1. Introduction to this course
   1. what you will build
   2. what you will learn
   3. who are audiences
2. Install Tools
   1. Code Editor
   2. Web Browser
   3. VS Code Extension
3. Website Template
   1. Create amazona folder
   2. create template folder
   3. create index.html
   4. add default HTML code
   5. link to style.css
   6. create header, main and footer
   7. style elements
4. Display Products
   1. create products div
   2. add product attributes
   3. add link, image, name and price
5. Create React App
   1. npx create-react-app frontend
   2. npm start
   3. Remove unused files
   4. copy index.html content to App.js
   5. copy style.css content to index.css
   6. replace class with className
6. Share Code On Github
   1. Initialize git repository
   2. Commit changes
   3. Create github account
   4. Create repo on github
   5. connect local repo to github repo
   6. push changes to github
7. Create Rating and Product Component
   1. create components/Rating.js
   2. create div.rating
   3. style div.rating, span and last span
   4. Create Product component
   5. Use Rating component
8. Build Product Screen
   1. Install react-router-dom
   2. Use BrowserRouter and Route for Home Screen
   3. Create HomeScreen.js
   4. Add product list code there
   5. Create ProductScreen.js
   6. Add new Route from product details to App.js
   7. Create 3 columns for product image, info and action
9. Create Node.JS Server
   1. run npm init in root folder
   2. Update package.json set type: module
   3. Add .js to imports
   4. npm install express
   5. create server.js
   6. add start command as node backend/server.js
   7. require express
   8. create route for / return backend is ready.
   9. move products.js from frontend to backend
   10. create route for /api/products
   11. return products
   12. run npm start
10. Load Products From Backend
    1. edit HomeScreen.js
    2. define products, loading and error.
    3. create useEffect
    4. define async fetchData and call it
    5. install axios
    6. get data from /api/products
    7. show them in the list
    8. create Loading Component
    9. create Message Box Component
    10. use them in HomeScreen
11. Install ESlint For Code Linting
    1. install VSCode eslint extension
    2. npm install -D eslint
    3. run ./node\_modules/.bin/eslint --init
    4. Create ./frontend/.env
    5. Add SKIP\_PREFLIGHT\_CHECK=true
12. Add Redux to Home Screen
    1. npm install redux react-redux
    2. Create store.js
    3. initState= {products:[]}
    4. reducer = (state, action) => switch LOAD\_PRODUCTS: {products: action.payload}
    5. export default createStore(reducer, initState)
    6. Edit HomeScreen.js
    7. shopName = useSelector(state=>state.products)
    8. const dispatch = useDispatch()
    9. useEffect(()=>dispatch({type: LOAD\_PRODUCTS, payload: data})
    10. Add store to index.js
13. Add Redux to Product Screen
    1. create product details constants, actions and reducers
    2. add reducer to store.js
    3. use action in ProductScreen.js
    4. add /api/product/:id to backend api
14. Handle Add To Cart Button
    1. Handle Add To Cart in ProductScreen.js
    2. create CartScreen.js
15. Implement Add to Cart Action
    1. create addToCart constants, actions and reducers
    2. add reducer to store.js
    3. use action in CartScreen.js
    4. render cartItems.length
16. Build Cart Screen
    1. create 2 columns for cart items and cart action
    2. cartItems.length === 0 ? cart is empty
    3. show item image, name, qty and price
    4. Proceed to Checkout button
    5. Implement remove from cart action
17. Implement Remove From Cart Action
    1. create removeFromCart constants, actions and reducers
    2. add reducer to store.js
    3. use action in CartScreen.js
18. Create Sample Users In MongoDB
    1. npm install mongoose
    2. connect to mongodb
    3. create config.js
    4. npm install dotenv
    5. export MONGODB\_URL
    6. create models/userModel.js
    7. create userSchema and userModel
    8. create userRoute
    9. Seed sample data
19. Create Sample Products In MongoDB
    1. create models/productModel.js
    2. create productSchema and productModel
    3. create productRoute
    4. Seed sample data
20. Create Sign-in Backend
    1. create /signin api
    2. check email and password
    3. generate token
    4. install json web token
    5. install dotenv
    6. return token and data
    7. test it using postman
21. Design SignIn Screen
    1. create SigninScreen
    2. render email and password fields
    3. create signin constants, actions and reducers
    4. Update Header based on user login
22. Implement SignIn Action
    1. create signin constants, actions and reducers
    2. add reducer to store.js
    3. use action in SigninScreen.js
23. Create Register Screen
    1. create API for /api/users/register
    2. insert new user to database
    3. return user info and token
    4. create RegisterScreen
    5. Add fields
    6. Style fields
    7. Add screen to App.js
    8. create register action and reducer
    9. check validation and create user
24. Create Shipping Screen
    1. create CheckoutSteps.js component
    2. create shipping fields
    3. implement shipping constant, actions and reducers
25. Create Payment Screen
    1. create payment fields
    2. implement shipping constant, actions and reducers
26. Design Place Order Screen
    1. design order summary fields
    2. design order action
27. Create Place Order API
    1. createOrder api
    2. create orderModel
    3. create orderRouter
    4. create post order route
28. Implement PlaceOrder Action
    1. handle place order button click
    2. create place order constants, action and reducer
29. Create Order Screen
    1. build order api for /api/orders/:id
    2. create OrderScreen.js
    3. dispatch order details action in useEffect
    4. load data with useSelector
    5. show data like place order screen
    6. create order details constant, action and reducer
30. Add PayPal Button
    1. get client id from paypal
    2. set it in .env file
    3. create route form /api/paypal/clientId
    4. create getPaypalClientID in api.js
    5. add paypal checkout script in OrderScreen.js
    6. show paypal button
31. Implement Order Payment
    1. update order after payment
    2. create payOrder in api.js
    3. create route for /:id/pay in orderRouter.js
    4. rerender after pay order
32. Display Orders History
    1. create customer orders api
    2. create api for getMyOrders
    3. show orders in profile screen
    4. style orders
33. Display User Profile
    1. create user details api
    2. show user information
34. Update User Profile
    1. create user update api
    2. update user info
35. Create Admin View
    1. Create Admin Menu
    2. Create Admin Middleware in Backend
    3. Create Admin Route in Frontend
36. List Products
    1. Create Product List Screen
    2. Add reducer to store
    3. show products on the screen
37. Create Product
    1. build create product api
    2. build Create Product button
    3. define product create constant, action and reducer
    4. use action in Product List Screen
38. Build Product Edit Screen
    1. create edit screen
    2. define state
    3. create fields
    4. load product details
    5. add to routes
39. Update Product
    1. define update api
    2. define product update constant, action and reducer
    3. use action in Product Edit Screen
40. Upload Product Image
    1. npm install multer
    2. define upload router
    3. create uploads folder
    4. Handle frontend
41. Delete Product
    1. create delete api in backend
    2. create delete constants, action and reducer
    3. use it in product list screen
42. List Orders
    1. create order list api
    2. create Order List Screen
    3. Add reducer to store
    4. show products on the screen
43. Delete Order 2. create delete order action and reducer 3. add order delete action to order list
44. Deliver Order
    1. create constant, actions and reducers for deliver order
    2. add order deliver action to order details screen
45. Publish To Heroku
    1. Create git repository
    2. Create heroku account
    3. install Heroku CLI
    4. heroku login
    5. heroku apps:create amazona
    6. Edit package.json for build script
    7. Create Procfile
    8. Create mongodb atlas database
    9. Set database connection in heroku env variables
    10. Commit and push