Product Backlog Specification - Syntrix Software Engeering.

Project: Baby_Boo_ Closet / E-commerce Platform
Course: DCIT208 - Software Engineering
Team: Syntrix Software Engineering

Question 1:
User Story Refinement (Epics User Stories)

Epic ID	Original Epic	Derived User Stories
E1	Customer Account Management	US-5a Register, US-5b Login/Logout, US-5c Edit Profile
E2	Order Management	US-6 Place Order, US-7 Track Order, US-8 Admin Update Order
E3	Product Catalog & Browsing	US-1 Browse Products, US-2 Search /Filter Products
E4	Shopping Cart	US-3a Add to cart, US-3b Remove from cart, US-3c View cart summary.
E5	Payments & Checkout	US-9 Checkout, US-10 Secure Payment integration.

Question 2
Sizing & Prioritization
Estimation Method: Fibonacci Scale (1-7)
Total Backlog: 55 points
Assumed Velocity: 18 points per sprint (≈3 sprints).

US ID	Description	Story Points	Priority
US-1	Browse Products	3	High
US-2	Search & Filter Products	5	High
US-3a	Add to Cart	5	High
US-3b	Remove from Cart	2	Medium
US-3c	View Cart Summary	3	High
US-5a	Register Account	5	Medium
US-5b	Login/Logout	3	High
US-5c	Edith Profile	2	Low
US-6	Place Order	5	High
US-7	Track Order	5	Medium
US-8	Admin updates order	5	Medium
US-9	Checkout Process	6	High
US-10	Secure Paymentss	6	High

Question 3.
Up-to-Date Story List
US-1: Browse Products
➢ _Precondition:_ Product catalog exists in DB.
➢ _Postcondition:_ Products displayed on UI.

US-2: Search & Filter Products
➢ **Precondition:** User has entered query/filter.
➢ **Postcondition:** Filtered results displayed.

US-3a: Add to Cart
➢ **Precondition:** Item selected is in stock.
➢ **Postcondition:** Item added to cart session.

US-3b: Remove from cart
➢ **Precondition:** Cart has at least one product.
➢ **Postcondition:** Select product is removed from the cart.

US-3c: View Cart Summary
➢ **Precondition:** Cart contains at least one product.
➢ **Postcondition:** User sees cart items, quantities, and total price.

US-5a: Register Account
➢ **Precondition:** New user provides name, email, password.
➢ **Postcondition:** Account is created, and confirmed email sent.

US-5b: Login/Logout
➢ **Precondition:** New user valid credentials.
➢ **Postcondition:** Session is created/destroyed, user redirected to homepage.

US-5c: Edit Profile
➢ **Precondition:** User is logged in.
➢ **Postcondition:** Profile details updated and saved in database.

US-6: Place Order
➢ **Precondition:** Cart contains products, user provides shipping details.
➢ **Postcondition:** Order is created with unique ID, status = "Pending".

US-7: Track Order
➢ **Precondition:** User has placed an order.
➢ **Postcondition:** Order status (e.g., Pending, Shipped, Delivered) is displayed.

US-8: Admin Updates Order
➢ **Precondition:** Admin is logged in.
➢ **Postcondition:** Order status updated in system and visible to customer

US-9: Checkout
➢ **Precondition:** Cart has must have at least one product.
➢ **Postcondition:** Order created, awaiting payment.

US-10: Secure Payment
➢ **Precondition:** Valid checkout intiated
➢ **Postcondition:** Payment confirmed, receipt sent, order status updated.

Question 4.

Sprint-1 Planning (Aug 2-6, 2025)

Sprint Goal: *Deliver MVP: Product browsing, cart basics, and login.*

Sprint 1 Stories (≈18 pts):
➢ **US-1** Browse Products (3pts)
➢ **US-2** Search/Filter Products (5pts)
➢ **US-3a** Add to Cart (5pts)
➢ **US-3c** View art Summary (3pts)

➤ **US-5b** Login/Logout (3pts)

    Justification:
➤ These features give a working demo customers can test.
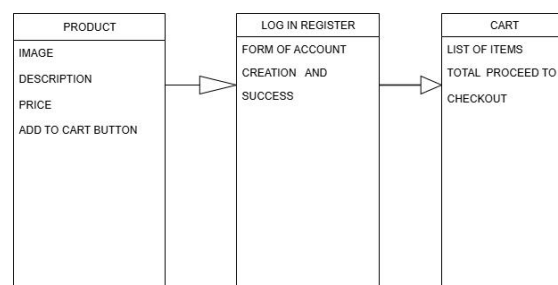➤ Browsing/Search is the foundation → cart → login.

    Sprint-1 Demo:
➤ Customer browser products, searches by category, logs in, adds products to cart, and views cart summary.

Question 5.

Design Sketches & UI (Wireframes)

➤ **Homepage:** Banner + grid of kids' clothes.
➤ **Product Page:** Image, description, price, add to Cart button.
➤ **Cart Page:** List of items, total, "Proceed to Checkout"
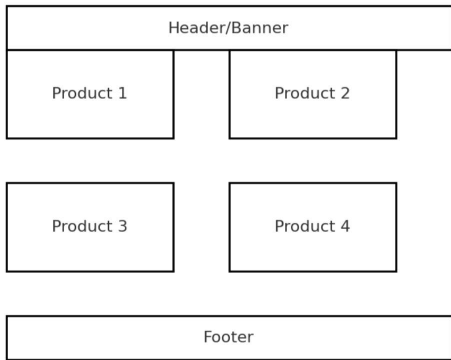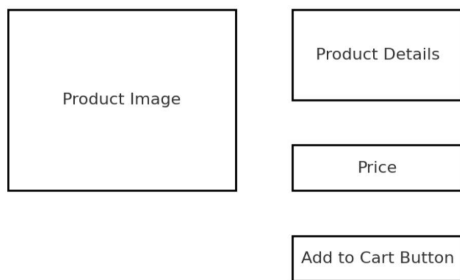➤ **Login/Register Page:** Form for account creation & access.

PRODUCT		LOG IN REGISTER		CART
IMAGE		FORM OF ACCOUNT		LIST OF ITEMS
DESCRIPTION	→	CREATION AND	→	TOTAL PROCEED TO
PRICE		SUCCESS		CHECKOUT
ADD TO CART BUTTON				

Login Page

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Username Field

Password Field

Login Button

Register Link
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Homepage

Header/Banner

Product 1	Product 2

Product 3	Product 4

Footer

Product Page

Product Image	Product Details
	Price
	Add to Cart Button

Cart Page

Cart Item List

Cart Summary

Proceed to Checkout

Accessibility Features

➢ High-contrast colors for text & buttons .
➢ Alt-text for all product images.
➢ Keyboard navigation for login and checkout forms.