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ANDROID-BASED PSYCHOLOGICAL TEST MANAGEMENT

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Abstract

The aim of this research is to create an Android-based cell mental check utility in which this software may be used as a medium to make it greater efficient and less complicated for people to prepare for the psychological test. The method in this research is collecting data regarding psychological tests, through writings and books, starting from question statements to searching for results that will be the output of this application. The result of this studies is an Android-based totally mental take a look at software that may be used on smartphones. the belief of this research is that an Android-based psychological take a look at application makes wearing out assessments less complicated and extra efficient due to the truth it may be accessed via a cellphone.

Keywords: Android Based, Psychometric, Management

INTRODUCTION

The history of psychological testing began with the ancients, which then progressed through the research process in line with the development of science. For example, ancient kings selected soldiers by letting them feel thirsty and then observing how the soldiers drank from the lake. Soldiers who drank directly without taking water from their stairs were

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considered suitable for battle. The history of significant developments related to tests or measurements in the fields of psychology indicates that the Chinese already had a testing program for military selection approximately 4000 years ago. Every year in China, verbal exams were conducted to select job evaluation and promotion decisions. By the Han Dynasty, the use of battery tests (the use of 2 or more tests together) was quite common. These tests were used in the fields of public administration, military, agriculture, finance and geography.

Subsequently, tests developed relatively rapidly in the Ming Dynasty (1368-1644). In this era, a multi-stage, nationwide program involved local test centers, proceeding to provincial tests, and if the highest score was obtained, proceeding to the national level. The Western world eventually learned a lot from the Chinese testing process. In fact, the East Indian trading company

In 1832 the British Empire was encouraged to replicate the system as a method of selecting workers for overseas assignments. The success of the process in companies was eventually applied to select government employees in 1855. Not only in the UK, France and Germany also implemented this. In 1883, the American government formed the American Civil Service Commission, which distributed and conducted competitive examinations for several government jobs. The impetus for the testing movement in the Western world then grew rapidly.

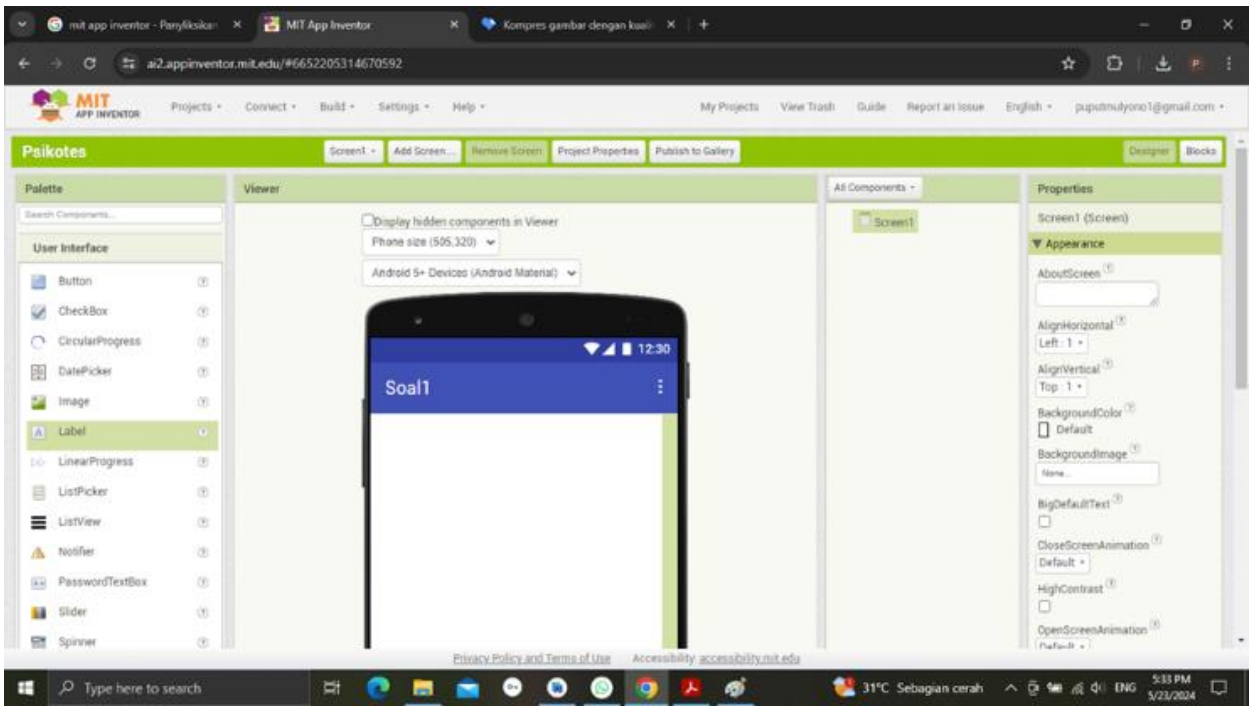
One of the early problems that stimulated the growth of psychological tests was identifying mentally retarded people, detecting intelligence, and continuing to develop in the field of education. Meanwhile, the clinical field has also developed to test for emotional disorders and other behavioral disorders (Meizara & Permatasari, 2021).

Psychotes come from the words psycho and test. Psycho means psychology (soul) and test which comes from the Latin testum which means a bowl, to test whether there is gold or silver in a metal mixture. In 1890, James Mckeen Cattel used this term in the field of psychology to introduce his investigation of aspects of intelligence, he called it the mental test. A psychological test is essentially an objective, standardized measurement of a sample of specific behaviors. A psychologist works in the same way as a biochemist who conducts a patient's blood test distributing one drop of blood that means the same throughout the person's body.

Psychological tests are intended to determine the psychological aspects of the selection participants (such as work motivation, character and behavior), so that the Company obtains a workforce using appropriate characters using the needs and work fields that the new employee will undergo (Wardhani & Viatrie, 2006). Many cases provide someone who actually has a good score has not succeeded in the psychological test. The participants of the psychological test felt common and did not know the rules of the test tool. As a result, predictably, their scores were low and interpreted as having no potential. They also fall in the early stages of selection (Sustiwi & Sustiwi, 2009).

METHODS

In this method the researcher collects data on psychological tests, through the friction of pen and book collisions ranging from questions of statements to the search for the impact that will be as a result of this application. The data obtained from this method means from the exercise book of psychological test questions for job applicants. The following are the test questions.



Picture 1 form an APP Inventor 2 application

1. Sinonim kata BARBAR adalah...

   a. Tidak Beradab c. Etika

   b. Akhlak d. Moral

2. Sinonim kata OBESITAS adalah...

   a. Tidak Beradab c. Etika

   b. Akhlak d. Moral

And so on to form an APP Inventor 2 application requires an active Google account, so in the initial term it is required to have a google account If you already have a google account then you can proceed to the next stage, but if you have not first created a google account. after accessing the App Inventor website http://www.appinventor.mit.edu/ and then click create. similar to the following display:

RESULTS AND DISCUSSION

Psychological tests actually benefit both parties, both for employees (employees) and for the company. An imperfect selection will cause great losses, both for the employee and the company concerned (Zaman & Helmi, 2008). In general, large companies have implemented psychological tests as a selection method in employee recruitment. Psychological tests are sometimes known as tests called Scholastic Aptitude Tests (TBS) and Personality Scale Tests.

Many prospective employees who fail to consider this part of the test is a barrier that is difficult to penetrate (Suryaningrat, 2010). Psychological test means a test that aims to convey an illustration of the psychological aspects of a person according to the needs and needs of the client (company or agency). The test was given to be a sense or vehicle for psychologists to be able to fully understand the psychological aspects of a person in order to provide a picture (psychogram profile) of each test individual who took the test (Salemba, 2016). The term psychological testing itself is a series of tests that are usually given in the selection process which aims to determine the psychological aspects of the test takers. In short, psychological testing means one of several tests used to find the best of the good test takers, who are suitable for the tasks and positions they will carry out using a psychological approach (Solution, 2015).

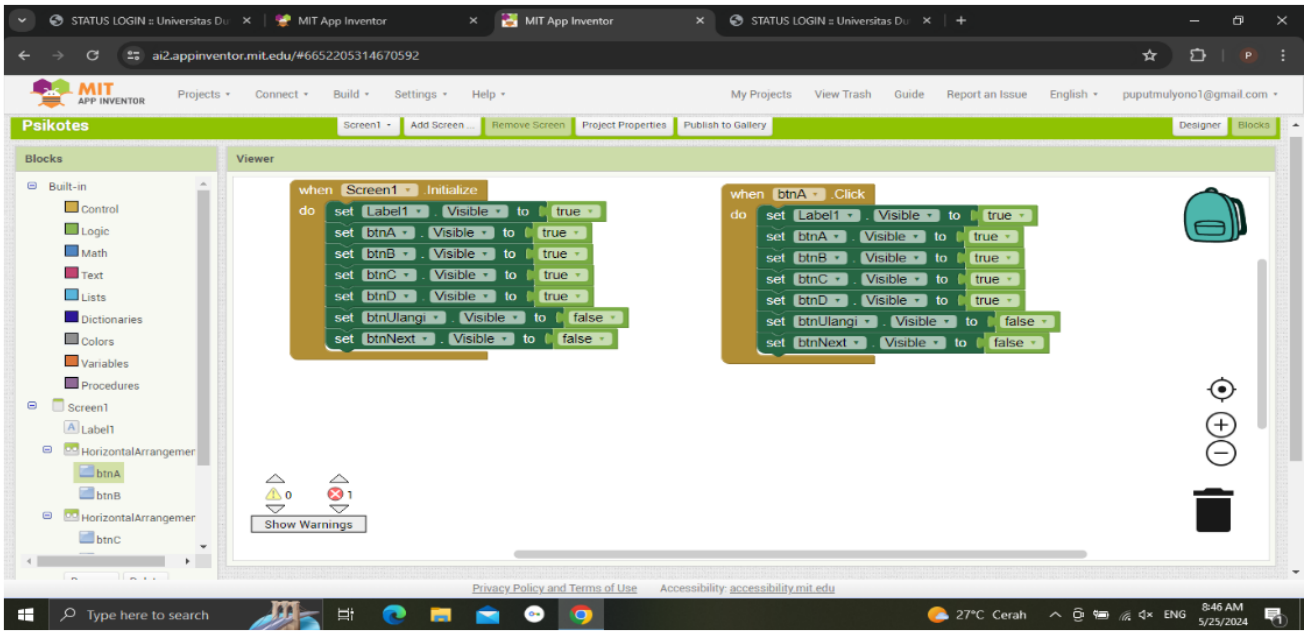
Technological developments have caused disruption in various fields. This development can have an effect and create something useful for people's lives. Through technological collaboration, many activities become faster and more effective, increase productivity, save costs, and do various kinds of things without the need to move from one area to another. one of the fields affected by technological developments is the world of education. The collaboration between technology and people shares the latest thing called e-learning or cyber teaching, which is a model of learning or teaching in cyberspace or learning conducted using the internet (Sugiyanto, et al., 2022).

The utilization of technology in various fields is growing. The Internet is a computer network that can convey the most rapid issues to netizens. Institutions can provide news comprehensively and stunningly with websites. Using technology-based can conduct psychological services such as psychological tests will be as thorough and efficient (Mustofa & Yusnanto, 2022).

To run this application can only be run by any mobile device with an android system. but this software can also be tricked so that it can run on a laptop. in this study researchers implemented the software on 3 devices, namely: Toshiba Satellite L745 Laptop, OPPO A16 Smartphone and Advace Sketcha Tablet three. to be able to run this software a laptop or PC requires an emulator application first. as well as in this study researchers used Bluestacks App Player Android Emulator using the dream of Android OS five.0.1 Lolipop. on smartphone devices to run this software using the usual package. this application is designed with MIT APP Inventor for the use of this software requires an android OS device at least version 5.0 Lolipop. this application has four screens or from, which are as follows:

First, the dish screen, this screen means the initial display when the software is opened or the primary page in this software that makes it possible to access other screens in the software, through the buttons that have been provided, here are the components that make up the dish screen. dish there are 3 buttons available, if you click “strat test” it will automatically open the test screen. If you click “particulars” it will open the software

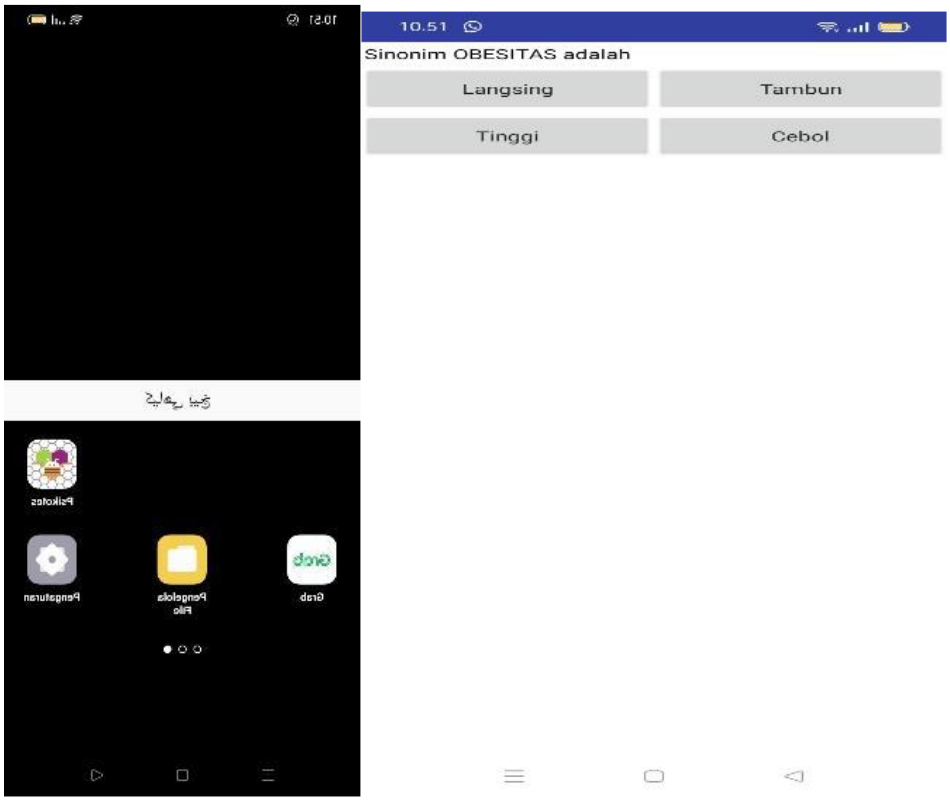
discourse screen. and If you click "exit" it will automatically exit the software.



Picture 2 presentation screen

Second, the about screen, this screen is accessed by pressing the discourse button on the presentation screen. in this screen displays news about the purpose of making this application. there is also a home screen button which, if clicked, will return to the presentation screen.

Third, the test screen, this screen is the most primary screen, because it is on this screen that psychological tests are carried out. The following means the components contained in the test screen. This test screen has 42 labels, namely 1 instruction label and 40 others displaying the original text of the test statement questions. 40 text boxes become the area to input the scores of each question stated on the question labels. The label that will occur will display that will occur the calculation of the values that have been inputted previously.



Picture 3 and 4. Display of the Psychological Test Application

After completing the implementation period, the testing carried out in this study is to use the white box method, which is to see whether each part of this software runs according to its function.

CONCLUSION

Based on the making of psychological software and its discussion, the researcher can take the conclusion that: First, the android-based psychological test application makes the test application simpler, more efficient because it is relatively accessed via a smartphone. Second, judging from its usefulness, this application can be used by netizens who are competent in the field of psychology as well as people who just want to know psychological tests. Third, looking at what will happen testing this software can be simpler.

REFERENCES

A, Sustiwi. (2009). Cara mudah lolos psikotes (1st ed.). Yogyakarta: IndonesiaTera.

Karen, L. (2022). Become an APP inventor. Massachusetts: MITeen Press.

Maxine, O. P. (2021). 10 ide aplikasi bisnis dengan MIT App Inventor 2. Jakarta: Elex Media Komputindo.

Meizara, E., & Permatasari, N. (2021). Pengantar psikodiagnostik (3rd ed.). Makassar: UPT Unhas Press.

Mulyadi. (2011). Android App Inventor. Yogyakarta: Multimedia Center Publishing.

Mustofa, K., & Yusnanto, T. (2022). Sistem informasi pendaftaran rawat jalan berbasis web di klinik. Prosiding Seminar Informasi Kesehatan Nasional (SIKesNas), Surakarta.

Saeful Zaman. (2007). Soal-soal tes potensi akademik (TPA). Jakarta: Visimedia.

Safaat, N. (2007). Soal-soal psikotes. Jakarta: Kawan Pustaka.

Salemba, T. P. (2016). Big psikotes terlengkap (1st ed.). Jakarta: PT. Bintang Wahyu.

Solution, T. S. (2015). Bank soal psikotes matematika (1st ed.). Yogyakarta: PT. Bentang Pustaka.

Sugiyanto, A., Dewantara, A. D., & Pabe, R. R. (2022). Implementasi aplikasi psikotes berbasis android pada lembaga psikologi terapan Widya Prasethya. KOLONI: Jurnal Multidisiplin Ilmu, 1(12), 859–869.

Suharto, A. (2021). Mudah membuat aplikasi android dengan MIT App Inventor. Indramayu: Penerbit Adab.

Suhendar. (2022). Visual modeling menggunakan UML dan Rational Rose. Bandung: Informatika.

Suryaningrat, W. (2010). Strategi jitu menaklukan soal-soal psikotes dan TPA (1st ed.). Jakarta: Bukune.

Team PBB. (2009). Soal-soal yang sering muncul dalam tes penerimaan pegawai. Jakarta: Visimedia.

Team Wahana Komputer. (2009). The best 40 Java application. Jakarta: Elex Media Komputindo.

Wardhani, Y. F., & Viatrie, D. I. (2006). Latihan soal-soal psikotes untuk pelamar kerja (1st ed.). Depok: PT. Kawan Pustaka.

Zaman, S., & Helmi, D. R. (2008). Memahami dan mengerjakan psikotes dengan benar dan tepat waktu (1st ed.). Jakarta: Visimedia.