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Optimal Size And Font For Mobile Learning

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Abstract

The study of fonts encompasses not only the expression of letter forms but also other aspects of readability and appearance. The necessity for additional font references for mobile learning heightens the importance of the font selection issue. Because many writers want their readers to feel comfortable and at ease when reading their work, study on this font is necessary because if the font size on a mobile phone is too large or too tiny, it becomes unpleasant. This research aims to examine the varieties of fonts that feels comfortable, appropriate, and clear for mobile learning material. This study employed a survey-based data-gathering method. Research on fonts such as Garamond, Gill Sans, Cambria, Kalibri, Constantia, Lato, and Georgia with sizes 10, 12, 14, 16, 18, 20, 22, 24, 26, and 28 and short to lengthy phrases revealed that Georgia was recommended for small and medium size fonts with sizes 10 to 22. For greater font sizes, however, Garamond was suggested with a size of 26.

Keywords: *Mobile Learning, Font, Typeface*

1. Introduction

The study of fonts concerns not only the representation of letters but also different aspects of reading and display [1]. Fonts are one of the most crucial parts of written communication. Fonts are a set of characters composed of a mixture of letter types, of which the characters are applied to a collection of numbers and symbols. There are 26 fonts for the modern Latin alphabet and 47 fonts for the Hiragana alphabet [2].

Fonts are utilized in various circles and places, including journal writing, research, resumes, articles, and many others. Applications and electronic devices such as mobile phones and computers feature fonts. Most mobile phones allow the users to change the font type and perform customization, and most applications let the users select from various fonts. Not occasionally, several mobile phone users select the font's origin.

Research on selecting the optimal font for mobile phones is quite uncommon. The choice of font is crucial to the readability of text on mobile phones. Many people select the origin of the font they employ. Garamond, Gill Sans, Cambria, Calibri, Constantia, Lato, Georgia, Avenir, and Helvetica are ten font types considered the best for mobile phones [3].

This font selection issue is essential for authors, newsreaders, article writers, and mobile phone and computer monitor usage. Many authors prioritize their readers' comfort when reading their work. Some users select certain fonts for their phones, and several authors randomly select fonts for mobile learning [4] .Using cleaner, clearer, and more uniform fonts is the source of such occurrences, which needs more study. It also makes writing for mobile learning easier to comprehend.

If the font size on mobile phones is excessively large or too small, it might be uncomfortable to read. The font style alone is comforting [4]. With this study, fonts preferred by both mobile phone users and developers can be determined. Knowing font standards appropriate for the size and type can serve as a guide for developers.

1.1 Theoretical basis

Human and Computer Interaction (Human Computer Interaction) is a science who study about how a computer technology affects work and human activities. The HCI concept is developed in various rules or existing parameters as a reference for making applications in various fields [5]. Research in the field of Human and Computer Interaction is generally divided into two categories, namely micro-HCI and macro-HCI. Challenges faced of research in this field is the very rapid changes in technology that must be accommodated to a wide range of users. Meanwhile, researchers in the field of macro-HCI faced with challenges in developing interfaces in that area wider [6].

1.1.1 Fonts

Font is a design to assemble a character. Fonts too a combination of other qualities such as size, spacing and thickness. Part the application shows the possibility of the user to choose among the many fonts. Basically, there are three types of fonts, namely sans serif, serif and decorative [7]. Fonts are one of the landing pages that have important role so that someone is easier to read. On the election the landing page itself pays great attention to font selection [8] .

1.1.2 Text Usability

Text usability is how text is used with which font is more widely used, about how the purpose of measuring a text, and the distance between specified line. According to Janie Kliver's research, there are several good fonts to use smartphone, resume or other writing. These fonts have advantages including Garamond, Gill Sans, Cambria, Calibri, Constantia, Lato, Georgia, Avenir, Helvetica [9].

1.1.3 Font Size

Basically, fonts have several sizes and standard sizes. Fonts with a size of 1 inch equals 72pt, so the normal size is 12p. The size of this font is good standard for some uses [10] .

1.1.4 Line and paragraph spacing

Basically, there are standard spaces, single spaces, and spaces double. Spacing is the space between lines that separates a word. Standard spacing line is 1.08, which is slightly larger than the one-space and paragraph standards is 1.15.

1.1.5 Setting the font to be comfortable

The use of fonts that appear clear and consistent is the reason why users are given comfort by reading writing with fonts.

2. Method

The data were gathered through a questionnaire, particularly by following the steps:

a. Examining websites or documents for popular font styles

b. Determining the variable size, font type (7), and amount of words (3-24)

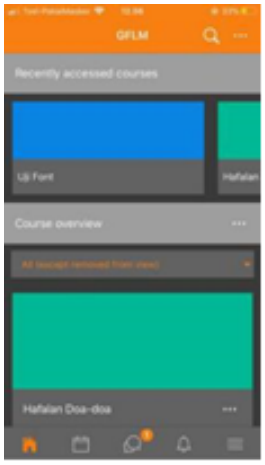
c. Creating test media for variations in font type, size, and word length

d. Conducting a survey with a sample group of fourth-year university students, totaling 50 respondents

e. Analyzing and drawing conclusions

3. Analysis Results

The research conducted a questionnaire to establish the ideal font test for mobile learning.



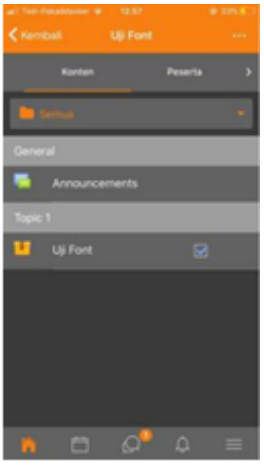


Figure 1 Homepage Figure 2 Topic Selection

Figure 1 depicts the application's homepage upon launch. On the screen, respondents were instructed to select the "Test Font" to begin testing. In the initial step, the respondents were not required to enter a username or password because the initial login was exclusively for researchers, allowing them to store the questionnaire database correctly.

Figure 2 illustrates the list of available topics for the questionnaire. Since only one topic was available, the respondents must select "Test Font".

Figure 3 Start Display Figure 4 Material

Figure 3 exhibits the starting point for the font test survey. On this screen, the respondents were prompted to press the enter key to proceed to the next page and begin the survey.

This page provided an overview of material on fonts, including the definition of fonts, font sizes, distinct types of fonts, fonts recommended by experts, and smartphone-compatible fonts.

Figure 5 Title

Figure 6 Font Selection

Figure 7 Survey Font

This page informed respondents about the survey's font size and type. Figure 7 demonstrates that respondents were instructed to carefully study and select a font for the survey.

On this page, respondents were requested to fill in options from the readings indicated in Figure 7. They were prompted to click the submit button if they had selected one of the options to record their selections in the database of the researchers.

4. Conclusion

The font study of Garamond, Gill Sans, Cambria, Kalibri, Constantia, Lato, and Georgia with sizes 10, 12, 14, 16, 18, 20, 22, 24, 26, and 28 and short to lengthy sentences uncovered Georgia as the most selected for small and medium size font sizing 10 to 22. It was also applied for bigger font sizes beginning with size 26. This alternative font was preferred since it was easier to read and more pleasant to use on mobile phones. This research unveiled that the font choice was unaffected by the number of words or the length of the sentences.

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