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Subject	Human Computer Interaction

Lab-08

Usability Engineering in Human-Computer Interaction

Task:

Designing a Usable E-commerce Website Task Description: Design an e-commerce website for a fictional online store selling outdoor gear. The website should allow users to browse products, add items to cart, and checkout.

Html Code:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Outdoor Gear Store</title>
  <style>
    /* General Styles */
    body {
```

```css
    font-family: Arial, sans-serif;

    margin: 0;

    padding: 0;

    background-color: #f4f4f4;

}


header {

    background-color: #333;

    color: white;

    padding: 10px 0;

    display: flex;

    justify-content: space-between;

    align-items: center;

}


header .logo {

    font-size: 24px;

    font-weight: bold;

    padding-left: 20px;

}


header nav ul {

    list-style-type: none;

    margin: 0;

    padding-right: 20px;

}


header nav ul li {
```

```css
    display: inline;

    margin-left: 20px;

}


header nav ul li a {

    text-decoration: none;

    color: white;

    font-size: 18px;

}


/* Main Section */
main {

    padding: 20px;

}


.product-list {

    display: flex;

    flex-wrap: wrap;

    gap: 20px;

    justify-content: space-around;

}


.product-item {

    background-color: white;

    padding: 10px;

    width: 200px;

    text-align: center;

    border: 1px solid #ddd;
```

```css
    border-radius: 8px;

}


.product-item img {

    width: 100%;

    height: auto;

    border-radius: 5px;

}


.product-item h3 {

    font-size: 20px;

    margin-top: 10px;

}


.product-item p {

    font-size: 18px;

    margin: 5px 0;

}


.product-item button {

    background-color: #4CAF50;

    color: white;

    padding: 10px 20px;

    border: none;

    border-radius: 5px;

    cursor: pointer;

}
```

```css
    .product-item button:hover {
        background-color: #45a049;
    }


    /* Footer */
    footer {
        background-color: #333;
        color: white;
        text-align: center;
        padding: 10px 0;
        position: absolute;
        width: 100%;
        bottom: 0;
    }
  </style>
</head>
<body>

  <header>
    <div class="logo">OutdoorGear</div>
    <nav>
      <ul>
        <li><a href="#">Home</a></li>
        <li><a href="#">Products</a></li>
        <li><a href="#">Cart</a></li>
        <li><a href="#">Checkout</a></li>
      </ul>
    </nav>
```

```html
</header>

<main>
  <section class="product-list">
    <div class="product-item">
      <img src="https://via.placeholder.com/150" alt="Tent">
      <h3>Tent</h3>
      <p>$100</p>
      <button>Add to Cart</button>
    </div>
    <div class="product-item">
      <img src="https://via.placeholder.com/150" alt="Sleeping Bag">
      <h3>Sleeping Bag</h3>
      <p>$50</p>
      <button>Add to Cart</button>
    </div>
    <div class="product-item">
      <img src="https://via.placeholder.com/150" alt="Backpack">
      <h3>Backpack</h3>
      <p>$80</p>
      <button>Add to Cart</button>
    </div>
    <div class="product-item">
      <img src="https://via.placeholder.com/150" alt="Camping Stove">
      <h3>Camping Stove</h3>
      <p>$40</p>
      <button>Add to Cart</button>
    </div>
```

```html
      </section>

   </main>


   <footer>

      <p>&copy; 2025 OutdoorGear Store. All rights reserved.</p>

   </footer>


</body>

</html>
```
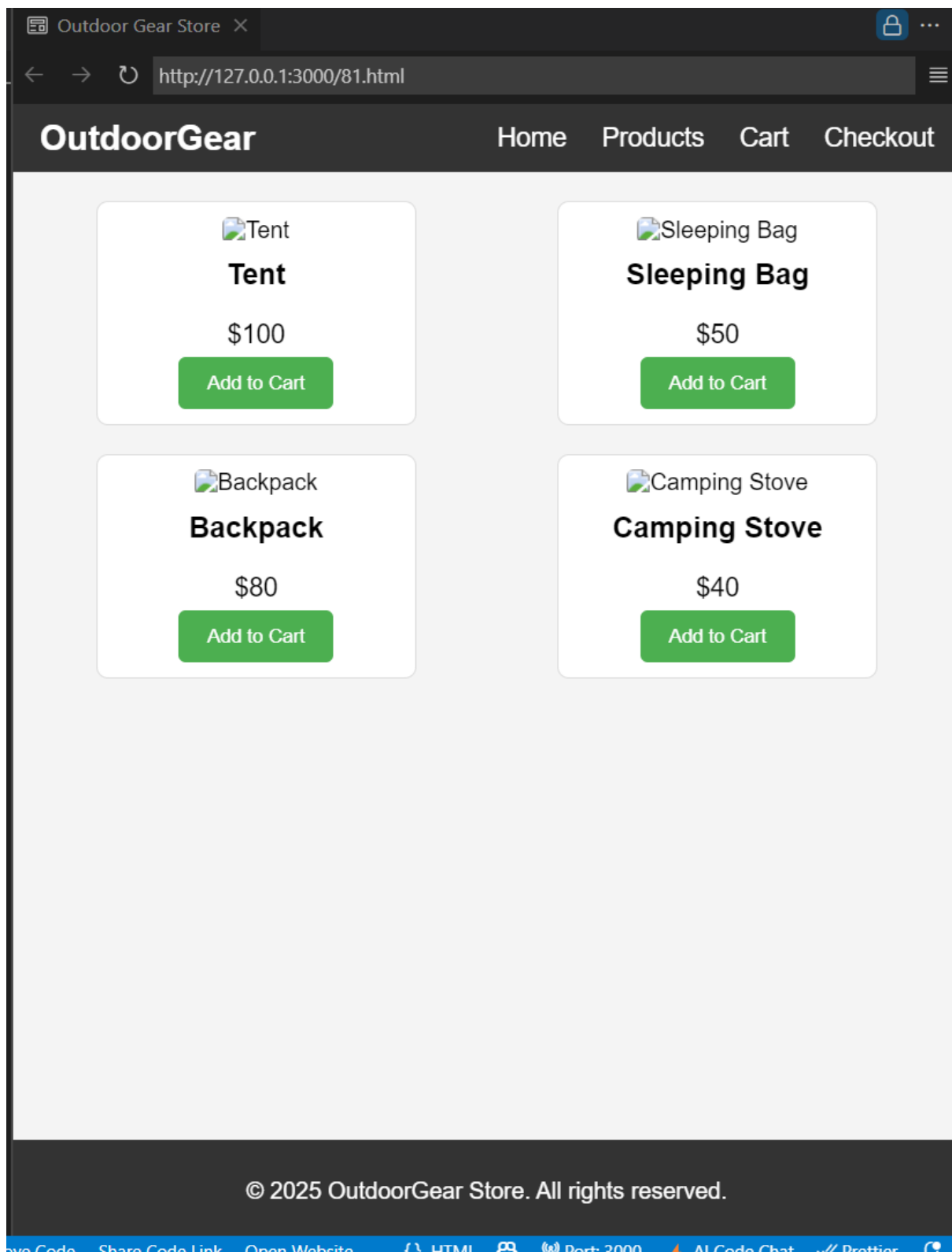
Interface:

Activity#02 User Interview

Objective: Understand the needs and goals of a potential user for an e-commerce outdoor gear website.

Interview Summary:

- **User Profile**: Farhan, 28, adventure enthusiast, frequently shops online for camping gear.

- **Interview Method:** Semi-structured interview (in person)

- **Questions & Responses:**

  1. **Q: How often do you shop online for outdoor gear?**
     A: About once a month.

  2. **Q: What do you usually look for in an outdoor gear website?**
     A: Fast loading, clear product categories, real user reviews, and secure checkout.

  3. **Q: What features do you find most useful?**
     A: Product comparisons and filters by brand/price.

  4. **Q: What problems have you faced on other e-commerce websites?**
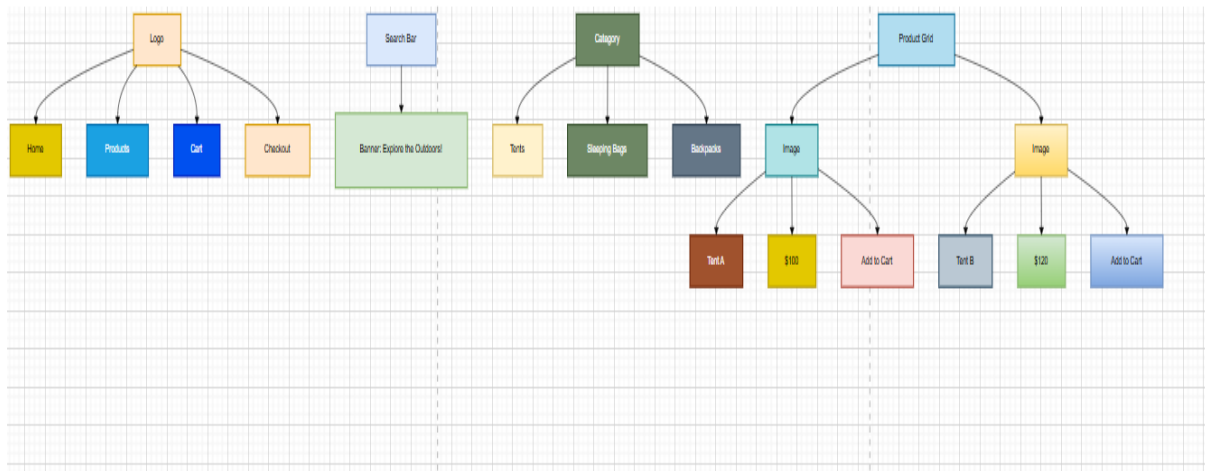   A: Confusing navigation and lack of mobile responsiveness.

Insights:

- Users prioritize ease of navigation and trust indicators (reviews, secure checkout).

- Filtering options and responsive design are key usability factors.

Activity#03

Wireframing

Result:

Activity#04

Usability Testing Plan

Application: Outdoor Gear Store Website
Goal: Test how easily users can browse products, add to cart, and checkout.

Plan Outline:

- **Participants:** 5 target users (outdoor enthusiasts, age 18–40)

- **Test Scenarios:**

  1. Find and view details of a sleeping bag.

  2. Add a backpack to the cart.

  3. Navigate to the checkout page and simulate a purchase.

- **Metrics to Measure:**

  o Task completion time

  o Error rate

  o User satisfaction (via post-test survey)

- **Method:**
  - In-person testing or remote screen-sharing
  - Think-aloud protocol (user narrates their thoughts)
- **Data Collection:**
  - Observation notes
  - Screen recordings
  - User feedback form
- **Success Criteria:**
  - 80% task completion rate
  - Positive satisfaction score (4 out of 5 average)

THE END