FACULTY OF INFORMATION COMMUNICATION AND TECHNOLOGY

DEPARTMENT OF INFORMATION COMMUNICATION TECHNOLOGY

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ASSESSMENT:	POE Part 1
MODULE NAME:	WEB DEVELOPMENT(INTRODUCTION)
MODULE CODE:	WEDE5020
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Organisation Overview

Website Project Proposal

Name:

      aespa's Fanstore

Brief history of the organisation

In 2025, Siphelele Pienaar, an enthusiastic supporter of the K-Pop girl group aespa, established aespa's Fanstore to serve as a comprehensive outlet for all merchandise related to aespa. What began as a minor online group selling personalized fan products evolved into a reliable site providing official merchandise, collectables designed by fans, and special event items. The store has since turned into a center for international MYs (aespa's fanbase) to connect, celebrate, and show support for their idols with creative merchandise and joint fan initiatives

Mission and Vision statement

To offer unique, innovative, and genuine aespa-themed products that honor the group's artistry, enhance fan relationships, and cultivate a worldwide community of MYs.

To establish ourselves as the top global merchandise store for aespa, known for our innovation, authenticity, and for connecting fans across the globe through common passion and creativity

Target Audience

Main Audience: Fans of aespa across the globe, deeply engaged in K-Pop culture, collectibles, and unique merchandise.

Secondary audience: fans of K-pop, music memorabilia collectors, and pop culture aficionados looking for distinctive, limited-edition products.

Geographic coverage: Worldwide, with significant markets in South Korea, South Africa, the USA, Japan, Southeast Asia, and Europe.

Website objectives and goals

Specific Goals

Boost website visitation

Attract additional visitors to the website via SEO (Search Engine Optimization), social media marketing, and engagement with the fan community.

Generate Prospects & Create a Fanbase Database

Inspire guests to register for newsletters, unique product notifications, and fan event news.

Market Items & Increase Income

Provide a simple, safe, and enjoyable online shopping experience for both official and fan-created aespa merchandise.

Deliver Useful Insights & Enthusiast Material

Provide news on aespa's events, product launch timelines, and unique behind-the-scenes material.

Boost Community Participation

Encourage engagement among fans by utilizing discussion forums, surveys, and fan-created artwork or designs submitted by users.

Key Performance Indicators (KPIs)

Objective	Performance Indicator	Assessment Technique	Aim
Boost Site Visitors	Monthly distinct users	Google analytics	+30% over 6 months
Create Leads	Count of newsletter subscription	Data from email marketing platform	500 subscribers each month
Market Goods & Increase Income	Online sales per month	E-commerce analytics	Rx,xxx/month revenue goal
Offering Useful Insights	Mean session length	Google analytics	≥ 3 minutes average visits
Improve Community Involvement	Forum participation & post totals	Site metrics & CMS information	Over 100 active members within initial 3 months

Enhance Conversion Rates	Percentage of visitors turning into buyers	Online retail analytics	≥ 3% conversion percentage

Current Website Analysis

Advantages

Powerful Brand Attraction – Visuals and color schemes embody aespa's style, captivating fans immediately.

Limited-Edition Merchandise – The presence of unique items and products designed by fans generates interest.

Essential E-commerce Features – Customers can explore, add items to their cart, and complete purchases effortlessly.

Worldwide Availability – Options for international shipping accessible.

Engaging Social Media Connections – Linking with Instagram, X (Twitter), and TikTok boosts traffic from fan groups.

Vulnerabilities

Slow Page Load Time – Unoptimized images and videos lead to lags.

Limited Mobile Adaptability – Certain layouts look misaligned on smaller displays.

Restricted Payment Methods – Only a few globally accepted options (e.g., PayPal, Apple Pay) available.

Absence of Search & Filter Features – Challenging for users to locate products swiftly.

Absence of a Defined Newsletter or Lead Capture Plan – Users are not encouraged to subscribe to a mailing list.

Flaw	Recommended Enhancements
Slow Page Load Time	Optimize images, activate caching, and implement a Content Delivery Network (CDN).

Limited Mobile Adaptability	Revamp with a responsive framework (e.g., Bootstrap) and evaluate on different devices.
Restricted Payment Methods	Incorporate PayPal, Apple Pay, Google Pay, and gateways that support cryptocurrency.
Absence of Search & Filter Features	Introduce a product search feature along with category and price options.
Absence of a Defined Newsletter or Lead Capture Plan	Implement pop-up or integrated sign-up forms with rewards (promo codes, priority access)

Proposed Website Features and Functionality

Essential features and desired functionality

Main Page

Objective: Make a memorable initial impact and lead guests to essential sections.

Desired Features:

Hero banner featuring visuals or promotions themed around aespa.

Fast access to highlighted items, latest additions, and top sellers.

Section for news/updates on recent aespa events and product launches.

Action buttons (Purchase Now, Subscribe to Newsletter)

About Us Section

Goal: Establish confidence and narrate the tale of Aespa's Fanstore.

Intended Features:

Concise history of the fanstore.

Statements of mission and vision.

Images or illustrations highlighting fan culture and community.

Products/Services Section

Objective: Primary retail area for products.

Required Features:

Types of products (e.g., Albums, Apparel, Accessories, Fan-Created Items).

Pages for product details featuring high-resolution images, descriptions, measurements, and inventory status.

Options for searching and filtering (by category, price, popularity).

"Add to Basket" and "Favorites" options.

Reach Out Page

Aim: Deliver assistance to customers and foster interaction.

Desired Features:

Contact form (name, email, message) includes spam protection.

Email for store assistance and links to social media.

Map showing availability of physical store or pickup location.

Design and User Experience

Design Aesthetic & Branding for Aespa's Fanstore

1. Color Scheme (Proposed Palette)

Since aespa has a futuristic, cyber-aesthetic brand identity, the fanstore should mirror that vibe.

Primary Colors:

⚫ Black (#000000): Sleek, modern, and bold foundation.

🟣 Neon Purple (#9B5DE5): Represents aespa's futuristic and digital vibe.

Secondary Colors:

🔵 Electric Blue (#3A86FF): Adds vibrancy and aligns with tech/fandom culture.

⚪ White (#FFFFFF): Balance for readability and clean design.

Accent Color:

🌸 Light Pink (#FF99CC): Soft highlights that appeals to K-pop fan aesthetics.

Typography (Font Selection & Structure)

Headings (H1, H2): Poppins Bold (contemporary, forward-looking, and robust for branding).

Body Text: Roboto Regular (clear, easily legible on various devices).

Call-to-Action (CTAs): Poppins Semi-Bold in uppercase for greater emphasis.

Hierarchy:

H1: 32–36px → Bold page titles, neon purple/blue.

H2: 24–28px → Headers for sections.

Body text: 14–16px, either black or white based on the background.

Buttons/CTAs: Dissonant highlight colors (pink/blue against dark backdrop).

Design and Layout Strategy

General Aesthetic: Sleek and modern, featuring neon highlights on deep backdrops.

Design Approach: Grid-oriented, segmented areas with ample spacing.

Visual Features: Premium product photos, aespa visuals, and interactive hover effects.

Uniformity: Recurring color highlights and fonts for brand awareness.

Considerations for User Experience (UX)

Navigation: Fixed top navigation menu featuring distinct categories (Home, About, Shop, Community, Contact).

Layout: The homepage serves as a center with links to products, news, and community updates.
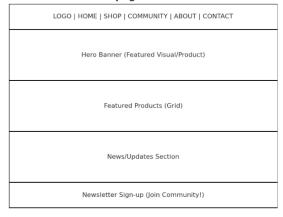
Color Palette in UX: Dark backdrop decreases eye strain; neon highlights underscore key CTAs.

Accessibility: Adequate contrast (light text on dark backdrop), alternative text for pictures, resizeable fonts.

Mobile-First Approach: Designed for compact displays featuring expandable menus.

Low-fidelity wireframes

Homepage Wireframe

LOGO | HOME | SHOP | COMMUNITY | ABOUT | CONTACT

Hero Banner (Featured Visual/Product)

Featured Products (Grid)

News/Updates Section

Newsletter Sign-up (Join Community!)

Footer: Social Links, Policies, Contact Info

Products Page Wireframe

LOGO | HOME | SHOP | COMMUNITY | ABOUT | CONTACT

Filters:
- Category
- Price
- Size
- Type

Product Grid (4x4 items: Images + Prices)

Pagination / Load More

Product Detail Page Wireframe

LOGO | HOME | SHOP | COMMUNITY | ABOUT | CONTACT

Product Image

Product Title
Price
Description
[Add to Cart]
[Wishlist]

Related Products (Carousel/Grid)

Community Page Wireframe

LOGO | HOME | SHOP | COMMUNITY | ABOUT | CONTACT

Fan Forum / Discussion Topics

Fan Art Gallery (Grid)

Polls / Surveys

Technical Requirements

Requirements for Hosting and Domain Name

Domain Name

Hosting and Domain Name Specifications

Domain Name

Recommended Domain: www.aespafanstore.com (or local options such as .co.kr for South Korea, .shop for online shopping branding).

Requirements:

Simple to recall and input.

Incorporates important keywords (aespa, fanstore).

Register your domain securely with WHOIS privacy protection.

Hosting Prerequisites

Hosting Category:

Shared Hosting (Basic Option): Cost-effective, ideal for low to medium traffic.

VPS Hosting (Suggested): Scalable resources, improved speed.

Cloud Hosting (Ideal for Worldwide Audience): (AWS, Google Cloud, Azure) for substantial traffic, international content distribution, and dependability.

Essential Hosting Characteristics:

At least 99.9% uptime assurance.

SSL Certificate (HTTPS) ensures secure transactions.

Global load speed optimization using a Content Delivery Network (CDN).

Routine Backups & Safety Oversight.

Storage: ~10–50 GB (depending on space-intensive content).

Bandwidth: Flexible/unlimited to accommodate surges (e.g., album launch days).

Coding Languages & Frameworks

User Interface (Frontend)

HTML5 & CSS3 → Formatting & design.

JavaScript (ES6+) → Dynamic capabilities and interactive elements.

Frameworks/Libraries:

React.js → For adaptable, component-based, and extensible user interfaces.

Bootstrap / Tailwind CSS → For rapid, mobile-centric design.

Server-Side (Backend)

Node.js (using Express.js) → Rapid, event-driven, expandable backend.

Option: PHP (WordPress or Laravel) when utilizing a CMS.

Database:

MySQL (conventional option for online retail).

MongoDB (if adaptability for user-created content is required).

E-commerce Platform (Optional Mixed)

WooCommerce (powered by WordPress) → Convenient for merchandise in fan stores.

Shopify (if the SaaS choice is favored) → Easier to use but offers fewer customization options.

Tailored Development (React + Node.js + Stripe/PayPal API) → Complete oversight on branding and functionalities.

This collection guarantees:

Velocity (React + Content Delivery Network).

Scalability (Node.js + Cloud hosting).

Protection (SSL, data backups, HTTPS).

Audience involvement (community functions, interactive interface).

Timeline and Milestones

Stage	Activities	Timeline	Major Achievements
Planning and Discovery	Establish project parameters, objectives, and KPIs - Analyze competitors	25-26 Aug	Scope endorsed
Design	Establish color scheme, font selection, and brand identity - Produce wireframes & prototypes	17-19 Aug	Wireframes and Brand Identity completed
Frontend Development	Create homepage, about, contact page - Organize product pages	20-22 Aug	Core pages completed

Backend Development	Database configuration (initial structure) - E-commerce prototype (shopping cart, payment process)	23-24 Aug	Fundamental Features Operational
Testing & QA	Verify navigation, links, and forms - Enhance for speed & mobile	25 Aug	Testing successful
Completion & Submission Preparation	Finalize document composition - Incorporate wireframes, proposal, and timeline into submission PDF	26 Aug	Proposal prepared
Submission	Submit finalized proposal/document	27 Aug	Submission Day

Budget

Budget Overview

Single-instance Development (Construction Stage)

Lean MVP (prototype): R15,000 – R35,000

Complete Store Launch: R44,000 – R95,000 (may go as high as R145,000 with enhanced functionalities)

Costs that occur annually or monthly.

Domain (.co.za): R97 – R197 annually

Conducting:

Shared hosting: R79 to R99 monthly

Cloud/VPS hosting: R420 – R1,295 every month

SSL Certificate: Complimentary (through Let's Encrypt)

CDN/Security: Cloudflare Free or Pro approximately R450/month

Payment Gateway (PayFast): approximately 3.5% plus R2 for each transaction

Maintenance: R1,400 – R5,600 monthly (based on the level of support)

Substitute (Shopify SaaS)

Installation & personalization: R15,000 – R50,000

Platform: ~R690/month (US$39) following promotion

Applications and integrations: additional expenses may apply.

Payments: PayFast charges apply.

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