Milestone	Task	Explanation	Responsibility	Dependency	Duration
User Research	Identify Target Audience	Define the specific group of potential customers who are most likely to use the e-commerce platform.	Market Researcher		2
	Conduct Market Analysis	Study the current market trends, competitors, and customer preferences to identify opportunities.	Market Researcher	Identify Target Audience	8
	User Surveys and Interviews	Gather insights from potential users through surveys and interviews to understand their needs.	Market Researcher	Conduct Market Analysis	15
	Analyze Competitor Websites	Evaluate competitors' websites to identify best practices, gaps, and potential areas of improvement.	Market Researcher		10
	Define User Personas	Create fictional representations of target customers to better understand their motivations and goals.	Market Researcher		5
	Usability Testing By External Stakeholders	Test the e-commerce platform with real users to identify usability issues and gather feedback.	Market Researcher		10
	Card Sorting or Information Architecture	Organize website content to ensure intuitive navigation and smooth user experience.	Market Researcher		8
	A/B Testing	Conduct experiments to compare different design or content variations for optimization.	Market Researcher		12
	Mobile User Research	Study user behavior and preferences on mobile devices to optimize the mobile e-commerce experience.	Market Researcher		12
	Eye-Tracking Studies	Use eye-tracking technology to understand what users pay attention to and improve page layouts.	Market Researcher		15
	Scroll and Click Heatmaps	Analyze user interactions on the website using heatmaps to improve page design and layout.	Market Researcher		7
	Conversion Funnel Analysis	Identify potential drop-off points in the user journey and optimize the conversion funnel.	Market Researcher		10
Product Management	Market Research and Analysis	Conduct research on target market, competitors, trends, and customer needs to identify opportunities and make data-driven product decisions.	Product Manager		8
	Define Product Vision and Strategy	Develop a clear vision and long-term strategy for the e-commerce product to align with business goals and customer expectations.	Product Manager		2
	Create Product Roadmap	Plan and prioritize product development initiatives, features, and improvements to guide the product's growth and evolution.	Product Manager		3
	User Persona Development	Identify and understand the target audience by creating user personas, ensuring product decisions cater to their specific needs.	Product Manager		2
	Requirements Gathering and Analysis	Collaborate with stakeholders to gather and analyze product requirements, ensuring they are well-defined and feasible for development.	Product Manager		10
	Competitive Analysis	Continuously monitor competitors' offerings, strengths, and weaknesses to maintain a competitive edge and identify areas for improvement.	Product Manager		5
	Stakeholder Communication	Regularly communicate product updates, progress, and plans to internal teams and stakeholders to maintain alignment and support.	Product Manager		Ongoing
	Feature Prioritization	Prioritize product features based on business value, user needs, and development effort to maximize the product's impact.	Product Manager		7
	Product Documentation	Create and maintain product documentation, including user guides, feature specifications, and release notes for internal and external use.	Product Manager		Ongoing
	Coordinate Product Development	Collaborate with cross-functional teams (designers, developers, QA) to ensure timely and successful product development and releases.	Product Manager		Ongoing
	User Acceptance Testing (UAT)	Engage with users to conduct UAT, gather feedback, and ensure the product meets quality standards and user expectations.	Product Manager		5
	Pricing and Monetization Strategy	Develop pricing models and strategies to optimize revenue generation and align with the value provided by the e-commerce product.	Product Manager		7
	Customer Support and Feedback Analysis	Gather customer feedback and support data to identify pain points and opportunities for product improvements and customer satisfaction.	Product Manager		Ongoing
	Performance Monitoring and KPI Tracking	Define key performance indicators (KPIs) for the e-commerce product and regularly monitor and analyze metrics for continuous improvement.	Product Manager		Ongoing
	Product Training and Education	Conduct internal training sessions to educate teams about the product's features, benefits, and value proposition.	Product Manager		5
	End-of-Life Planning	Evaluate and plan for the product's end-of-life, including migration strategies or sunsetting the product, when necessary.	Product Manager		7
UX UI	User Research and Analysis	Conduct user research to understand target audience, behavior, needs, and pain points to inform the design process.	UX UI Designer		5
	Information Architecture	Plan the website's structure, navigation, and content organization to create an intuitive and user-friendly e-commerce experience.	UX UI Designer	Requirements Gathering and Analysis	5
	Wireframing and Prototyping	Create low-fidelity wireframes and interactive prototypes to visualize the layout and flow of key pages before finalizing the design.	UX UI Designer	Requirements Gathering and Analysis	14
	Mobile Responsive Design	Ensure the e-commerce website's design is responsive and optimized for various devices, providing a seamless user experience.	UX UI Designer		7
	Visual Design and Branding	Develop the visual design elements, including color schemes, typography, and branding, to establish a consistent and appealing look.	UX UI Designer		14
	Checkout Process Optimization	Optimize the checkout process to reduce friction, enhance usability, and improve conversion rates for a smooth user journey.	UX UI Designer		10
	Product Page Design	Design visually engaging and informative product pages, showcasing products with clear images, descriptions, and call-to-action.	UX UI Designer		7
	Category and Navigation Design	Create intuitive category pages and navigation menus to help users find products quickly and easily.	UX UI Designer		7
	Interactive Element Design	Design interactive elements like buttons, forms, and product galleries to engage users and encourage action.	UX UI Designer		7
	A/B Testing and User Feedback Incorporation	Collaborate with the UX team to conduct A/B tests and incorporate user feedback into design iterations for continuous improvement.	UX UI Designer		Ongoing
	Accessibility and Inclusivity Considerations	Ensure the e-commerce website's design meets accessibility standards, making it usable for all users, including those with disabilities.	UX UI Designer		10
	Performance Optimization	Optimize graphics and design elements to improve website loading speed and performance for a better user experience.	UX UI Designer		5
	Error and Validation Message Design	Design clear and user-friendly error messages and validation prompts to guide users during form submissions and error scenarios.	UX UI Designer		5
	Collaborate with Developers and QA	Work closely with development and QA teams to ensure the design is implemented accurately and meets quality standards.	UX UI Designer		Ongoing

The remaining columns form a Gantt chart spanning Sprint 1 through Sprint 8, divided into Week 1 to Week 16, with shaded cells indicating scheduled activity per task.

Milestone	Task	Explanation	Responsibility	Dependency	Duration	Scheduled Weeks (green cells)
	User Onboarding and Tutorials	Design onboarding experiences and tutorials to help new users navigate and understand the e-commerce platform.	UX UI Designer		7	Week 13–14, Week 16
	Design System Development	Create a design system and style guide to maintain consistency and streamline the design process for future updates and features.	UX UI Designer		14	Week 13–14, Week 16
Platform	Defining the platform architecture of the application	Deciding the architecture for an ecommerce site for scalability, robust, availability, maintainability, reusability, usability, security, accessibility.	Solution Architects	Requirements Gathering and Analysis	8 days	Week 3–4
	Infrastructure Setup	Provision and configure the necessary infrastructure for the ecommerce platform, including servers, databases, load balancers, and content delivery networks (CDNs).	Platform Engineers		3 days	Week 3
	Scalability Planning	Develop a strategy to ensure the platform can handle increasing traffic and data as the business grows. This may involve horizontal and vertical scaling, caching mechanisms, and resource monitoring.	Platform Engineers		5 days	Week 3
	High Availability Setup	Implement measures to ensure the ecommerce platform remains available and operational even during hardware or network failures. This may include redundancy, failover systems, and load balancing.	Platform Engineers		4 days	Week 3
	Security Implementation	Harden the platform's security by applying best practices, setting up firewalls, encrypting data in transit and at rest, and implementing authentication and authorization mechanisms to protect user data and prevent unauthorized access.	Platform Engineers		6 days	Week 7
	Backup and Disaster Recovery	Set up regular data backups and create a disaster recovery plan to ensure data integrity and availability in the event of a system failure or data loss.	Platform Engineers		4 days	Week 7
	Continuous Integration and Deployment	Establish an automated CI/CD pipeline to facilitate seamless code integration, testing, and deployment. This reduces manual errors, speeds up development cycles, and ensures new features are rolled out efficiently and reliably.	Platform Engineers		6 days	Week 5
	Monitoring and Logging Setup	Implement monitoring tools and logging mechanisms to track the platform's performance, identify bottlenecks or issues, and proactively address potential problems to maintain optimal system health.	Platform Engineers		4 days	Week 5
	Database Optimization	Optimize database performance, indexing, and query execution to ensure fast and efficient data retrieval and storage. This improves overall platform responsiveness and user experience.	Platform Engineers		5 days	
	API Development and Management	Design and develop APIs that facilitate communication between different components of the ecommerce platform, as well as with third-party services or external partners. Ensure proper documentation and versioning for ease of integration.	Platform Engineers		6 days	Week 15
	Content Management System Setup	Integrate a content management system (CMS) to allow easy management and updating of website content, product catalogs, and other dynamic elements.	Platform Engineers		3 days	Week 11
	Payment Gateway Integration	Integrate with various payment gateways to enable secure and seamless payment processing for customer transactions. Ensure compliance with PCI DSS standards for handling cardholder data securely.	Platform Engineers		5 days	Week 7
	Shipping and Logistics Integration	Integrate with shipping and logistics providers to automate shipping processes, calculate shipping costs, and provide real-time tracking information to customers.	Platform Engineers		4 days	
	Personalization and Recommendation Systems	Implement personalized user experiences through recommendation systems based on user behavior and historical data. Utilize machine learning algorithms to offer product recommendations tailored to individual users.	Platform Engineers		6 days	
Software Development	Frontend Architecture and Tech Stack Finalization	Deciding the architecture for an ecommerce site for scalability, robust, availability, maintainability, reusability, usability, security, accessibility.	Solution Architects	Requirements Gathering and Analysis	8 days	Week 3–4
	Backend Architecture and Tech Stack Finalization	Deciding the architecture for an ecommerce site for scalability, robust, availability, maintainability, reusability, usability, security, accessibility.	Solution Architects	Requirements Gathering and Analysis	8 days	Week 3–4
	User Authentication - Login Page	Create user account systems with secure authentication, password management, and account settings.	Frontend Engineers		3	Week 5
	User Authentication - User Database Integration	Create user account systems with secure authentication, password management, and account settings.	Backend Engineers		3	Week 3
	Product Catalog - Display Product List	Display a list of products available for purchase.	Frontend Engineers		4	Week 5
	Product Catalog - Database Setup and API	Display a list of products available for purchase.	Backend Engineers		4	Week 3
	Product Details Page - UI Design	Provide detailed information about a specific product.	Frontend Engineers		4	Week 7
	Product Details Page - Product Data Integration	Provide detailed information about a specific product.	Backend Engineers		4	Week 5
	Shopping Cart - Cart UI and Functionality	Enable users to add, remove, and manage items to buy.	Frontend Engineers		5	Week 7
	Shopping Cart - Cart Management Backend	Enable users to add, remove, and manage items to buy.	Backend Engineers		5	Week 7
	Payment Processing - Payment Gateway UI and Integration	Handle secure payment transactions for orders.	Frontend Engineers		7	Week 7
	Payment Processing - Payment Processing Backend	Handle secure payment transactions for orders.	Backend Engineers		7	
	Checkout Process - Checkout UI and Flow	Guide users through the payment and order confirmation.	Frontend Engineers		6	Week 9
	Checkout Process - Payment Gateway Integration	Guide users through the payment and order confirmation.	Backend Engineers		6	Week 9
	User Profiles - Profile Page	Allow users to manage their profiles and preferences.	Frontend Engineers		3	Week 9
	User Profiles - User Data Management	Allow users to manage their profiles and preferences.	Backend Engineers		3	Week 9
	Search Functionality - Search UI and Filtering	Enable users to search and filter products efficiently.	Frontend Engineers		4	Week 9
	Search Functionality - Search Algorithm Integration	Enable users to search and filter products efficiently.	Backend Engineers		4	Week 11
	Order History - Order History Page	Display the history of past orders for each user.	Frontend Engineers		4	
	Order History - Order Data Management	Display the history of past orders for each user.	Backend Engineers		4	Week 11
	Ratings and Reviews - Review Submission Form	Let users submit and view product reviews and ratings.	Frontend Engineers		4	Week 13
	Ratings and Reviews - Review Data Management	Let users submit and view product reviews and ratings.	Backend Engineers		4	Week 13
	Wishlist - Wishlist UI and Functionality	Allow users to create and manage a list of desired items.	Frontend Engineers		5	Week 13
	Wishlist - Wishlist Data Management	Allow users to create and manage a list of desired items.	Backend Engineers		5	Week 13

Sprint / Week header (columns across the chart):
Sprint 1 (Week 1, Week 2), Sprint 2 (Week 3, Week 4), Sprint 3 (Week 5, Week 6), Sprint 4 (Week 7, Week 8), Sprint 5 (Week 9, Week 10), Sprint 6 (Week 11, Week 12), Sprint 7 (Week 13, Week 14), Sprint 8 (Week 15, Week 16).

Milestone	Task	Explanation	Responsibility	Dependency	Duration	Sprint 1 Week 1	Week 2	Sprint 2 Week 3	Week 4	Sprint 3 Week 5	Week 6	Sprint 4 Week 7	Week 8	Sprint 5 Week 9	Week 10	Sprint 6 Week 11	Week 12	Sprint 7 Week 13	Week 14	Sprint 8 Week 15	Week 16
	Product Recommendations - Recommendation Algorithm Integration	Suggest relevant products based on user behavior.	Frontend Engineers		8															▓	▓
	Product Recommendations - User Behavior Tracking	Suggest relevant products based on user behavior.	Backend Engineers		8															▓	▓
	Order Management - Order Tracking and Status	Manage and track orders from placement to delivery.	Frontend Engineers		8																
	Order Management - Order Data Management	Manage and track orders from placement to delivery.	Backend Engineers		8																
	Inventory Management - Inventory Tracking and Alerts	Monitor and update product stock levels.	Frontend Engineers		6																
	Inventory Management - Inventory Database Integration	Monitor and update product stock levels.	Backend Engineers		6																
	Admin Dashboard - Admin UI for Site Management	Provide an interface for website management.	Frontend Engineers		4																
	Admin Dashboard - Admin Backend Functionality	Provide an interface for website management.	Backend Engineers		4																
	Customer Support - Support Chat UI and Integration	Offer chat support and manage support tickets.	Frontend Engineers		5																
	Customer Support - Support Ticket Management Backend	Offer chat support and manage support tickets.	Backend Engineers		5																
	Analytics and Reporting - Data Visualization Integration	Track website data and present it in a visual format.	Frontend Engineers		7																
	Analytics and Reporting - Data Processing and Storage	Track website data and present it in a visual format.	Backend Engineers		7																
	Email Notifications - Email Templates and Delivery	Send automatic email notifications to users.	Frontend Engineers		4																
	Email Notifications - Email Service Integration	Send automatic email notifications to users.	Backend Engineers		4																
	SEO Optimization - Metadata and URL Structuring	Optimize the website for better search engine ranking.	Frontend Engineers		3																
	SEO Optimization - SEO Backend Integration	Optimize the website for better search engine ranking.	Backend Engineers		3																
	Performance Optimization - Page Speed and Load Time Improvement	Improve website speed and performance.	Frontend Engineers		3																
	Performance Optimization - Backend Performance Tuning	Improve website speed and performance.	Backend Engineers		3																
	Security Measures - XSS and CSRF Protection	Implement measures to safeguard against attacks.	Frontend Engineers		3																
	Security Measures - Backend Security Configuration	Implement measures to safeguard against attacks.	Backend Engineers		3																
	Mobile Responsiveness - Mobile UI Design and Development	Ensure the website works well on mobile devices.	Frontend Engineers		4																
	Mobile Responsiveness - Mobile Backend Adaptation	Ensure the website works well on mobile devices.	Backend Engineers		4																
	Social Media Integration - Social Media Sharing Buttons	Enable users to share products on social media.	Frontend Engineers		3																
	Social Media Integration - Social Media API Integration	Enable users to share products on social media.	Backend Engineers		3																
	Multilingual Support - Language Selection UI	Provide the website in multiple languages.	Frontend Engineers		6																
	Multilingual Support - Language Data Management	Provide the website in multiple languages.	Backend Engineers		6																
	GDPR Compliance - Cookie Consent Banner	Ensure compliance with data protection regulations.	Frontend Engineers		4																
	GDPR Compliance - User Data Handling Compliance	Ensure compliance with data protection regulations.	Backend Engineers		4																
QA	Functional Testing	Verifies if all the features and functionalities of the e-commerce site are working as expected and meet the specified requirements. It ensures that the website functions properly for users.	Automation Testers	Feature Development	Ongoing					▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓
	Usability Testing	Focuses on evaluating the user experience and usability aspects of the e-commerce site. It assesses how easy it is for users to navigate, interact, and perform tasks on the website.	Automation Testers	Feature Development	Ongoing					▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓
	Performance Testing	Tests the website's performance under different conditions, such as load testing, stress testing, and scalability testing, to ensure it can handle the expected user traffic without issues.	Manual Testers	Feature Development	Ongoing					▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓
	Security Testing	Identifies and addresses vulnerabilities and weaknesses in the e-commerce site's security measures to protect sensitive user information, financial transactions, and prevent cyber-attacks.	Manual Testers	Feature Development	Ongoing					▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓
	Compatibility Testing	Ensures that the e-commerce site works seamlessly across various devices, browsers, and operating systems to provide a consistent user experience to a diverse range of users.	Manual Testers	Feature Development	Ongoing					▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓
	Mobile Testing	Specifically focuses on testing the e-commerce site's functionality, usability, and performance on mobile devices to cater to the growing number of mobile users and their unique needs.	Manual Testers	Feature Development	Ongoing					▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓
	Payment Gateway Testing	Validates the integration and functionality of payment gateways, ensuring smooth and secure payment processing for users during the checkout process.	Manual Testers	Feature Development	Ongoing					▓	▓	▓	▓		▓	▓	▓	▓	▓	▓	▓
	Load Testing	Evaluates how the e-commerce site performs under different user loads to assess its capacity and response time, ensuring it can handle peak traffic and provide a smooth user experience.	Manual Testers	Feature Development	Ongoing					▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓
	Regression Testing	Verifies that new changes or updates do not adversely impact the existing functionalities of the e-commerce site, ensuring a stable and error-free user experience after updates.	Automation Testers	Feature Development	Ongoing					▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓
	Cross-Browser Testing	Checks the compatibility and consistency of the e-commerce site's appearance and functionality across various web browsers to ensure a uniform experience for all users.	Automation Testers	Feature Development	Ongoing					▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓
Performance Marketing	Define Marketing Strategy and Objectives	Develop a comprehensive performance marketing strategy aligned with business goals, targeting audience segments and defining key performance indicators.	Performance Marketer		14	▓	▓														
	Conduct Market Research and Competitor Analysis	Analyze the market landscape, consumer behavior, and competitor strategies to identify opportunities and gain a competitive edge.	Performance Marketer		10																
	Plan and Execute Paid Advertising Campaigns	Manage the implementation of paid campaigns across platforms such as Google Ads, Facebook, Instagram, and other relevant channels.	Performance Marketer		21									▓	▓						
	Search Engine Optimization (SEO)	Optimize website content, meta tags, and structure to improve organic search visibility and attract relevant traffic from search engines.	Performance Marketer	Development of First Stable Version of the Application	Ongoing							▓	▓								
	Performance Tracking and Analytics	Set up and monitor performance metrics, analyzing campaign data and customer behavior to make data-driven decisions and optimize marketing efforts.	Performance Marketer		Ongoing									▓	▓	▓	▓	▓	▓		
	Budget Management and ROI Analysis	Monitor marketing budgets, allocate resources effectively, and evaluate the return on investment (ROI) for various marketing campaigns.	Performance Marketer		Ongoing									▓	▓	▓	▓	▓	▓	▓	▓

Milestone	Task	Explanation	Responsibility	Dependency	Duration	Sprint 1		Sprint 2		Sprint 3		Sprint 4		Sprint 5		Sprint 6		Sprint 7		Sprint 8	
						Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14	Week 15	Week 16
	Email Marketing and Automation	Develop and execute email marketing campaigns, including automated flows and personalized messages to engage and retain customers.	Performance Marketer		14																
	Influencer Marketing	Collaborate with influencers and industry partners to drive brand awareness and leverage their reach to target relevant audiences.	Performance Marketer		14																
	Social Media Management and Advertising	Manage and optimize social media platforms, running targeted ads, and engaging with followers to foster brand loyalty and generate leads.	Performance Marketer		21																
	Content Marketing and Blogging	Develop content marketing strategies, create valuable blog posts, and other content to attract and engage potential customers.	Performance Marketer		14																
	Conversion Rate Optimization (CRO)	Analyze website data, conduct A/B tests, and implement changes to improve the conversion rate of visitors into customers.	Performance Marketer		21																
	Affiliate Marketing	Establish and manage affiliate partnerships to drive traffic and sales through affiliate marketing programs.	Performance Marketer		14																
	Remarketing and Retargeting	Set up retargeting campaigns to re-engage website visitors who haven't converted and encourage them to return and make a purchase.	Performance Marketer		14																
	Customer Segmentation and Personalization	Implement strategies to segment customers and deliver personalized marketing messages based on their preferences and behavior.	Performance Marketer		14																
	Loyalty Programs and Customer Retention	Design and execute loyalty programs and initiatives to retain existing customers and encourage repeat purchases.	Performance Marketer		14																
	Collaborate with Creative and Design Teams	Work with creative teams to produce marketing collateral, graphics, and ad creatives that align with the brand's messaging and aesthetics.	Performance Marketer		Ongoing																
	Monitor and Respond to Online Reviews and Feedback	Monitor customer reviews and feedback on various platforms and respond appropriately to maintain a positive brand reputation.	Performance Marketer		Ongoing																