**CAPSTONE REQUIREMENTS DOCUMENT: PITARA – THE GIFT STORE**  
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**1. INTRODUCTION AND RATIONALE**

**Project Overview:**  
Pitara is a full-featured, user-friendly e-commerce web application built to provide a curated shopping experience for unique and thoughtful gift items. The platform supports diverse categories like Home Décor, Stationery, Artifacts, Personalized Items, and Plushies.

**Rationale:**  
Pitara is designed to meet the growing demand for thoughtful, curated gift shopping in an online space. In a digital market often flooded with generic, mass-produced items, users increasingly seek personalized and meaningful gift options that feel special and intentional. Pitara solves this need by offering a streamlined, user-friendly platform that features handpicked products across categories like Home Décor, Stationery, Personalized Items, and Plushies.

This project is built for users who value convenience and creativity when selecting gifts. Whether it’s for birthdays, holidays, or personal milestones, Pitara allows shoppers to find aesthetically pleasing and unique products that stand out from typical offerings on major e-commerce platforms.

**2. CONTENT EVALUATION**

**a. Navigation**

* Home
* Shop (All Products + Filters)
* Product Detail Page
* Cart
* Checkout
* Login/Register
* Admin Dashboard (only for admins)

**b. Layout & Wireframe**

**Figma Link:** [**https://www.figma.com/design/4jBXjzXpZ29ZAdf2qsvkKn/Pitara?node-id=21-20&t=EvKDHZV3A3nFPdtb-1**](https://www.figma.com/design/4jBXjzXpZ29ZAdf2qsvkKn/Pitara?node-id=21-20&t=EvKDHZV3A3nFPdtb-1)

**Home Page**

**A screenshot of a computer screen

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**Products Under Category – Should Have**

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**Products Details Page – Should Have**

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**Cart**

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**Checkout**

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**A screenshot of a computer

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**Login/Register**

**A screenshot of a login form

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**A screenshot of a login form

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**Payment – Nice to Have**

**A screenshot of a credit card application

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**Admin Dashboard – Admins CRUD**

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**Admin Dashboard – Products CRUD**

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**Admin Dashboard – Categories CRUD**

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**Admin Dashboard – Users**

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**c. Content Descriptions & Sources**

* **Product Images**: Sourced from Canva or any free images platform
* **Text Content**: Product descriptions, category info, and user help texts written manually
* **Pricing**: Inspired by market trends from Etsy or any other gifting brand

**3. FUNCTIONALITY**

**a. MUST HAVE USER STORIES**

**USER AUTHENTICATION & ACCOUNT MANAGEMENT**

**1. User Registration**  
*As a shopper, I want to register an account so I can shop and view my orders.*

* Registration form: 1 hr
* Input validation: 1 hr
* Password hashing: 1.5 hrs
* Save to DB: 1 hr
* Confirmation message/redirect: 0.5 hr  
  **Total:** 5 hrs

**2. Shopper Login**  
*As a shopper, I want to log in to my account to access my cart and orders.*

* Login form: 1 hr
* Auth logic (session): 2 hrs
* Password verification: 1 hr
* Error handling: 0.5 hr  
  **Total:** 4.5 hrs

**PRODUCT BROWSING**

**3. View All Products**  
*As a shopper, I want to see all available products.*

* Grid layout: 1.5 hrs
* Fetch from DB: 1 hr
* Product card UI: 2 hrs  
  **Total:** 4.5 hrs

**4. View Product Image**  
*As a shopper, I want to view image of a product.*

* Image UI: 1 hr
* Load image: 0.5 hr  
  **Total:** 1.5 hrs

**SHOPPING CART**

**5. Add Product to Cart**  
*As a shopper, I want to add items to my cart.*

* Add-to-cart button: 1 hr
* Store in DB/session: 1 hr
* Feedback confirmation: 0.5 hr  
  **Total:** 2.5 hrs

**6. View Cart**  
*As a shopper, I want to see items in my cart.*

* Cart layout: 1.5 hrs
* Load from DB: 1.5 hrs
* Subtotal calculation: 0.5 hr  
  **Total:** 3.5 hrs

**7. Update Quantity in Cart**  
*As a shopper, I want to change item quantity in my cart.*

* Quantity input UI: 1 hr
* Update logic: 1 hr  
  **Total:** 2 hrs

**8. Remove Item from Cart**  
*As a shopper, I want to remove items from my cart.*

* Remove button: 0.5 hr
* Delete from DB: 1 hr  
  **Total:** 1.5 hrs

**CHECKOUT**

**9. Checkout Page**  
*As a shopper, I want to proceed to checkout.*

* Checkout form: 2 hrs
* Autofill if logged in: 1 hr
* Order summary display: 1 hr  
  **Total:** 4 hrs

**10. Add a New Address**  
*As a shopper, I want to add a new shipping address so that I can use it during checkout.*

* Design and implement an "Add Address" form – 1 hr
* Validate and save the address to the database with shopper reference – 1 hr
* Show confirmation message or redirect on success – 0.5 hr  
  **Total: 2.5 hrs**

**11. View Saved Addresses**  
*As a shopper, I want to view all my saved addresses so that I can choose one during checkout.*

* Fetch saved addresses by shopper ID from the database – 1 hr
* Display list of addresses in the account or checkout page – 1 hr  
  **Total: 2 hrs**

**12. Edit an Address**  
*As a shopper, I want to update an existing shipping address so that I can correct or change details.*

* Load selected address into editable form – 1 hr
* Save updated data to the database – 1 hr
* Provide feedback message after successful update – 0.5 hr  
  **Total: 2.5 hrs**

**13. Delete an Address**  
*As a shopper, I want to delete a saved address if I no longer want to use it.*

* Display delete button next to each saved address – 0.5 hr
* Remove address from database with confirmation – 1 hr  
  **Total: 1.5 hrs**

**14. Order Confirmation Page**  
*As a shopper, I want to see confirmation after checkout.*

* Success page layout: 1 hr
* Save order in DB: 1.5 hrs
* Email logic (optional part): 2 hrs  
  **Total:** 4.5 hrs

**ADMIN FUNCTIONALITY**

**15. Admin Login**  
*As an admin, I want to log in securely to access the admin panel.*

* Login form: 1 hr
* Admin validation: 2 hrs  
  **Total:** 3 hrs

**16. View Products**   
*As a product manager, I want to view all products so I can manage them.*

* Fetch products from DB – 1 hr
* Display in admin panel – 1 hr  
  **Total: 2 hrs**

**17. Add Product**   
*As a product manager, I want to add new products.*

* Product form UI: 1.5 hrs
* Save to DB with image: 2 hrs  
  **Total:** 3.5 hrs

**18. Edit Product**   
*As a product manager, I want to update product info.*

* Fetch by ID: 1 hr
* Update form and DB: 2 hrs  
  **Total:** 3 hrs

**19. Delete Product**   
*As a product manager, I want to remove products.*

* Delete button: 0.5 hr
* DB logic: 1 hr  
  **Total:** 1.5 hrs

**20. View Categories**   
*As a product manager, I want to view all categories.*

* Fetch categories – 0.5 hr
* Display in admin dashboard – 0.5 hr  
  **Total: 1 hr**

**21. Add Category**   
*As a product manager, I want to create new product categories.*

* Category form: 1 hr
* Save to DB: 1 hr  
  **Total:** 2 hrs

**22. Edit Category**  
*As a product manager, I want to update category info.*

* Fetch by ID: 0.5 hr
* Edit + save logic: 1 hr  
  **Total:** 1.5 hrs

**23. Delete Category**   
*As a product manager, I want to delete a category.*

* Button + confirmation: 0.5 hr
* Validate + remove from DB: 1.5 hrs  
  **Total:** 2 hrs

**24. View Admins**  
*As an admin, I want to view a list of admin accounts.*

* Fetch admin users – 0.5 hr
* Display in dashboard – 0.5 hr  
  **Total: 1 hr**

**25. Add an Admin**  
*As a Site Manager, I want to create new admin.*

* Category form: 1 hr
* Save to DB: 1 hr  
  **Total:** 2 hrs

**26. Edit Admin Details**  
*As a site manager, I want to update admin details.*

* Fetch by ID: 0.5 hr
* Edit + save logic: 1 hr  
  **Total:** 1.5 hrs

**27. Delete an Admin**   
*As a site manager, I want to delete an admin.*

* Button + confirmation: 0.5 hr
* Validate + remove from DB: 1.5 hrs  
  **Total:** 2 hrs

**28. View Shoppers**  
*As an admin, I want to view a list of shopper accounts.*

* Fetch shoppers – 0.5 hr
* Display in dashboard – 0.5 hr  
  **Total: 1 hr**

**29. Delete a Shopper**   
*As a site manager, I want to delete a shopper account.*

* Button + confirmation: 0.5 hr
* Validate + remove from DB: 1.5 hrs  
  **Total:** 2 hrs

**30. Logout Functionality for Admin**  
*As an admin, I want to log out of my account.*

* Logout button + session/token cleanup: 1 hr  
  **Total:** 1 hr

**GENERAL FEATURES**

**31. Responsive Design**  
*As a shopper, I want the site to work on all devices.*

* CSS + Media queries: 5 hrs  
  **Total:** 5 hrs

**32. Accessibility Compliance**  
*As a shopper with disabilities, I want accessible UI.*

* Alt tags, ARIA roles, contrast: 2.5 hrs  
  **Total:** 2.5 hrs

**33. Logout Functionality for Shopper**  
*As a shopper, I want to log out of my account.*

* Logout button + session/token cleanup: 1 hr  
  **Total:** 1 hr

**b. SHOULD HAVE USER STORIES**

1. **Shopper: Receive Order Confirmation Email – 3 hrs**

*As a shopper, I want to receive an email after placing an order.*

* Generate order summary email – 1.5 hrs
* Connect with email service – 1.5 hrs  
  **Total:** 3 hrs

**2. View Products by Category**  
*As a user, I want to view products by category.*

* Products under Category UI: 1.5 hrs
* Backend query logic: 1 hr  
  **Total:** 2.5 hrs

**3. View Product Details**  
*As a user, I want to read product descriptions and view pricing.*

* Product page layout: 1.5 hrs
* Fetch by ID: 1 hr
* Display images, details, price: 1.5 hrs  
  **Total:** 4 hrs

**c. NICE TO HAVE USER STORIES**

1. **Shopper: Save to Wishlist**

*As a shopper, I want to save products to a wishlist for later.*

* Wishlist icon (UI) – 1 hr
* DB model for wishlist – 1.5 hrs
* Display saved wishlist items – 1.5 hrs  
  **Total:** 4 hrs

1. **Admin: Drag & Drop Image Upload**

*As an admin, I want to drag and drop image for products.*

* Integrate drag-and-drop UI – 1 hr
* Configure upload handling – 1.5 hrs
* Validate and preview uploaded image – 1 hr  
  **Total:** 3.5 hrs

1. **Shopper: Leave Product Reviews**

*As a shopper, I want to submit reviews for purchased products.*

* Review form on product page – 1 hr
* Save to DB with rating/comment – 1.5 hrs
* Display user review live – 1.5 hrs

**Total:** 4 hrs

**4. Shopper: Read Product Ratings***As a shopper, I want to read ratings for each product before buying.*

* Display average rating – 1 hr
* Show user reviews below product details – 1.5 hrs  
  **Total:** 2.5 hrs

**5. Payment Integration (Sandbox)**  
*As a shopper, I want to securely pay for my order.*

* Integrate PayPal/Stripe sandbox: 1.5 hrs
* Payment processing logic: 2.5 hrs
* Confirm transaction: 1 hr  
  **Total:** 5 hrs

**4. TECHNICAL SPECIFICATIONS**

**Frontend**: HTML, CSS, JavaScript or React  
**Backend**: Node.js with Express  
**Database**: MongoDB (preferred)  
**Payment Integration**: PayPal Sandbox or Stripe  
**Auth**: session-based auth

**Hosting**: Hostinger

**Third-party Libraries**: Stripe/PayPal APIs, Bootstrap

**5. DEVELOPMENT SPECIFICATIONS**

**a. Folder Structure**

* /views (React frontend)
* index.js (Node + Express backend)
* / components/ component-name /routes
* / components/component-name/models
* /components/ component-name /controllers

**b. File Naming Conventions**

* kebab-case for files and folders
* camelCase for variables/functions/tables

**c. Accessibility Standards**

* Alt text for all images
* Color contrast and readable fonts

**d. Responsiveness**

* Mobile-first approach using Flexbox/Grid

**e.** **GitHub Repository**

<https://github.com/Himani1609/Pitara-ECommerce>

**6. Database Schema and ERD**

**Database: MongoDB**

**users**

|  |  |  |
| --- | --- | --- |
| Field | Type | Description |
| \_id | **ObjectId** | **Primary key** |
| firstName | **String** | **First name of the user** |
| lastName | **String** | **Last name of the user** |
| email | **String** | **Unique email** |
| password | **String** | **Hashed password** |
| createdAt | **Date** | **Account creation timestamp** |

**admins**

|  |  |  |
| --- | --- | --- |
| Field | Type | Description |
| \_id | **ObjectId** | **Primary key** |
| firstName | **String** | **First name of the user** |
| lastName | **String** | **Last name of the user** |
| email | **String** | **Unique email** |
| password | **String** | **Hashed password** |
| role | **String** | **Enum: 'Product Manager', 'Site Manager'.** |
| createdAt | **Date** | **Account creation timestamp** |

**addresses**

|  |  |  |
| --- | --- | --- |
| Field | Type | Description |
| \_id | **ObjectId** | **Primary key** |
| userId | **ObjectId** | **Reference to users.\_id** |
| fullName | **String** | **Name on address** |
| street | **String** | **Street address** |
| city | **String** | **City** |
| state | **String** | **State or province** |
| zip | **String** | **Postal/ZIP code** |
| country | **String** | **Country** |
| phone | **String** | **Contact number** |
| createdAt | **Date** | **Timestamp when added** |

**products**

|  |  |  |
| --- | --- | --- |
| Field | Type | Description |
| \_id | **ObjectId** | **Primary key** |
| name | **String** | **Product name** |
| description | **String** | **Product description** |
| image | **String** | **image URL with image name** |
| price | **Number** | **Price in CAD** |
| categoryId | **ObjectId** | **Reference to categories.\_id** |
| stockQuantity | **Number** | **Inventory count** |

**categories**

|  |  |  |
| --- | --- | --- |
| Field | Type | Description |
| \_id | **ObjectId** | **Primary key** |
| name | **String** | **Category name** |
| description | **String** | **Category details** |

**carts**

|  |  |  |
| --- | --- | --- |
| Field | Type | Description |
| \_id | **ObjectId** | **Primary key** |
| userId | **ObjectId** | **Reference to users.\_id** |
| updatedAt | **Date** | **Last updated** |

**cart\_items**

|  |  |  |
| --- | --- | --- |
| Field | Type | Description |
| \_id | **ObjectId** | **Primary key** |
| cartId | **ObjectId** | **Reference to carts.\_id** |
| productId | **ObjectId** | **Reference to products.\_id** |
| quantity | **Number** | **Quantity of product in the cart** |
| addedAt | **Date** | **Timestamp when item was added** |

**orders**

|  |  |  |
| --- | --- | --- |
| Field | Type | Description |
| \_id | **ObjectId** | **Primary key** |
| userId | **ObjectId** | **Reference to users.\_id** |
| totalAmount | **Number** | **Final price** |
| paymentStatus | **String** | **Enum: 'Pending', 'Paid', etc.** |
| orderStatus | **String** | **Enum: 'Pending', 'Shipped', etc.** |
| createdAt | **Date** | **Timestamp** |

**order\_items**

|  |  |  |
| --- | --- | --- |
| Field | Type | Description |
| \_id | **ObjectId** | **Primary key** |
| orderId | **ObjectId** | **Reference to orders.\_id** |
| productId | **ObjectId** | **Reference to products.\_id** |
| quantity | **Number** | **Quantity of the product ordered** |
| price | **Number** | **Price per unit at the time of purchase** |

**ERD DIAGRAM**

**A diagram of a product

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**7. SCHEDULE**

<https://docs.google.com/spreadsheets/d/1BkAmhGpw0d2SO5mp9vzUkXIgoi2qdyx7BeVXYSTueUE/edit?gid=0#gid=0>

**8. CONCLUSION**

Pitara is a thoughtfully designed e-commerce project that focuses on curated gift shopping. This document outlines the key features, technical stack, user roles, and development plan required to build a fully functional web application. With a clear roadmap and solid foundation, Pitara is ready for implementation and future growth.