HACKATHON

Hackathon: Milestone-Based E-Commerce App Builder

Event Date: 6th September 2024
Duration: 24 Hours (Starting Midnight after the event)
Submission Deadline: 7th September 2024, Midnight

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Hackathon: Milestone-Based E-Commerce App Builder

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Overview: This hackathon challenges you to build a complete E-Commerce Application step-by-step, divided into five key milestones. Each milestone builds upon the previous one, starting from setting up the store to implementing dynamic features such as payment integration. You can work from home, completing as many milestones as you can within the 24-hour time frame.

Hackathon Structure:

- The hackathon is divided into 5 milestones.

- Each milestone carries 100 points.

- You can submit your progress for each completed milestone.

- Aim to complete as many milestones as possible within the 24-hour limit.

Milestone 1: Static E-Commerce Homepage (100 Points)

Objective:
Create a static homepage using HTML, CSS, and JavaScript.

Requirements:

- Design a homepage that includes sections like:

    o Product Listings

    o Categories

    o Navigation Bar

    o Footer

- Ensure the page is responsive and works well across devices.

Scoring Breakdown:

- **HTML Structure and Completeness (40 points):**
  Are all necessary sections clearly created using proper HTML structure?

- **CSS Styling and Responsiveness (40 points):**
  Does the homepage look visually appealing and function across mobile and desktop devices?

- **Basic JavaScript Interactivity (20 points):**
  Is there interactivity, such as a button to filter product categories?

Milestone 2: Add-to-Cart Functionality (100 Points)

Objective:
Add functionality to allow users to add products to a cart.

Requirements:

- Create a cart section where selected products are displayed.

- Users should be able to add or remove products from the cart.

- Cart should update in real-time.

Scoring Breakdown:

- **Cart Design and Functionality (50 points):**
  Does the cart update correctly when products are added or removed?

- **JavaScript Logic (50 points):**
  Is the code for adding/removing items from the cart efficient and error-free?

Milestone 3: Product Detail Page with Reviews (100 Points)

Objective:
Create a product detail page where users can view more information and add reviews.

Requirements:

- Each product should have a detailed page showing its description, price, and reviews.

- Allow users to add new reviews dynamically without refreshing the page.

Scoring Breakdown:

- **Page Design and Information Display (40 points):**
  Is the product information clearly displayed and organized?

- **Review System Functionality (40 points):**
  Can users successfully add reviews, and are they displayed in real-time?

- **User Experience and Interactivity (20 points):**
  Is the page user-friendly and interactive?

Milestone 4: User Authentication (100 Points)

Objective:
Implement user authentication for the checkout process.

Requirements:

- Users should be able to register and log in before checking out.

- Ensure form validation for login/registration.

Scoring Breakdown:

- **Authentication Flow (60 points):**
  Can users register, log in, and access their account securely?

- **JavaScript Code Quality (40 points):**
  Is the authentication code organized, efficient, and error-free?

Milestone 5: Payment Integration and Order Confirmation (100 Points)

Objective:
Integrate a payment gateway (use a mock API) and complete the order process.

Requirements:

- Set up payment processing using a mock API.

- Upon successful payment, show an order confirmation page.

Scoring Breakdown:

- **Payment Flow (50 points):**
  Is the payment integration working correctly with mock API?

- **Order Confirmation (50 points):**
  Does the order confirmation page display the necessary details?

Hackathon Timeline:

Start Time: Midnight [Insert Date]
End Time: Midnight [Insert Date]
Submission Deadline: Midnight [Insert Date]

Submission Guidelines:

- **Milestone 1:** Submit your HTML, CSS, and JavaScript code for the homepage.

- **Milestone 2:** Submit the code for the cart functionality and real-time updates.

- **Milestone 3:** Share the live product detail page link and your repository.

- **Milestone 4:** Submit the authentication system and ensure form validation works.

- **Milestone 5:** Submit the project with payment integration and order confirmation functionality.

Awards and Recognition:

Students who complete all milestones will be awarded the title of "Senior Developer." Those who finish with high scores will receive special recognition.

Evaluation:

Your submissions will be evaluated by a panel of instructors based on the following:

- **Completeness:** Did you meet the objectives of each milestone?

- **Code Quality:** Is your code clean, well-organized, and efficient?

- **Functionality:** Does your app work as expected?

- **Design and User Experience:** Is the app visually appealing and easy to use?

Good luck, and we look forward to seeing your innovative solutions!