UI/UX DESIGN IN ANDROID-BASED HANDWRITING ANALYSIS APPLICATION WITH NAIVE BAYES ALGORITHM USING DOUBLE DIAMOND DESIGN THINKING

UNDERGRADUATE THESIS

Submitted as one of the requirements to obtain
Sarjana Komputer

By:
Fawwaz Aqil
001202000126

FACULTY OF COMPUTING

INFORMATICS STUDY PROGRAM

CIKARANG

MAY, 2023

APPROVAL SHEET

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By

Fawwaz Aqil

001202000126

Approved:

Rosalina, S.Kom., M.Kom.
Thesis Advisor

Cutifa Safitri, ~~M.Sc.~~, Ph.D.
Head of Informatics

Rila Mandala, Ph.D
Dean of Faculty of Computing

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Panel of Examiner

.....	.....
Rusdianto Roestam, M.Sc, Ph.D.	**Cutifa Safitri, [redacted]c., Ph.D.**

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Rosalina, S.Kom., M.Kom.

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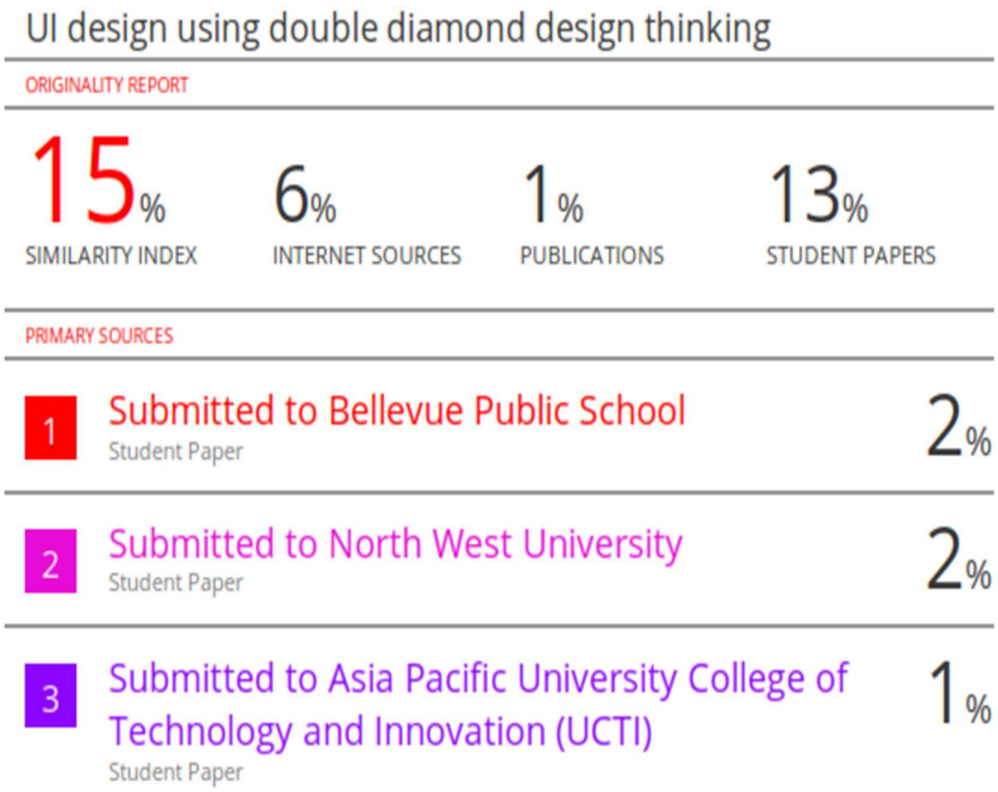

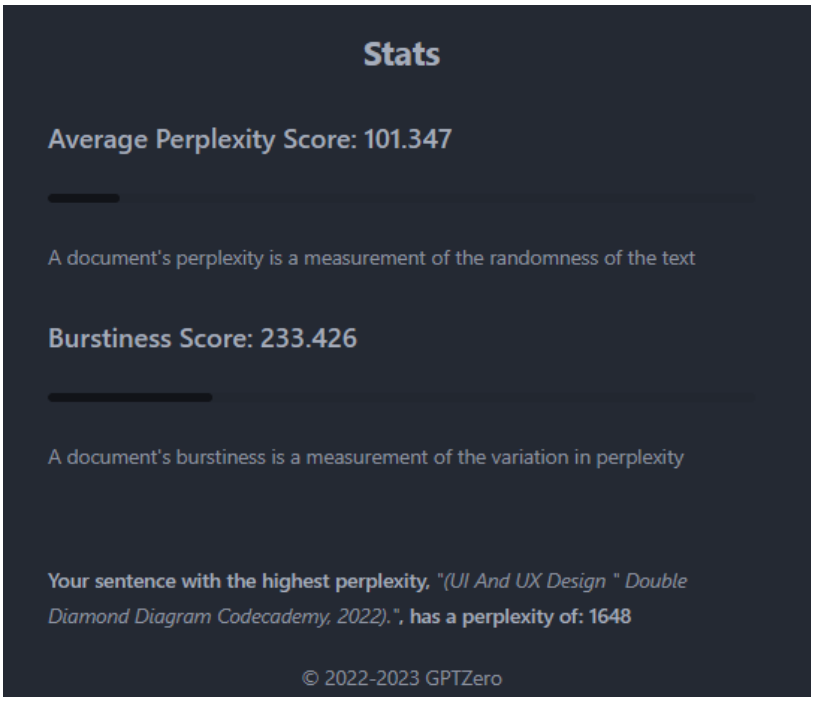

ABSTRACT

Recently, especially in the wake of the epidemic, the subject of mental health has been increasingly prevalent. Human to human interaction is severely restricted throughout the epidemic in order to ensure everyone's safety as well as their own. There is no questioning that some people are skilled at disguising their emotional and mental problems as a calm and cheery persona. Seven out of ten times, this disguised persona succeeds in deceiving everyone around them, and occasionally, it even deceives themself. Although it is difficult to read minds, studies have proven that a person's psychological state may be inferred from their body language, posture, behavior, and voice tonality. A person's handwriting may also be used to read their emotions. Graphology is the term for this. Graphologists, or professional handwriting examiners, can analyze these patterns to figure out a person's personality. Although the analysis's accuracy is dependent on how well-trained the graphologists are, it is time-consuming, prone to human error, and expensive because a graphologist must be hired. Graphology may be completed rapidly and without bias using an image processing tool and machine learning. The Myers-Briggs Type Indicator-based automated method for predicting personality traits from handwriting analysis is what the Graphology App project seeks to create. The program can estimate the MBTI personality from a handwriting picture with a precision and accuracy of 93% and 68% using the Naïve Bayes method. The application user interface will be designed with the Double Diamond Design Thinking in mind, the user interface design will include illustrations which represents what the user can do with the application as well as what the application can do for the user, typography and color that is chosen accordingly which represents the application value as well as custom made logo that encapsulates the entire feature of the application within it.

Keywords: Graphology, Naïve Bayes, Machine Learning, MBTI, User Interface Design, Double Diamond Design Thinking, Handwriting Features.

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