THE YENEPOYA COLLEGE

DEPARTMENT OF COMPUTER APPLICATIONS

Vth Semester BCA Project

<u>SYNOPSIS</u>

"E-COMMERCE WEBSITE FOR LAPTOPS"

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DATE OF SUBMISSION: 11/08/2025

1.1 TITLE OF THE PROJRCT
E-Commerce Website for Laptops

1.2 INTRODUCTION

The demand for laptops has significantly increased due to the growing need for remote work, online education, gaming, and personal use. This project aims to create a dedicated e- commerce platform for purchasing laptops online, providing customers with a wide range of options, competitive pricing, and a seamless shopping experience. The platform will cater to different user segments such as students, professionals, gamers, and businesses, ensuring accessibility and convenience.

1.3 OBJECTIVES OF THE PROJECT

The e-commerce website will be designed to offer laptops from various brands and categories, allowing users to search, compare, and purchase products easily. It will include essential e-commerce functionalities like product listings, search filters, shopping cart, secure payment gateways, and order tracking. The website will be optimized for mobile devices, ensuring users can shop anytime and anywhere.

1.4 OVERVIEW

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1.5 CATEGORY

The laptops on the website will be organized into the following categories:

- **By Usage:**
  - Student Laptops
  - Business Laptops
  - Gaming Laptops
  - Ultra books & 2-in-1 Convertibles
- **By Price Range:**
  - Budget (< ₹40,000)
  - Mid-Range (₹40,000 – ₹80,000)
  - Premium (> ₹80,000)
- **By Brand:**
  - HP, Dell, Lenovo, Asus, Acer, Apple, MSI, etc.

1.6 HARDWARE REQUIREMENTS

Processor   : Intel Core i5 or higher
RAM   : 8 GB RAM
Hard Disk   : 500 GB SSD storage

1.7 SOFTWARE REQUIREMENTS

Front End   : HTML5, CSS3, JavaScript, React.js
Back End   : Node.js / PHP
Operating System : Windows 10 or more / Linux

1.8 MODEL DESCRIPTION

1.8.1 Login Page:
- User login with email/username and password.
- "Forgot Password" functionality with email OTP verification.
- Option for new users to register.
- Secure authentication using encryption (e.g., HTTPS, password hashing).

1.8.2 Product Page:
- Product listing with thumbnails, prices, and specifications.
- Filter and sort options (by brand, price range, processor, RAM, etc.).
- Product detail page with images, technical specs, reviews, and ratings.
- "Add to Cart" button for quick purchasing.

1.8.3 Cart Page:
- Display list of selected items with quantity, price, and total amount.
- Option to update quantities or remove items.
- Show estimated delivery date and shipping charges.
- "Proceed to Checkout" button.

1.8.4 Checkout Page:
- Form for entering shipping address and contact details.
- Multiple payment options (credit/debit card, UPI, net banking, COD).
- Order summary before final confirmation.
- Payment gateway integration for secure transactions.

1.8.5 Account Page:
- Edit personal details (name, address, contact number).
- View order history and track current orders.
- Manage saved addresses and payment methods.
- Option to change password and privacy settings.

1.9 LIMITATIONS

- Initial version limited to laptops only; no accessories or other electronics.
- Limited payment gateway options in the early stage.
- Requires stable internet connection for smooth operation.
- No dedicated mobile application in the first release (website only)

1.10 FUTURE SCOPE

- Expansion to sell laptop accessories such as chargers, bags, and external storage.
- Integration of AI-based recommendation systems for personalized shopping.
- Development of a dedicated mobile app for Android and iOS.
- Support for multiple languages and currencies for international reach.