Project Proposal

1. Overview

The Al-Harrifa project aims to create an online marketplace that supports artisans and craftsmen in showcasing and selling their products easily. The project seeks to provide a digital marketing environment that helps these artisans reach potential customers, facilitating sales transactions and ensuring a seamless and secure shopping experience for users.

2. Objectives

- Enable artisans to easily list their products on a digital platform.
- Facilitate electronic payments through various methods such as InstaPay and Visa.
- Ensure a smooth and secure user experience.
- Provide marketing features such as promotions and discounts from the start.

3. Scope

- **Target Market:** The store will initially operate locally, with the possibility of expanding globally in the future.
- **System Features:**
  - Artisan registration and product listing.
  - Integrated electronic payment system (InstaPay, Visa).
  - Marketing features such as promotions and discounts from the start.
  - Order and shipping management.

4. Project Plan

Timeline (Two Months):

- **Week 1:** Information gathering and requirements analysis.
- **Week 2:** Database design and implementation.
- **Weeks 3-4:** Frontend development.
- **Weeks 5-7:** Backend development.
- **Week 8:** Project testing and deployment.

Task Phase	Tasks	Time Frame	Deliverables
1. Information Gathering	Develop a work plan, identify target groups, and conduct market and competitor analysis	1 Week	Market analysis report and work plan

Task Phase	Tasks	Time Frame	Deliverables
2. Database Design	Create tables, design the Entity Relationship Diagram (ERD), set relationship constraints, and prepare the diagrams	1 Week	A ready-to-use database
3. Front-end Development	Enhance user experience; design the interface using HTML, CSS, and JS (UI/UX); integrate the interface with the API	2 Weeks	Interactive web pages; API integrated with the front-end
4. Back-end Development	Create the API using .NET Core C#, implement CRUD operations (Create, Read, Update, Delete), and manage authentication and user control	3 Weeks	An efficient and fully secured API
5. Testing and Deployment	Deploy the project, fix issues and make adjustments, test functionality and performance on the hosting server	1 Week	An online platform ready for operation

Key Milestones

◈ **End of Week 1**: Market analysis report and work plan ready.
◈ **End of Week 2**: Database ERD ready.
◈ **End of Week 4**: Front-end integrated with the API.
◈ **End of Week 7**: The project is fully functional after testing and ready for launch.

5. Task Assignment & Roles

Team Member	Task	Tools
David Fared Soliman	Frontend Development	HTML, CSS, JavaScript
Moaz Mohammed Zidan	Backend API Development	.NET Core C#
Fares Gamal Nady	Database Design	MySQL OR SQL Server
Maria Ibrahim Yaqob	Testing and Publishing	Postman, Unit Testing

6. Risk Assessment & Mitigation Plan

Potential Risks:

- Low initial user engagement.
- Shipping issues and order delays.

Risk Solutions:

- Implement an early marketing strategy to attract users before launch.
- Improve communication with shipping companies and provide alternatives in case of delays.

7. KPIs (Key Performance Indicators)

- Number of registered users within the first 3 months.
- Sales volume within the first 6 months.
- API response time and overall system performance.

Literature Review

Feedback & Evaluation

The project received a lot of positive feedback, especially because very few online platforms focus on this type of product. The idea was well received by those interested in handicrafts and artistic goods.

Suggested Improvements

No specific improvements or modifications have been suggested yet, but the project will be evaluated later to add necessary features based on user experience.

Final Grading Criteria

The final grading criteria have not yet been determined but are expected to be based on documentation, implementation, testing, and presentation.

Requirements Gathering

1. Stakeholder Analysis
Key Stakeholders & Their Needs:

1. **Artisans (Sellers):**
   - Ability to create an account easily.
   - Option to add products with images and detailed descriptions.
   - Secure electronic payment processing.
   - Order management.

2. **Customers (Buyers):**
   - Easy product search through categories or keywords.
   - Ability to view product details and images before purchasing.
   - Secure checkout process with multiple payment options.
3. **Shipping Companies:**
   - Receive order details and shipping addresses.
   - Provide real-time shipping status updates integrated with the system.
   - Ensure timely deliveries and service quality.
4. **Payment Providers (InstaPay, Visa):**
   - Secure and reliable transaction processing.
   - Provide reports on financial transactions.
   - Support refunds when necessary.
5. **Development Teams:**
   - Implement platform features based on user needs.
   - Ensure system integration and performance optimization.
   - Regular maintenance and troubleshooting.

2. User Stories & Use Cases

Examples of User Needs (User Stories):

- As a buyer, I want to search for products easily so I can find what suits me.
- As a seller, I want to add my products with clear images and details so that customers can purchase them.
- As a user, I want multiple payment options so I can pay in the most convenient way.
- As a system admin, I want to track sales performance so I can improve the platform.

3. Functional Requirements

- User registration (artisans and customers).
- Product management (add, edit, delete).
- Electronic payment system (InstaPay, Visa).
- Shopping cart for completing purchases.
- Advanced product search.
- Order management.

4. Non-functional Requirements

- **Usability:** A simple and intuitive user interface.
- **Security:** Protection of user data and financial transactions.
- **Performance:** Optimized platform performance for a fast and smooth experience.