### **CHAPTER II**

## LITERATURE REVIEW

This chapter consists of the concept of Perception, the concept of Android-based exam browser, and related previous study.

# A. The Concept of Perception

#### 1. Definition of Perception

Robbins and Judge (2013) states that perception is a process by which individuals organize and interpret their sensory impressions in order to give meaning to their environment. Meanwhile, Qiong (2017) defines perception as: 1) the way you think about something and your view of how it is. 2) The manner in which you see things using your senses of sight, hearing, and so on. 3) The innate ability to comprehend or perceive information quickly.

Based on the explanation above, the writer concluded that perception is someone's opinion about the sense of sight, an environment that interprets the data and transforms it into something meaningful.

### 2. Factor that Influence Perception

There are many factor that influence perception as bellow:

a. Intention

According to Ubaidillah (2019) in, interest is a constant process of paying attention and focusing on something that is of interest to him with feelings of pleasure and satisfaction. It is means that interest can be a cause of activity and participation in activities.

### b. Perceived usefulness

Gong and Xu (2004) state that the definition of perceived usefulness is the subjective probability that users using certain application systems can increase their expectations. So, the effectiveness of information if the users believe that using information systems will improve their performance and make their efforts easier.

### c. Perceived ease of use

According to Ndubisi et al., (as cited in Fegasanti & Priyatmojo, 2020) perceived ease of use refers to how clear and understandable, interaction with the system is ease of getting the system to do what is require, mental effort required to interact with the system and ease of use of the system. So, the writer can say that ease of use is about the clear and easy to understand when we interact with the system.

### d. Anxiety

Johnston (as cited in Fegasanti & Priyatmojo, 2020) argues that anxiety is a reaction to threats, obstacles to personal desires, or a feeling of distress because of disappointment, dissatisfaction, insecurity, or hostility to others. So, the writer conclude that anxiety is talking about a feeling of people because of a condition that caused of disappointment, dissatisfaction, insecurity, or hostility. Then, level of anxiety depends on the intensity of the stimulus that affects it, meaning that the individual will experience anxiety as long as the condition exists.

e. Android attitude

According to Fegasanti and Priyatmojo (2020) android attitude is about people's believe of the use of android can give many advantages such as brought them into a bright new era, enhanced their standard of living, enjoyable system, saves paper and stationery, savings cost, and summarizing tasks for correction for teachers.

### B. Concept of Android-Based Exam Browser

### 1. Definition of Android-Based Exam Browser

According to Putra and Pamungkas (2020) Android-based Exam Browser is one of the secured web browsers for conducting online examination. It works in lock mode, so it prevents opening of any page, switching to unnecessary programs, operating system-specific key combinations and functions, leaving the browser secure at any time and opening gallery.

Android Kiosk is basically a gadget or smartphone that is intended to run a single application and to serve certain cases. Some basic requirements to be in kiosk mode include the need to be in a single mode serving specific use cases, hiding navigation, removing the toolbar, controlling or blocking all ways of setting it to the smartphone, turning off calls or messages according to the use case and the application must continue to run in mode full screen (James, 2018).

So, the writer defined Android-based Exam Browser as an online exam assistive browser-based android to access the web of online examinations. By using the Android-based Exam browser, the display is in locked mode so students are unable to open or exit the browser because a password can be installed to exit the browser.

### 2. Benefit and Challenge of Android-Based Exam Browser

The benefit of students using mobile devices when conducting examinations is that they are more flexible because they do not need cable networks (Sarrayrih & Ilyas, 2013). And then, the key features of this application used is Lockdown application that is a computer program used during an online exam that attempts to prevent users from accessing software other than the exam application. The application will lock the online exam environment in a classroom or through an actor; prevent access to applications and other websites during the exam; prevent test takers from copying or printing exam content; as well as displaying the contents of the exam in full screen and cannot be minimized (William, 2012) so it can be helpful for less cheating by the students.

Android-based Exam Browser prevents any website from being opened, changing to undesired programs, operating system-specific key combinations and features, leaving the browser safe and gallery opening at any time. Then, examines can only run the browser during the test session. The browser can lock the device and so cannot communicate via the internet, or access to the file system.

But, there are several challenges when using android-based exam browser, such as the conviguration file still often has error of bugs so the teacher must prepare the examinees with two internet providers during the exam because when the network break in some cases, participants have to start the axam all over again. Beside that, Some times the students do not read the text or question instruction carefully and also the students Network problems get in the way of exam are the disadvantage of the us exam browser.

### 3. Key Features of Android-Based Exam Browser

The first appearance of the Android-based exam browser application is the input form server test URL. The URL can be an IP address or server domain name. If the server or domain URL entered is valid, the main index file will be accessed from the test server. Usually it will contain a login page.



Figure 2.1 Login Page

Figure 2.1 displays the student login page, so that it can continue to the next menu. The user name box should be filled in with the name of the Student Identification Number of the examiners in order to show all the activities available in the Exam Browser, and the password should be filled in with 2 combined of numbers, to ensure that illegal logging by unauthorized parties is protected.

Next will go to the Confirmation data test page. Confirmation data test page shows the test code, the name and class of the examiner, the subject, the date and length of the test will appear in the first icon for the English final exam. Before that, students can take part in the exam by strictly following the time limit set as shown in figure 2.2

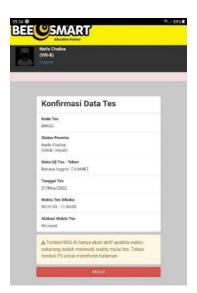


Figure 2.2. Confirmation data test

The Token Confirmation as shown in Figure 2.3 is intended to provide protection for this Android-based exam system. Before answering the question, each student must enter the token number first. The token number can be different or same for all students, as shown in

Figure 2.3.

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Kode Peserta / User Name		
63		
Status Peserta		
Naifa Chalisa (VIII-B   Hirah	0	
Jenis Kelamin		
PEREMPUAN		
Mata Pelajaran		
Bahasa Inggris		
Masukkan TOKEN		
ILMAB.		
TOKEN Anda: -00[ILMAB]0	0-	
	SUBAIIT	

Figure 2.3. Token Confirmation

After filling the token number in the browser, the student is considered to have been identified as an examiner in the English exam and must comply with the schedule as shown in Figure 2.3. If the student clicks the submit attempt button, the exam will start and the questions for the subjects will appear and must be answered by the examiner, as shown in Figures 2.4



Figure 2.4. Questions Page

The type of questions presented in the Exam Browser is typically multiple choice questions in which the questions were validated by the relevant teachers of the subjects so that they meet the requirements to be considered. At the end of the display of questions, there is a navigation boxes icon as in Figure 2.5 shown at the conclusion of test questions, namely a brief report on the exam such as the remaining time and the number of questions that have been and have not been answered.

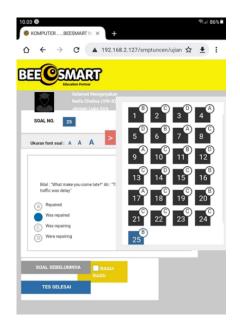


Figure 2.5. Quiz Navigation

To exit the application can be done by selecting the finish attempt button on the page. When leaving the browser, Exam Browser will request confirmation to exit as shown in figure 2.6. If the examiner has validated the button, the test is ended.

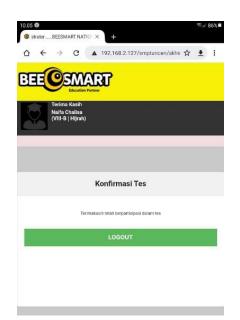


Figure 2.6 Confirmation Page

### C. Related Previous Study

There are some studies which were carried out by some writer. The first study is conducted by Chikmah (2016) entitled "Students' Perception on Proprofs Online Computer-Based Assessment Software as An Assessment Tool at English Education Departement, UIN Sunan Ampel Surabaya". The objective of her study was to determine the perception of the students and the result score for the use of online ProProfs CBA (Computer Based Assessment) software as an evaluation tool. In the study, that used questionnaire and interview as the instruments. The population of the study was Classroom Management Course that consists of 73 students. The result of the study was that the positive component was 93%, and the negative component was 7%. That means the perception of the students about Proprofs online machine as an evaluation tool was good.

The study correlates with this study because of the same discussion regarding students' perceptions about the use of technology as a medium to assess assessment. The differences were the subject, method, object and measured population sample. The previous study focused on the perception of students towards Proprofs Online Computer-based Assessment Program as an assessment tool, while this study focused on students' perception of using Android-based Exam Browser as the medium for assessing the final exam. For the previous study, the approach was quantitatively descriptive while this study used qualitative descriptive. The population of this previous study was consists of 73 students, while this study was consists of 85 students. The subject of the previous study was the students of English Education Department, UIN Sunan Ampel Surabaya, while this study focus was the students of SMPIT Tunas Cendikia Baturaja.

The second study was by Nahdia (2017) about Washback Analysis of Students' Perception and Teachers' Teaching Material of English National Examination. This study is intended to investigate the washback of the English national examination based on the students' perception and teachers' teaching material. Her study used descriptive qualitative method as the research methodology. The population of the study was ninth grade students of SMP N 12 Semarang in academic year 2016/2017. The sample of the study was 16 students of ninth grade and also the English teachers who teach ninth grade. The result of the study showed that the national examination brings positive and negative effects to both students and teacher. For the students, the national examination triggers them to study harder than usual. Nevertheless, the national examination still makes the students anxious due to its usefulness as the consideration of their next school level entrance, which, consequently, makes them give more attention only to the subjects tested in the national examination. Furthermore, for the teachers, the national examination makes them work hard to supply the students with various media, methods, and books in the teaching-learning process in order to make the students getting ready to face the national examination.

The previous study correlates with this satudy because of the same discussion regarding students' perceptions about assessment. The study examined the washback analysis of students' perception and teachers' teaching material of English National Examination. While, this study focussed on students' perception on the use of Android based Exam Browser as the medium to assess examination. For the previous study used qualitative descriptive method and this study used qualitative descriptive survey method. The population of the previous study was the ninth grade that consists of 16 students, while this study was the eighth and ninth grade consists of 85 students. The subject of the previous study was the students of SMPN 12 Semarang, while this study was the students of SMPIT Tunas Cendikia Baturaja.

The third study was by Himmah (2020) entitle "Penerapan ujian online berbasis android dalam mengembangkan madrasah unggul di MA Darul Ulum Waru Sidoarjo". The similarity of this study and Himmah's was about the topic both focus on online assessment-based Android. Both of study used qualitative descriptive method. The previous study collected the data used inteview, observation and documentation while our study used questionnaire. The study conducted in MA Darul Ulum Waru Sidoarjo while this study conducted at SMPIT Tunas Cendikia Baturaja.