Designing IELTS web-based simulation applications (Reading and Listening) at Language Center Unit of State Polytechnic of Pontianak

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Abstract

Nowadays, there is a demand for the implementation of IELTS test in Pontianak is still quite difficult to find. In addition, for IELTS test training itself can be quite expensive with special training organized by various English learning guidance scattered in Pontianak. However, on the other hand, the use of IELTS test itself is very useful for many people considering the results of IELTS score to be one of the requirements to be accepted on a campus or reputable institution. So, we need a media like website that can be able to know the outline of questions from the IELTS test itself. Language Center Unit (UPT Bahasa) State Polytechnic of Pontianak is one of the institution which is held IELTS preparation for public Method of system development used is Waterfall method. The software used to build this application is Pear Hypertext Preprocessor (PHP) as a programming language, MySQL as the database server, XAMPP as a local server and Sublime Text 3 as a text editor. This application assists the public in estimating the scores achieved for IELTS test questions online and the website also comes with the information about what an IELTS test is and some unique facts about the IELTS test.

Keywords: IELTS, website, Score, Reading, Listening

1. INTRODUCTION

English is an international language that is often used as a communication medium between individuals who have different native languages from various parts of the world. English grammar has variations in structure and usage, it depends on the tradition used by a country that is influenced by the native language of the country.

English language user countries are divided into three categories. First, countries that use English as a mother tongue such as English, Canada, Australia, New Zealand, and the United States (Inner Circle Countries). Next is a country that has a British institutional history so that this language plays an important role especially in the fields of education, government, literature, and popular culture. This country includes Nigeria, Singapore, and India (Outer Circle Countries). The next country is a country that uses English for various purposes but does not make it the dominant language in Expanding Circle Countries. Indonesia, Russia and China are countries included in this category.

IELTS (International English Language Testing System) was formed in 1989, and is a substitute for ELTS (English Language Testing Service), which is designed as a test for prospective undergraduate and doctoral students. IELTS test standards have been recognized by more than 5,000 organizations worldwide. In addition to certification in the world of education, IELTS certification is also recognized by organizations in the world of work and for the benefit of
migration. IELTS is an initiative of three organizations, namely the British Council, IDP: IELTS Australia, and Cambridge English Language Assessment. At first, the IELTS test was used at British prosperity countries, such as Australia, New Zealand, Hong Kong, and the United Kingdom itself. However, at present, the IELTS test standard has been used in many countries, including the United States, and several countries on the European continent.

Language Center Unit (UPT-Bahasa) at State Polytechnic of Pontianak (Polnep) is a language technical service unit at State Polytechnic of Pontianak that serves various linguistic activities such as the implementation of English language tests, ITP, TOEFL, provision of English language training, and various activities specifically aimed at improving foreign language skills for lecturers, students, and all academic community at State Polytechnic of Pontianak.

At present, the implementation of an IELTS test in the city of Pontianak is still quite difficult to find. Apart from that, IELTS test training itself can be considered quite expensive with a price range of around Rp. 3,000,000,- per 24 meetings with special training organised by various English language tutors spread in Pontianak. However, from the other side, the use of IELTS itself is very useful for various groups considering that the IELTS score is one of the requirements to be accepted at a well-known campus and institution in Indonesia and the world so that the Language Center Unit has the initiative to make an IELTS simulation application.

Based on the description of the problems above, the author intends to build a Web-Based IELTS (Listening and Reading) Simulation Application at Language Center Unit State Polytechnic of Pontianak where the information is obtained from a website that contains IELTS test questions that also provide the answer key to the question. with the intention to train the ability of the users in working on IELTS questions.

2. RESEARCH METHODOLOGY

2.1. Research Site and Participants

This research is a qualitative research. According to Creswell (2005: 39) qualitative research is a type of educational research which the researcher takes the conclusion based on participants’ opinions, asking questions deeply, giving questiones, collecting data through paerticipants’ sentences and study them closely and carefully and carry on the inquiry in relating to the way the researcher experiences in his mind. In order to solve the problems in this research, there are some kinds of method that can be applied based on kind of research it is. The method which is used in this research is descriptive method because it describes the subject or object in the present condition based on the fact finding.

2.2. Techniques for Collecting and Analysing Data

In doing the research, the researchers decide the population and sample that they are going to observe. In order to have the right conclusion they decide the representative sample from the population of the research. The population in this research are the technician and administration staffs in the Language Center Unit.

The researchers choose observation, interview dan documentation study as techniques for data collecting. According to Cresswell (2005:211) observation is a process of collecting information which is done by researcher through observing people involved and place. During the interview process, the researchers gather information by giving several questions and record them (Cresswell 2005:214). In doing documentation study, the researchers select valuable records which have the correlation with research theme.

In doing the research, there are some steps applied to gather the data. In doing observation, the researchers observe how the technician and administration staffs prepare the appropriate documents study and use English in the training preparation. Then, all phenomena found will be recorded as source of information to reach the conclusion. The researchers also use interview, there are several steps to obtain the data. First, the researchers identify the sample.
Second, selecting the type of interview. Third, selecting questions to be asked. Fourth, doing interview process. Fifth, taking important note during the interview. The last, analysing the information obtained and making conclusion. In documentation study, the researchers identify the related documents and analyse them based on the theme discuss.

3. FINDINGs AND DISCUSSION

Interface design of IELTS reading and listening preparation

Image 1. Home

The start page displayed when the website is opened. The contents are login page, a brief information of Language Center Unit (UPT Bahasa) of State Polytechnic of Pontianak, short facts about the IELTS test, Reading test and Listening test information.

Image 2. Information about UPT Bahasa

Image 3. Some facts about IELTS
This page contains user authentication who will access the system by logging. The user must enter username and password into the provided fields. If the password entered are correct with the existing database, the system will display main page to be able to start working on the test questions.

**DISCUSSION**

Application Implementation

Application implementation consists of hardware implementation, software implementation, and interface implementation. Following is the result of the implementation of the IELTS test simulation website in Language Center Unite at State Polytechnic of Pontianak.

Hardware Implementation

Tools used in implementing websites IELTS Test Simulation are as follows:

- Using ASUS X453M Laptop
- Using an Intel (R) Celeron (R) CPU N2840 processor
- Uses 2 GB RAM
- Using a 500 GB hard drive to store data
- A mouse

Implementation of Software (Software)

Software used in implementation The IELTS test simulation website are as follows:

- Microsoft Windows 10 Professional operating system
- Sublime Text 3 as a text editor
- PHP version 5.6.24 is used as a program script interpreter
- XAMPP version 3.2.2 is used as a local server
- Balsamiq Mockup as an application interface design
- Navicat Premium Version 10.1.8 as a modeling design database
- Microsoft Office 2010 is used for writing documents

Website Interface Pages

After reviewing and designing the system, the system successfully created in accordance with existing designs. Results of every system page that has been created can be seen in the discussion the following.

a. Homepage

![Image 4. Homepage](image-url)
The start page is the first page displayed when the website is opened. Content contained in this start page consists of a Login page, a brief information regarding UPT-Language of the Pontianak State Polytechnic, facts briefly about the IELTS test, Reading test information, and information regarding the Listen. The code is explained to check the data Login entered, where is this checking process need a user table to be able to prove what data is which is entered according to or not with the data in the user table the. If the data entered does not match the existing data in the database, a notification will appear as below this.

```
else {
    echo '<script>
    alert('Login gagal! Username dan Password SALAH!');
    self.history.back();
    </script>';
}
```

*Image 5. Script Dashboard*

The code above is used to display capital that serves to inform that there is mismatch of data entered with those in the database.

b. Register

```
<

```

*Image 6. Register Page*

The code in the following figures describes it components used to get it displays the Register page. As for the code in the figure outlining the process of how the data entered earlier can be stored in the database.
c. Dashboard

![Image 8. Dashboard Page](image8.png)

The Dashboard page is the main page to be displayed after the user has logged in. On this page, there is a brief explanation of the IELTS test. There is also a start button to start the test.

![Image 9. Script Dashboard Page](image9.png)


d. Test Type Selection Page

![Image 10. Test Type Selection Page](image10.png)
In this page, before the user does the test, the user will be presented in advance 2 pieces to choose what kind of test you want to do. The available buttons are Reading Test and Listening Test buttons. There is also a working program code to display the test type selection page.

![Image 11. Script Test Type Selection Page](image11.png)

**e. Question Package Selection Page**

After selecting the type of test, package page the questions will appear by presenting several question packages displayed in the form of CheckBox. Then, choosing a package, one wants to do first, the user can press Start button to start working on the problem. In this page also displays a container for displaying packages which one is done and what score is earned work on the package.

![Image 12. Question Package Selection Page](image12.png)
There is a code that works for displays a score table that can later be filled after the questions done. Due to no package has been resolved yet, then the container for displaying the score in the figure is still empty.

f. Work on Questions page
In this page, the members will be presented with questions IELTS to be worked on. In the picture below, test what is done is the Reading Test, so that it is on the page working on the problem, text and questions will be displayed along with options question. There is a working program code to display text as seen in the figure. After a member input answers, members must press the next button to go to the next problem.

Program code contained layout the process of calculating questions that can be influential changes to the next button which is if the problem in the text first done, then the next button will change becomes the next passage button.

g. Page Showing Score
In the score page, the final score is displayed accordingly with the right answer obtained by the member. Then the user will be able to see which packages that has been done by the member and also the final score obtained by the member. There is a working program code to display the score. The process of displaying your own score involves the question package table which is displayed at the time of display the score, the score data will appear based on the question package done first.

Image 16. Script Score Page

h. Admin Interface

Admin interface page is a page that displays all kinds of functions that are displayed to the admin to be managed by the admin.

Image 17. Script Admin Interface

System analysis

System analysis is a translation of a system with the purpose of being able to identify and evaluate various kinds problems that arise in the system so that later can be done improvement. System analysis of the IELTS Test Simulation Application in Language Center Unit at State Polytechnic of Pontianak is like when testing, the researchers use 2 types of browsers namely Google Chrome and Mozilla Firefox. Google Chrome supports the display of the IELTS Test Simulation Application on Language Center Unit at State Polytechnic of Pontianak, has a little error compared Mozilla Firefox. As for speeding access to Google Chrome has an access speed of 32.8 kb / 2.08 seconds, compared to Mozilla Firefox has an access speed of 32.7 kb / 2.0 seconds. So the researchers recommend using the Google Chrome browser to access it.
4. CONCLUSION AND SUGGESTIONS

The conclusions of the results of building a test simulation website IELTS in Language Center Unit at Pontianak State Polytechnic is as following:

1. IELTS Test simulation website has been designed and built successfully in Language Center Unit at State Polytechnic of Pontianak by using PHP 5.6.24, MySQL 5.6.24 and Bootstrap 3. This application is built using the concept of OOP (Object Oriented Programming) so that if developed it will be easier.
2. The application is designed by using several designs consists of designing the UML (Unified Modeling Language) process and database design consisting of several table structures, and display interface.
3. The application is divided into general user, member, and access rights administrator who each level has access rights to the data different.
4. The application is effective in terms of learning Reading and Listening more flexible.
5. The website is equipped with features to add questions that can be done by the administrator.
6. The website is equipped with a score viewer feature where this feature will display the score obtained by members in each work the package.

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Alhamdulillah, with regards of Allah SWT blessing, we finally finished our research activities in academic year 2018/2019 entitle “Designing IELTS web-based simulation applications (Reading and Listening) at Language Center Unit of State Polytechnic of Pontianak”. This research focuses on the development in making a web-based simulation application to support IELTS preparation at Language Center Unit.

In truth, we could not have achieved this research succeed without a strong support groups. First of all, our parents and families, who always give best supported with love and understanding. And secondly, our administration staffs and especially intelligent students, who have provided fully support throughout the research process.

It is the sight of the participants’ achievement on the classroom learning IELTS especially Reading and Listening that slightly not presented enough time to study English, especially in reaching good IELTS score. Therefore, this research found that the need of a web-based application to support the flexibility of IELTS in terms of learning individually at anywhere and anyplace with respect not to change to lectures’ times, and calling for materials developers.

Furthermore, we strongly needed valuable critics and support from the readers in order to make a good research for better achievement in teaching and learning process. In the future, the researchers will enhance the similar research topic to make better web-based application that can be applied in State Polytechnic of Pontianak.

REFERENCES


