1O30fR-EE&list=PLillGF-RfqbZTASqIqdvm1R5mLrQq79CU&index=1
11. CSS: https://www.youtube.com/watch?v=yfoY53QXEnI&list=PLillGF-RfqbZTASqIqdvm1R5mLrQq79CU&index=2
12. Watch this guys videos, they are GOD tier https://www.youtube.com/channel/UCsBjURrPoezykLs9EqgamOA