

DAY 5 TASK

Testing, Error Handling, and Backend Integration Report

Prepared by: [Naghmana Imran]

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Project: Marketplace Development

1. Comprehensive Testing

✓ **Functional Testing:** All features, including navigation, buttons, and interactive elements, were tested and are working correctly.

✓ **User Experience Testing:** The website has been reviewed for usability, ensuring a smooth and intuitive experience.

✓ **Security Testing:** Basic security measures, such as input validation and authentication, were tested.

✓ **Performance Testing:** The loading speed and response time were measured and optimized.

2. Error Handling Implementation

✓ **Fallback Messages:** User-friendly error messages have been added to handle API failures gracefully.

✓ **404 Error Handling:** A custom page displays when a resource is not found.

✓ **500 Error Handling:** If the server is down, a message prompts users to try again later.

✓ **Validation Errors:** Proper validation messages are displayed for incorrect form inputs.

3. Speed and Performance Optimization

✓ **Image Optimization:** All images were compressed and optimized for faster loading.

✓ **Minification of CSS and JS:** Unnecessary spaces and characters were removed from CSS, JavaScript, and HTML.

- ✓ **CDN Integration:** A CDN was used to enhance loading speeds globally.
 - ✓ **Lazy Loading:** Images and assets are now loaded only when needed to improve initial load time.
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4. Cross-Browser and Device Compatibility

- ✓ **Tested on Multiple Browsers:** Chrome, Firefox, Edge, and Safari.
 - ✓ **Tested on Multiple Devices:** Desktop, Tablet, and Mobile.
 - ✓ **Responsive Design Ensured:** The layout adapts well to different screen sizes.
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5. Testing Documentation and Reports

- ✓ **Created a CSV Report:** A structured report was generated listing all test cases, errors encountered, and fixes applied.
 - ✓ **Documented All Fixes:** Every identified bug and its resolution have been recorded for future reference.
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6. Backend Integration and API Handling

- ✓ **Error Handling for API Calls:** Proper error handling mechanisms were implemented to ensure a seamless user experience.
 - ✓ **Log System Implemented:** Errors are now logged systematically instead of just appearing in the console.
 - ✓ **Optimized Database Queries:** Improved query efficiency for faster responses.
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Final Status: Testing and Integration Successfully Completed ✓