

# Montal app development: Mental monitoring for disability in adapting to the community environment

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**Abstract.** Technological developments can be used for a wide variety of benefits. One of them is the use of assessment for students or someone independent of the community environment. This monitoring activity is not only carried out by the concerned, but also involves the homeroom teacher, teacher council, and parents/guardians. Learners. The goal is that this activity is not only carried out in schools, in Parents also contribute to shaping the disciplinary character of their children. It is associated with people with disabilities and the importance of the role of the environment is enormous in fostering the mental health of people with disabilities. Good surroundings can be a critical success factor in mental health growth, because can facilitate people with disabilities to blend in and socialize. Montal's application is carried out with media feasibility tests before being used by people with disabilities. Declared Fit for use with a number of 3.59. In the implementation of the MONTAL research in a trial with a total of 20 SLB Gedangan Students and 15 UNESA Students with disabilities getting results of 3.05 it was stated that this application could be suitable for special assessment of students or students with disabilities to be confident in the surrounding environment.

## 1 Introduction

Technological developments also play a role in the field of assessment in the environment. Around including knowing one's mentality. Mental is the understanding of A healthy mentality cannot be separated from an understanding of being healthy and physically ill. Various studies have revealed a link between physical health and physical health. mental individual, whereas individuals with medical complaints indicate a problem psychic to the level of mental disorders. Conversely, individuals with mental disorders also indicate the presence of impaired physical functioning. Healthy and sick conditions in humans are a continuum, so it is very difficult to give clear boundaries when conducting its evaluation. However, observing the phenomenon, it is believed to be a level. A person's health can be improved and even

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optimized. This is what underlies Today's Mental Health Movement. Not just looking at how a person is recovering from illness, but how to improve one's health becomes more optimal.

In the International Convention on the Rights of Persons with Disabilities and its Optional Protocol [1] Against the Convention (UN Resolution 61/106 of 13 December 2006) persons with disabilities means any person who is unable to guarantee by himself, in whole or in part, normal individual needs and/or social life, as a result of their record, whether innate or not, in terms of physical or mental abilities. Strictly The juridical definition of persons with disabilities is regulated in Article 1 paragraph (1) of Law No. 4 of 1997 as follows: any person with a physical and/or mental impairment, who may interfere with or constitute obstacles and hindrances for him to carry out activities appropriately, consisting of; a. persons with physical disabilities; b. persons with mental disabilities; c. persons with physical and mental disabilities. It states that persons with disabilities. There needs to be a special approach to form self-confidence with his mentality so that can adapt to the environment, this is in accordance with [2] which states. The importance of mental health services in general has been emphasized in Mental health policy with a community that cares for people with disability. Below are the disability cases from the interview, as Table 1.

**Table 1.** Unit of analysis of mental disabilities cases.

Analysis Unit	Analysis subunit		
	Ordinary people	Professional	Persons Disabilities-Mental
Case Disabilities Mental	Based on text/interview corpus: a. Description of community life; b. Social representation of disability mental dipublic	Based on text/interview corpus: Description from community life; Representation social about mental disabilities in society	Based on text/interview corpus: Representation social which-constructed from emotions and personal experiences

This also affects the fulfillment of rights for persons with disabilities, because protection and guarantees of human rights are not only necessary for normal citizens but also for persons with disabilities [3] In reality there are still many persons with disabilities who experience discrimination related to the fulfillment of their rights obtain education, employment, public facilities such as transportation, places of worship, places of entertainment, as well as equality before the law. This is what prompted researchers to create an application MONTAL which serves as mental monitoring of disabilities so that it is easy to adapt in the community environment.

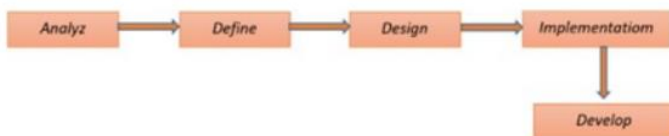
According to Slamet's research, [4]. Fulfillment of the Rights of Persons with Disabilities in Semarang Regency Through the Implementation of the Convention On The Rights of Persons With Disabilities (CPRD) in the Education Sector which stated in this study the number of persons with disabilities in Semarang Regency based on data in 2019 in Semarang Regency there were 280 persons with disabilities, who consisting of 161 men and 119 women. This number is spread across 19 sub-districts in Semarang district. Fulfillment of the rights and needs of persons with disabilities by the Semarang District Social Service. In connection with MONTAL's research, having mental monitoring for disabilities will equalize the rights of persons with disabilities because they will be more confident.

While the inhibiting factors are the influence of the drugs consumed by the beneficiaries, the lack of psychological readiness of the beneficiaries, and discriminatory actions that have been received by the beneficiaries, in this case, the researcher [5] who carried out the research is associated with researchers with guidance from an early age on mental matters that will provide People with disabilities feel cared for.

Research on health monitoring systems is also important in this research, for example, the Monitoring System for Mental Health and Employee Performance [6], research using field research methods, data and information obtained directly. Monitoring can be defined [7] as a process of measuring, recording, collecting, processing and communicating information to assist project management decision-making. Generally, monitoring is used to check between performance and predetermined targets. Monitoring in terms of the relationship to performance management is an integrated process to ensure that the process goes according to plan (on the track). Monitoring can provide process continuity information to set steps towards continuous improvement. In practice, monitoring is carried out when a process is running.

## 2 Method

This research model uses a research and development model that is used to produce certain products and test the effectiveness of a product. The development model used is ADDIE (Analyze, Design, Develop, Implementation and Evaluation) [8]. The development model was chosen because it aims to produce the MONTAL (Mental Monitoring) Application for disabilities in the community environment. The subjects in this study were Gedangan State SLB Students The instrument used in this study was the MONTAL (Mental Monitoring) media feasibility instrument. How to use the instrument by putting a tick (√) on each aspect of the assessment 1 if it is not good, 2 if it is not good enough, 3 if it is good enough and 4 if it is good.



**Fig. 1.** Research flowchart.

### 2.1 Analyze

The activity began with collecting data and information by conducting interviews with Mr. Maseri, M.Pd's school at the Gedangan State SLB where many students lack confidence and easily adapt to the environment.

### 2.2 Design

Develop a framework for preparing MONTAL, assessment questions for mental monitoring.

## 2.3 Develop

- a. Develop validation instruments
- b. Perform instrument validation
- c. Compile MONTAL Media (Mental Monitoring),
- d. Expert validation (feasibility of material content, presentation feasibility, language feasibility and graphic feasibility),
- e. Revise according to expert input

## 2.4 Implementation

Trials were carried out on students or students using the MONTAL application.

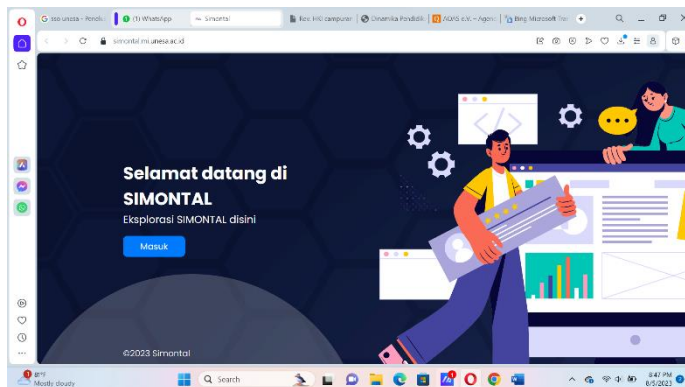
# 3 Results and Discussion

## 3.1 Analysis results

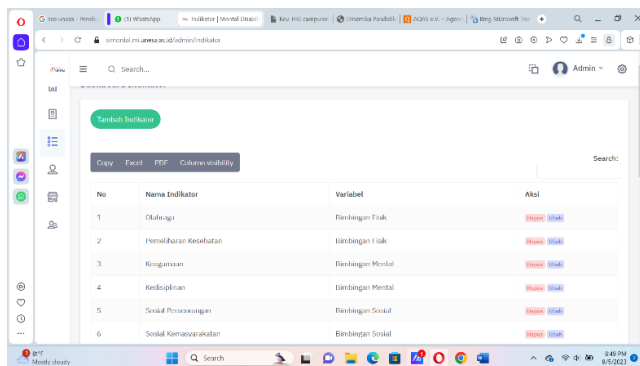
In the analysis, there are 2 stages, namely Needs Assessment and Front-end Analysis. Needs Assessment in the form of analysis of field conditions and participants as well as collecting reference material that will be the subject of discussion in the SIMONTAL application Field analysis activities are carried out by collecting information about the condition of Mental Health for Disability [9], the results of this information are seen from the assessment of BK teachers regarding the confidence of SLB students.

## 3.2 Design

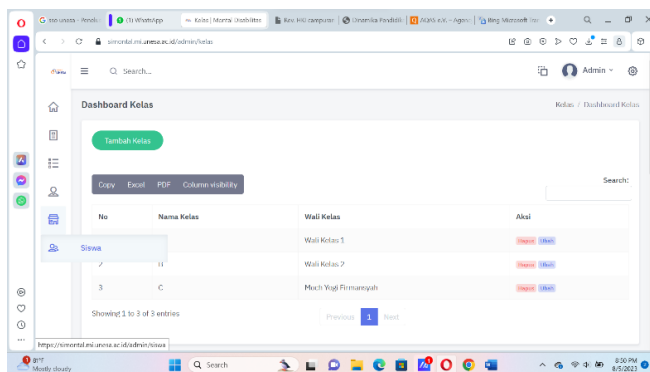
The design stage is the stage of designing career guidance modules which include the formulation of learning objectives for career guidance modules that are in accordance with student needs, making SIMONTAL applications according to needs which can later find out about mental health [10].



**Fig. 2.** Beginning of SIMONTAL application.



**Fig. 3.** In-app indicators.



**Fig. 4.** Students in the application.

### 3.3 Development

This stage aims to see the extent of the feasibility of the MONTAL application that has been designed. As a follow-up to the design that has been carried out at the design stage, the following development steps are carried out: Validators consist of two Media Experts and three Material Experts who are experts in the field of fashion design; The next stage is user responses (Teachers and Students) to find out the practicality test of the SIMONTAL application conducted by SLB Teachers, Lecturers in Education, Psychology, and Academics to find out how much the SIMONTAL application is made. The results of the Interclass Correlation Coefficients reliability test using SPSS statistical software, can be seen in the Table 2.

**Table 2.** Instrument Feasibility Reliability Test Module (Media Expert) ANOVA Analysis Output.

		Sum of Squares	Df	Mean Square	F	Sig
Between People		7.609	31	.245		
Within People	Between Items	.016	1	.016	.326	.572
	Residual	1.484	31	.048		
	Total	1.500	32	.047		
Total		9.109	63	.145		
Grand Mean = 4.84						

**Table 3.** Intraclass Correlation Coefficient (ICC).

	Intraclass Correlation	95% Confidence Interval		F Test with True Value 0		
		Lower Bound	Upper Bound	Value	df1	df2
Single Measures	.524a	.429	.826	5.126	31	31
Average Measures	.805c	.600	.905	5.126	31	31

Based on the calculation of data obtained from responses from Media Expert 1 by obtaining an average score of 4.09, it is included in the very decent category. Media Expert Response 2 with an average of 4.03 in the very decent category. The average score of both Media Experts is 4.06 which falls into the very decent category.

## 4 Conclusion

Development of the SIMONTAL application, I using ADDIE, which in this case (1) the first stage is the needs analysis of the design stage including the preparation of the application framework, collection and selection of references, application design, and preparation of the application framework, collection and selection of references, application design, and preparation of application assessment instruments; (3) the development stage includes the development of culinary vocational career guidance modules, Media Expert Validation, Material Experts, and Application User Validation, revisions are prepared in accordance with validator input. The head of the research team, as the first author, must arrange the overall research timeline. The second author is responsible for collecting the data, while the third and the fourth authors are needed to write the article.

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