**SOFTWARE**

**REQUIREMENTS SPECIFICATION**

**For**

# iWorld website

## Prepared by:-

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### Introduction:

#### 1.1 Purpose

#### 

Certainly, here are the purpose key points describing the software requirements for this project using an Entity-Relationship (ER) diagram approach:

- Primary objective: Provide a cost-effective payment solution for online iPhone purchases.

- Goal: Streamline the purchasing process and make it accessible to a wider audience.

- Empower customers to own the latest Apple devices affordably.

- Requirement: Develop a user-friendly website interface.

- Features:

- Browse iPhone offerings.

- Select preferred models.

- Complete transactions using the cost-effective payment method.

- Requirement: Implement a cost-effective payment solution.

- Options:

- Offer various payment methods (credit cards, digital wallets, installment plans).

- Provide exclusive discounts for specific payment methods.

- Focus on affordability and ease of use.

- Requirement: Establish open communication channels with customers.

- Features:

- Dedicated customer support channel on the website.

- Address queries, concerns, and assistance requests promptly.

- Support for inquiries about product specifications, order tracking, etc.

- Requirement: Ensure efficient handling of user queries and support requests.

- Channels:

- Email inquiries.

- Knowledge base for addressing common questions.

- Use an ER diagram to represent the relationships and entities within the system.

- Entities:

- Customer

- iPhone Models

- Payment Methods

- Orders

- Customer Support

- Relationships:

- Customers place Orders.

- Orders involve iPhone Models and Payment Methods.

- Customer Support handles inquiries from Customers.

- Requirement: Ensure data security and compliance.

- Compliance:

- Follow industry standards (e.g., PCI DSS) for payment data security.

- Encrypt sensitive information.

- Requirement: Ensure the system can handle increasing customer demand.

- Scalability:

- The system should be able to expand for potential future product offerings or market expansions.

- Requirement: Develop marketing strategies.

- Activities:

- Digital marketing campaigns to attract customers.

- Social media outreach for engagement and updates.

- Objective: Empower customers with affordable access to the latest Apple devices.

- Goal: Make iPhone ownership accessible without financial strain.

#### 1.2 Document Conventions

* Entire document should be justified.
* Convention for Main title

Font face: Times New Roman



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* Convention for Sub title

Font face: Times New Roman



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* Convention for body

Font face: Times New Roman



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#### 1.3 Scope of Development Project

The scope of this development project encompasses the design, creation, and implementation of a feature iWorld website. It includes but is not limited to the following:

1. Develop a secure and efficient payment system for purchasing iPhone at a lower cost.

2. Integrate various payment methods, including credit/debit cards, digital wallets, and installment plans.

3. Optimize the payment process for a seamless user experience, minimizing friction and drop-offs.

4. Improve the website's user interface (UI) to make it more visually appealing and intuitive.

5. Enhance product listings with high-quality images, detailed descriptions, and customer reviews.

6. Add filtering options to help customers easily find the desired iPhone model.

7. Ensure mobile responsiveness for compatibility with various devices and screen sizes.

8. Set up a comprehensive customer support system, including email inquiries and live chat support.

9. Create a knowledge base to address common questions and issues promptly, reducing support ticket volume.

10. Explore and integrate cost-effective payment options, such as digital wallets (e.g., Apple Pay, Google Pay), installment plans, and exclusive discounts for specific payment methods.

11. Ensure the payment system is scalable to accommodate increasing customer demand and potential expansion into additional product offerings or markets.

12. Implement rigorous testing and quality assurance (QA) processes to identify and resolve issues proactively, ensuring system reliability.

13. Develop marketing strategies for promoting the cost-effective payment option and the overall online shopping experience.

14. Execute digital marketing campaigns to attract customers and increase awareness.

15. Utilize social media outreach to engage with potential customers and provide updates on promotions and product offerings.

#### 1.4 Definitions, Acronyms and Abbreviations

React JS - React JavaScript.

HTML - Hyper Text Markup Language.

CSS - Cascading Style Sheets.

ER - Entity Relationship

MySQL - My Structured Query Language.

JS - JavaScript

#### 1.5 References

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These resources should provide you with a solid foundation and practical insights for developing your project, optimizing the payment process, and creating a user-friendly online iPhone purchasing platform.

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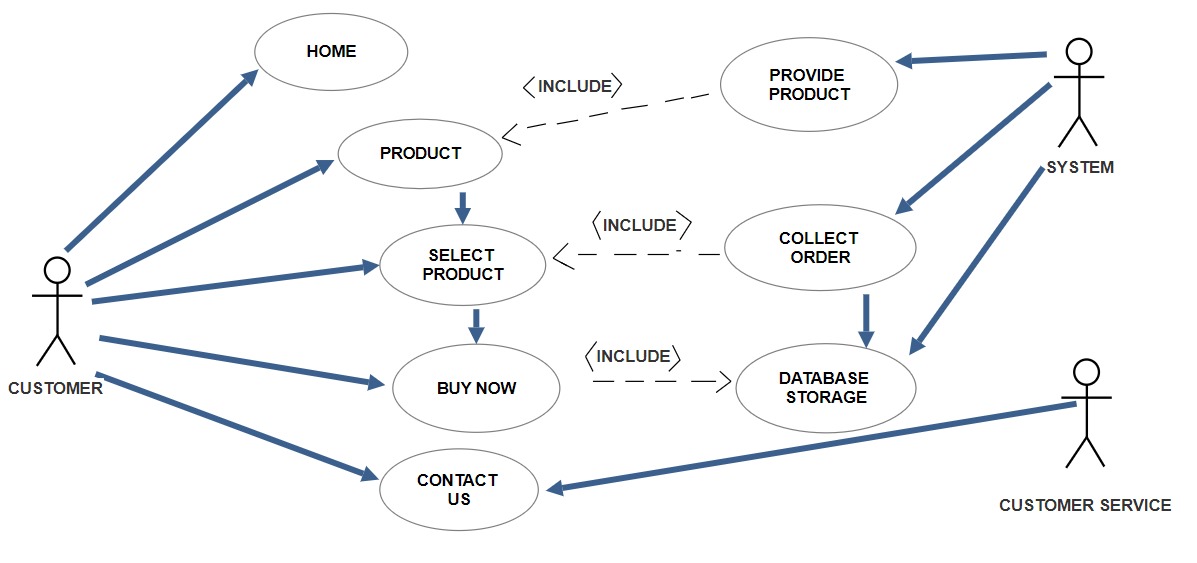
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### Overall Descriptions

### 2.1 Product Perspectives :

This is the broad level diagram of the project showing the basic overview. Customers can purchase their preferred iPhone. And they can place the order in their payment procedure if they like. After customers place their order, the time and date will be saved in the database. If a consumer has a problem with their iPhone, they can contact us via the message box.

Use Case Diagram of iWorld website



### 3. External Interface Requirement

### 3.1 GUI :

### --------------------------------

### | Online iPhone Store |

### --------------------------------

### [Header]

### --------------------------------

### | Logo | Home | products |

### --------------------------------

### [Navigation Menu]

### --------------------------------

### | Browse iPhone | Contact Us |

### --------------------------------

### [Product Listing]

### --------------------------------

### | iPhone X | iPhone 11 | iPhone 12 |

### | [Details] | [Details] | [Details] |

### | [Add to Cart] | [Add to Cart] | [Add to Cart] |

### --------------------------------

### [Product]

### --------------------------------

### | Your product |

### --------------------------------

### | - iPhone X |

### | Quantity: [2] |

### | Price: $799.99 each |

### | - iPhone 12 |

### | Quantity: [1] |

### | Price: $999.99 each |

### |--------------------------------|

### | Total: $2599.97 |

### | [Proceed to Checkout] |

### --------------------------------

### [Checkout]

### --------------------------------

### | Checkout |

### --------------------------------

### | Shipping Address: |

### | [Name] |

### | [Address] |

### | [City] |

### | [State] |

### | [Zip Code] |

### |--------------------------------|

### | Payment Method: |

### | [Credit Card] |

### | [PayPal] |

### 

### |--------------------------------|

### | [Complete Purchase] |

### --------------------------------

### [Contact Us]

### --------------------------------

### | Contact Us |

### --------------------------------

### | [Name] |

### | [Email] |

### | [Message] |

### | [Send Message] |

### --------------------------------

### The above listed details are GUI demo.

### System Features:

System features for a iWorld website are the functionalities that enable users to interact with the platform effectively and sells iPhone model. Here are key system features for such a website:

**Product Catalog:**

1. Display a catalog of iPhone models with detailed information.

2. Include specifications, images, and prices for each model.

**Filter and Search Functionality:**

3. Enable users to filter and search for specific iPhone models.

4. Allow filtering by features like storage capacity, color, and price range.

**Order Management:**

5. Provide order summaries and calculate totals before checkout.

6. Allow users to review and modify their orders.

**Payment Processing:**

7. Accept various payment methods, including credit cards and PayPal.

8. Ensure secure payment processing through encryption and compliance with payment industry standards.

**Order Confirmation:**

9. Generate order confirmation emails with detailed order information for customers.

10. Include order summary, payment confirmation, and delivery details.

**Customer Support:**

11. Offer channels for users to contact customer support, such as email inquiries.

12. Resolve inquiries and issues promptly to ensure customer satisfaction.

**Real-Time Inventory Management:**

13. Update product availability in real-time to prevent overselling or displaying out-of-stock items.

14. Show accurate stock information to users.

**Website Accessibility and Responsiveness:**

15. Ensure the website is accessible and user-friendly on various devices (desktop, mobile, tablet).

16. Implement responsive design for seamless user experience.

**Analytic and Data Tracking:**

17. Track website traffic, user behavior, and sales data.

18. Use analytic to make informed business decisions, optimize the user experience, and improve sales.

**Product Management:**

19. Easily update and manage product listings, descriptions, and images.

20. Support the addition of special promotions, discounts, and bundle deals.

**Regulatory Compliance:**

21. Ensure compliance with e-commerce regulations and data protection laws.

22. Safeguard customer data and privacy in accordance with legal requirements.

These system features collectively create a user-friendly and efficient iPhone website, enhancing the overall user experience and meeting the needs of both customers and shop owners.

**5. Other Non - Function Requirements:**

**5.1 Business role :**

In the context of the "Online iPhone Store" project, there are several key business roles that play distinct roles in the operation of the e-commerce platform. These roles include:

**1. Customer:**

Customers are the primary users of the online store. Their roles include browsing products, making purchases, providing feedback, and seeking customer support when needed.

**2. Administrator:**

- Administrators manage the day-to-day operations of the online store. Their responsibilities may include:

- Managing product listings and inventory.

- Monitoring and processing orders.

- Overseeing customer support and inquiries.

- Implementing promotional campaigns and discounts.

- Ensuring the security and stability of the platform.

**3. Customer Support Representative:**

- Customer support representatives are responsible for assisting customers with inquiries, issues, and requests. Their roles include:

- Providing information about products and services.

- Addressing order-related concerns.

- Ensuring customer satisfaction.

**4.Payment Processor:**

Payment processors are third-party entities responsible for securely handling payment transactions. They ensure that payments are processed accurately and securely, working closely with the online store to facilitate smooth payment flows.

**5. Product Manager:**

Product managers oversee the selection, pricing, and presentation of iPhone models on the online store. They may also be responsible for evaluating market trends and competition to optimize product offerings.

**6.Marketing Specialist:**

Marketing specialists are responsible for promoting the online store and its products. Their roles include creating and executing marketing campaigns, managing social media presence, and analyzing customer behavior to tailor marketing efforts.

**7. IT Administrator:**

IT administrators manage the technical infrastructure of the online store. Their roles include server maintenance, security monitoring, system updates, and ensuring the overall reliability and performance of the website.

**8. Legal and Compliance Officer:**

Legal and compliance officers ensure that the online store adheres to relevant laws and regulations, including e-commerce regulations, data protection laws, and consumer protection laws. They help draft and implement privacy policies and terms of service.

**5.2 User Requirements :**

**1. Product Details and Images:**

- Users need access to detailed information about each iPhone model, including specifications, features, and pricing.

- High-quality images of each product should be available to view.

**2. Payment Options:**

- Users should have a choice of secure payment methods, including credit cards, PayPal, and other popular options.

- The payment process should be transparent and easy to understand.

**3.Customer Support and Contact:**

- Users should have easy access to customer support through email, or a contact form.

- Response times for inquiries should be reasonable.

**4. Data Privacy and Security:**

- Users expect their personal information and payment details to be kept secure and private.

- Privacy policies and terms of service should be clear and accessible.

**5. Mobile-Friendly Design:**

- The website should be responsive and work well on both desktop and mobile devices.

- Mobile users should have an intuitive and enjoyable shopping experience.

**6. Promotions and Discounts:**

- Users should be informed about ongoing promotions, discounts, and special offers.

-Clear terms and conditions for discounts should be provided.

1. **Other Requirements:**

**6.1 Data and Category Requirements:**

Data and category requirements for the "Online iPhone Store" are crucial. Product data includes names, descriptions, images, prices, availability, Categories and organization involve a clear hierarchy, filters, search functionality, sorting options, featured products, and recommendations to enhance user navigation and product discovery. Additionally, allowing users to set up availability alerts keeps them engaged and informed.

**6.2 Appendix :**

A : Acronyms, Abbreviations ;B : Business role ; C: Class ; D : description , Data requirements; G: GUI ; N: non- functional requirements; P: performance, purpose; R: requirements; S: scope , system features ; U: user ;

**6.3 Glossary:**

Customer: Buying products

MySQL : My Structured Query Language

Data storage Layer : The section of the assignment referring to where

All data is required.

Use case diagram: A broad level diagram of the project showing the basic overview

Class diagram : It's a type of static structure diagram that describes the structure of system by showing the system case , attributes, and relationship between class.

#### Class Diagram:

A class diagram is a visual representation used in software engineering to illustrate the structure of a system by showing classes, their attributes, methods, and relationships. It's a valuable tool for modeling object-oriented systems, highlighting the interactions between classes and their roles in the overall application. In a class diagram, classes are represented as boxes, with attributes and methods listed inside. Arrows and lines connect classes to show associations, dependencies, and inheritance relationships. Class diagrams help developers plan, design, and communicate the architecture of a software system.

