

**Project Brief**

**Client Overview**

MKTIME is a prestigious retailer based in Scotland, specialising in the sale of high-quality Swiss watches. With a reputation for excellence and a commitment to providing customers with a curated selection of luxury timepieces, MKTIME aims to expand its reach through the development of a sophisticated eCommerce web application.

**Project Objectives:**

1. **Online Presence:** Establish a robust online presence for MKTIME to reach a global audience and increase sales.
2. **User-Friendly Interface**: Create an intuitive and user-friendly interface that enhances the shopping experience, allowing customers to easily browse, search, and purchase products.
3. **Product Showcase:** Showcase MKTIME's collection of Swiss watches through visually appealing and detailed product pages, highlighting key features, specifications, and pricing.
4. **Responsive Design:** Develop a responsive design that ensures seamless functionality across various devices, including desktops, tablets, and smartphones.

**Project Overview:**

In a small team of 3 or 4; create a small-scale eCommerce web application that leverages a robust database to manage product listings, user account, and order processing. The application aims to provide a seamless and secure shopping experience for users while ensuring efficient data management and scalability.

**Key Features**

1. **User Authentication and Account Management:**

* User registration and login functionality.
* Secure password handling and storage.
* User profile management, including order history.

1. **Product Catalogue:**

* Database-driven product management.
* Each product should have details such as name, description and price.

1. **Shopping Cart:**

* Users can add/remove items to/from their shopping cart.
* Ability to modify quantities and proceed to checkout.

1. **Database Architecture:**

* Choose an appropriate relational database system (e.g., MySQL) for data storage.
* Define clear relationships between entities (users, products, orders, order content).
* Ensure data integrity and normalization.

1. **Responsive Design:**

* Create a responsive and mobile-friendly user interface for seamless access on various devices.

**Technology Stack:**

* Frontend: Bootstrap
* Backend: PHP
* Database: MySQL

**Testing:**

* Implement unit testing for critical components.
* Conduct thorough testing of the application's functionality, security, and performance.

Noun Technique:

### Identify Nouns (Entities and Attributes)

From the project brief, here are the identified nouns:

* MKTIME
* Retailer
* Scotland
* Swiss watches
* Reputation
* Excellence
* Customers
* Selection
* Luxury timepieces
* eCommerce web application
* Online presence
* Audience
* Sales
* Interface
* Shopping experience
* Products
* Product pages
* Features
* Specifications
* Pricing
* Design
* Devices
* Desktops
* Tablets
* Smartphones
* Product listings
* User account
* Order processing
* User authentication
* Account management
* User registration
* Login functionality
* Password handling
* Storage
* Profile management
* Order history
* Product catalogue
* Shopping cart
* Quantities
* Checkout
* Relationships
* Data integrity
* Normalization
* Technology stack
* Frontend
* Backend
* Testing
* Components
* Functionality
* Security
* Performance
* Tables

Keywords:  
The keywords can be identified from the core functionalities and requirements mentioned in the project brief:

* eCommerce
* Swiss watches
* Luxury
* Products
* Users
* Orders
* Shopping cart
* Checkout
* Authentication
* User-friendly
* Responsive design
* Database-drive