Designing user interface of web-based e-commerce application

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Abstract. This study aims to provide guidance and examples in designing web interface of e-commerce applications that are good and easy to use by the users. This research used descriptive method by making a systematic description of the facts that refer to the object of research. Data collecting was carried out through literature study from journals, learning materials, and curriculum data. The result is that if users find it difficult to operate an application, the application will immediately be abandoned. In conclusion, this design has fulfilled the basic requirement of comfortable design and practibility.

1. Introduction
E-commerce is defined as activities and transactions done through social media environment and mostly on social networks [1]. Computers and other electronical devices today have used graphic interfaces where users can interact with another computer or devices [2]. E-commerce acts as a media that uses a device or computer, which certainly has a dependence on the interface [3]. Designing a visually good website has become the main goal for companies that wanted to maximize profits and promote their services or products in markets amidst intense competition [4]. User satisfaction in using the application is also important as a recommendation system to help users make better choices [5].

The qualities of recommendation are suitability, novelty, attractiveness, diversity, and context compatibility [6]. A compact display that has fewer controls is preferred by most users [7]. Standardization is very important for website design because people did not want to waste their time on the site. If the site is complicated, people will not use it [8]. Based on research done by Eid, 35%-40% of the an e-commerce website income comes from visitors who regularly visit the site [9]. The success of a website is achieved through information and entertainment relationships, and it is better to fulfill both for positive evaluations [10].

This study aims to provide guidance and examples in designing web interface of e-commerce applications that are good and easy to use by users. This research used descriptive method by making a systematic description of the facts that refer to the object of research and collecting data carried out through journals, learning materials, and curriculum data.
2. Method
This research used descriptive method by making a systematic description of the facts that refer to the object of research and collected data. Primary data collection was obtained by interviewing student as the respondents and secondary data was obtained from journals, study materials, and curriculum data.

3. Results and Discussion
3.1 Case Assumptions
In the application that is going to be made, the user has access rights in changing personal information and using the features available in the application.

3.2 Problem Identification
Creating a web-based e-commerce application interface design to assist users in conducting transactions and other activities online by looking at problems that may occur when conducting transaction activities.

3.3 User Interface Design
The interface design consists of displaying each web page along with its functions and attributes. The draft web page is made up of the main page, entry page, registration page, product details page, profile page, basket page, wish list page, settings page, and checkout page. The following is the design of the view that has been made.

3.3.1 Main Page
The following figure shows the main page display with the display name T01 (See Figure 1).

![Figure 1. Display T01](image)

Functions:
- Click the wishlist button to go to the T08 display.
- Click the basket button to go to the T07 view.
- Click the user button to go to T03 and T06 views.
- Click the product see button to go to T04 display.

Attribute: Size of 1920x1080, open-sans 12pt font, 14pt black, display name T01.

3.3.2 Registration Page
The following figure shows the page display with the display name T02 (See Figure 2).
Figure 2. Display T02

Functions:
- Click the enter button to go to T03.
- Click or select the logo button or text to go to T01 display.

Attribute: Size of 1920x1080, open-sans 12pt font, 14pt black, display name T02.

3.3.3 Sign In Page

The following figure shows the page display with the display name T03 (See Figure 3).

Figure 3. Display T03

Functions:
- Click the registration button to go to the T02 display.
- Click or select the logo button or text to go to T01 display.

Attribute: Size of 1920x1080, open-sans 12pt font, 14pt black, display name T03.

3.3.4 Product Details Page

The following figure shows the page display with the display name T04 (See Figure 4).
3.3.5 **Checkout Page**

The following figure shows the page display with the display name T05 (See Figure 5).

![Figure 5. Display T05](image)

Function:
- Click the wish list button to go to the T08 display.
- Click the basket button to go to the T07 view.
- Click the user button to go to T03 and T06 views.
- Click or select the logo button or text to go to T01 display.

Attribute: Size of 1920x1080, open-sans 12pt font, 14pt black, display name T05.
3.3.6 Profile Page

The following figure shows the page display with the display name T06 (See Figure 6).

![Figure 6. Display T06](image1)

Functions:

- Click the wishlist button to go to the T08 display.
- Click the basket button to go to the T07 view.
- Click the user button to go to T03.
- Click the settings button to go to T09 display.
- Click the buy button again to go to the T05 display.
- Click or press the logo button or text to go to T01 display.

Attribute: Size of 1920x1080, open-sans 12pt font, 14pt black, display name T06.

3.3.7 Basket Page

The following figure shows the page display with the display name T07 (See Figure 7).

![Figure 7. Display T07](image2)

Functions:

- Click the wishlist button to go to the T08 display.
- Click the transaction history button to go to the T06 view.
- Click the user button to go to T03.
• Click the settings button to go to T09 display.
• Click the checkout button to go to the T05 display.
• Click or select the logo button or text to go to T01 display.

Attribute: Size of 1920x1080, open-sans 12pt font, 14pt black, display name T07.

3.3.8  Wish list Page
The following figure shows the page display with the display name T08 (See Figure 8).

![Figure 8. Display T08](image)

Functions:
• Click the basket button to go to the T07 view.
• Click the transaction history button to go to the T06 view.
• Click the user button to go to T03.
• Click the settings button to go to T09 display.
• Click the checkout button to go to the T05 display.
• Click or select the logo button or text to go to T01 display.

Attribute: Size of 1920x1080, open-sans 12pt font, 14pt black, display name T08.

3.3.9  Setting Page
The following figure shows the page display with the display name T09 (See Figure 9).

![Figure 9. Display T09](image)

Function:
• Click the basket button to go to the T07 view.
• Click the transaction history button to go to the T06 view.
• Click the user button to go to T03.
• Click the wish list button to go to the T08 display.
• Click the checkout button to go to the T05 display.
• Click or select the logo button or text to go to T01 display.

Attribute: Size of 1920x1080, open-sans 12pt font, 14pt black, display name T09.

From every factor that must be noted there is a factor that must present in a display design which is the ease of use. A good interface does not make it difficult for users to use it. Each navigation menu contained in the application must be clear and mobile as to not make users feel confused when using the application. When users find it difficult to operate an application, the application will immediately be abandoned.

4. Conclusion
From the design, this design has fulfilled the basic requirement of a comfortable design and practicibility based on various statement of the experts. Therefore, this design can be used because it fulfill the standard qualification for e-commerce website that is easy to use and visually comfortable.

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