

# Jais's E-commerce Project Functionality Checklist

## 1 User Management

Feature	Status based on schema	Notes
User registration	✓ User collection with required fields	Consider email verification
Login	✓ userEmail & userPassword exist	Use JWT for auth
Logout	⚠ Not in schema	Needs frontend + backend flow
Forgot password	⚠ Not implemented	Implement email OTP or token system
Profile management	✓ userName, userEmail, userContact, userAddress, userLocation	✓ Update functionality needed
Address management (multiple addresses)	⚠ Only one userAddress field	Consider making a separate Address collection if needed
Role management (admin vs user)	✓ Admin collection exists	✓ Add role checks in routes

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## 2 Product Management

Feature	Status	Notes
Product listing	✓ Product + Variant + VariantSize collections	✓ Add filtering and pagination
Product detail page	✓ Product + images + variants	✓ Support multiple images via Image collection
Product categorization	✓ Category & Subcategory exist	✓ Type, Fit, Brand, Material support

Product filtering	✅ Collections support	Implement backend filter queries
Product search	⚠️ Not implemented	Use text indexes or search by name/category
Admin add/edit/delete products	✅ Product + variant management	✓ Make protected routes for admin/shop

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### 3 Shopping Cart

Feature	Status	Notes
Add products to cart	⚠️ No explicit cart collection	Currently using Order with status <code>inCart</code> — works as cart
Update quantity	✅ <code>orderItem</code> quantity	✓ Implement proper cart APIs
Remove products	✅ <code>orderItem</code> deletion	✓ Confirm delete or update quantity to 0
Cart summary	✅ <code>Order.totalAmount</code>	✓ Backend calculation needed

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### 4 Orders

Feature	Status	Notes
Place order	✅ Order + <code>OrderItem</code> collections	✓ Ensure stock reduction logic
Checkout flow	✅ <code>paymentPending</code> , <code>paymentSuccess</code> status	✓ Integrate payment gateway like Razorpay
Delivery address	✅ <code>deliveryAddress</code> in Order	✓ Supports per order
Order history / tracking	✅ <code>orderStatus</code> in Order & <code>orderItemStatus</code> in <code>OrderItem</code>	✓ Implement user API & frontend view

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### 5 Wishlist

Feature	Status	Notes
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Add/remove favorites	✓ WishList collection	✓ Implement frontend actions
View wishlist	✓	✓ API ready

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## 6 Reviews & Ratings

Feature	Status	Notes
Add rating/review	✓ ReviewRating collection	✓ Ensure unique per orderItem
Display ratings	✓	✓ Aggregate ratings for product page

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## 7 Complaints

Feature	Status	Notes
File upload for complaint	✓ complaintAttachments	✓ Handle multiple file types
Complaint status tracking	✓ complaintStatus	✓ Add admin/shop reply workflow

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## 8 Security

Feature	Status	Notes
Password hashing	⚠ Not yet implemented	Use bcrypt
JWT auth	⚠ Not yet implemented	Protect routes
2FA (Google Authenticator)	⚠ Not yet implemented	Optional advanced security
Prevent back-button login	⚠ Not yet implemented	Implement client + server checks

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## 9 Admin / Shop Management

Feature	Status	Notes
Admin CRUD	✓ Admin collection	✓ Protect endpoints

Shop CRUD & verification	✓ Shop collection with shopStatus	✓ Implement approval workflow
Manage products	✓ Product + Variant + VariantSize	✓ Only for verified shops

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## 10 Misc / UI & UX

Feature	Status	Notes
Responsive UI	⚠ Frontend	Ensure mobile-friendly
Navigation (navbar, footer)	⚠ Frontend	✓ Standard UX
Error & success messages	⚠ Frontend	✓ Include for all APIs
Loading indicators	⚠ Frontend	Optional but recommended

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## Summary

✓ You have **all core collections** for users, products, orders, variants, wishlist, reviews, complaints, and admin/shop management.

### ⚠ Pending / optional tasks before security features:

1. Cart APIs (if you want separate Cart collection or stick with **inCart** orders)
2. Search & filter APIs
3. Frontend UX polish (loading states, error messages, responsive design)
4. Security setup: password hashing, JWT auth, 2FA
5. Logout & back-button prevention
6. Email OTP / password reset
7. Admin/shop approval workflow (if not fully implemented)