# Project Report: Qazaq Republic E-Commerce Web Application

## **Abstract**

The Qazaq Republic e-commerce web application was developed to provide a seamless online shopping experience tailored for Kazakhstan. This project integrates modern web development technologies to create a responsive, user-friendly platform for browsing, selecting, and purchasing products. Core features include a dynamic product catalog, interactive cart functionality, and an FAQ section. The website prioritizes simplicity, accessibility, and local relevance while adhering to industry-standard methodologies. Technologies used include HTML for content structure, CSS for styling, and JavaScript for interactivity. This document elaborates on the development process, challenges faced, and future enhancements.

## **Development Process**

### **1. Core Features**

#### **1.1 Navbar**

The navigation bar ensures smooth navigation across different sections of the website. Using Bootstrap’s responsive design, the navbar adapts to various screen sizes.

**Code Example:**

<header class="navbar navbar-expand-lg navbar-dark bg-primary fixed-top">

<div class="container">

<a class="navbar-brand" href="index.html">

<img src="logo.svg" alt="Qazaq Republic Logo" class="logo">

</a>

<button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-bs-target="#navbarNav" aria-controls="navbarNav" aria-expanded="false" aria-label="Toggle navigation">

<span class="navbar-toggler-icon"></span>

</button>

<div class="collapse navbar-collapse" id="navbarNav">

<ul class="navbar-nav ms-auto">

<li class="nav-item"><a class="nav-link" href="catalog.html">Catalog</a></li>

<li class="nav-item"><a class="nav-link" href="aboutus.html">About Us</a></li>

<li class="nav-item"><a class="nav-link" href="FAQ.html">FAQ</a></li>

</ul>

<div class="cart-link">

<a href="cart.html">Cart</a>

</div>

</div>

</div>

</header>

#### **1.2 Product Catalog**

The catalog displays products in a grid layout, including images, names, prices, and an “Add to Cart” button.

**Code Example:**

<div class="catalog-grid">

<div class="item">

<img src="hoodie.jpg" alt="Hoodie">

<div class="product-name">Hoodie</div>

<div class="product-price">$29.99</div>

<button class="add-to-cart">Add to Cart</button>

</div>

</div>

**CSS Styling:**

.catalog-grid {

display: grid;

grid-template-columns: repeat(3, 1fr);

gap: 20px;

margin-top: 20px;

}

.catalog-grid .item img {

width: 100%;

border-radius: 10px;

}

#### **1.3 Cart Functionality**

The cart dynamically updates as users add or remove items. JavaScript ensures interactive functionality, such as updating totals.

**Code Example (Cart Row CSS):**

.cart-row {

display: flex;

align-items: center;

justify-content: space-between;

background-color: #f9f9f9;

border-radius: 10px;

padding: 1rem;

margin-bottom: 1rem;

box-shadow: 0 4px 6px rgba(0, 0, 0, 0.1);

}

**JavaScript:**

const cartItems = [];

function addToCart(product) {

cartItems.push(product);

renderCart();

}

function renderCart() {

const cartContainer = document.getElementById('cart-container');

cartContainer.innerHTML = '';

cartItems.forEach(item => {

const cartRow = document.createElement('div');

cartRow.className = 'cart-row';

cartRow.innerHTML = `<div>${item.name}</div><div>${item.price}</div>`;

cartContainer.appendChild(cartRow);

});

}

#### **1.4 FAQ Section**

FAQs provide users with helpful information about the platform. JavaScript is used to toggle answers.

**Code Example (HTML):**

<div class="faq-item">

<div class="faq-question">What is the return policy?</div>

<div class="faq-answer">You can return items within 30 days.</div>

</div>

**JavaScript for Interactivity:**

document.querySelectorAll('.faq-question').forEach((question) => {

question.addEventListener('click', () => {

question.classList.toggle('open');

question.nextElementSibling.classList.toggle('open');

});

});

## **Conclusion**

The Qazaq Republic e-commerce platform is a robust solution tailored to the needs of local users. By integrating HTML, CSS, and JavaScript, the project ensures a seamless user experience. Challenges such as responsive design and dynamic content management were successfully addressed, resulting in a functional, visually appealing website.

### **Future Work**

1. **Mobile Application**: Expanding to native mobile platforms.
2. **Personalized Features**: Introducing AI-driven recommendations.
3. **Market Expansion**: Multi-language support for international users.

## **References**

1. Bootstrap Documentation: [https://getbootstrap.com](https://getbootstrap.com/)
2. MDN Web Docs (HTML/CSS/JavaScript): [https://developer.mozilla.org](https://developer.mozilla.org/)
3. W3Schools Tutorials: [https://www.w3schools.com](https://www.w3schools.com/)