Design of TOEC/IKLA Online Examination Service Application: Case Study of the Centre of Language Development UIN Sunan Kalijaga

Perancangan Aplikasi Pelayanan Ujian Online TOEC/IKLA: Studi Kasus Pusat Pengembangan Bahasa UIN Sunan Kalijaga

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Abstract

The Language Center offers standardized tests for Arabic and English in the form of IKLA and TOEC exams. When conducted on paper, they are corrected manually and can have problems such as being less efficient, effective, and accurate. This research aims to design an online test application for TOEC/IKLA that can overcome these problems. This research uses a specific method called a waterfall. The research stages include needs analysis, design, implementation, and testing. A need analysis is carried out to understand the necessity of the application from the user's perspective. Design is carried out to produce an application design that meets user needs. Implementation is carried out to build applications according to the design that has been created. Testing is carried out to ensure that the application can function properly and meet user needs. The research results show that the designed TOEC/IKLA online test application can overcome the problems found in the manual TOEC/IKLA test. This application can provide more efficient, effective, and accurate exam services. This application is a new and better service that UIN Sunan Kalijaga Yogyakarta delivers for everyone, whether internal or external test takers. This application can even be utilized by other institutions that require online examination services.

Keywords: *Application, Online Exam Service, TOEC/IKLA*

Abstrak

Tes standar untuk bahasa Arab dan Inggris ditawarkan oleh Pusat Pengembangan Bahasa (P2B) dalam bentuk ujian IKLA dan TOEC. Ketika dilakukan di atas kertas, tes tersebut dikoreksi secara manual dan memiliki beberapa masalah seperti kurang efisien, efektif, dan akurat. Tujuan penelitian ini fokus pada merancang sebuah aplikasi tes online TOEC/IKLA. Penelitian ini

menggunakan metode khusus yang disebut waterfall. Model pengembangan waterfall terdiri dari tahap analisis kebutuhan, desain, implementasi, pengujian, dan pemeliharaan. Analisis kebutuhan dilakukan untuk memahami kebutuhan aplikasi dari sudut pandang pengguna. Desain dilakukan untuk menghasilkan rancangan aplikasi yang sesuai dengan kebutuhan pengguna. Implementasi dilakukan untuk membangun aplikasi sesuai dengan desain yang telah dibuat. Pengujian dilakukan untuk memastikan aplikasi dapat berfungsi dengan baik dan memenuhi kebutuhan pengguna. Hasil penelitian menunjukkan bahwa system aplikasi ujian online TOEC/IKLA ini merupakan layanan baru yang disediakan P2B UIN Sunan Kalijaga Yogyakarta untuk semua orang, baik peserta ujian internal maupun eksternal. Desain system aplikasi ujian TOEC/IKLA online dikembangkan sesuai dengan tahap pengembangan. Namun, belum dilakukan pengujian untuk melihat efisiensi, efektifitas dan akurasi karena keterbatasan penulis. Oleh karena itu rekomendasi penelitian lebih lanjut tentang system aplikasi ini untuk melihat efektivatas, efisiensi, dan akurasi secara lebih valid. Rancangan ini juga dapat dimanfaatkan oleh institusi lain yang membutuhkan layanan ujian secara online.

Kata Kunci: Aplikasi, Pelayanan Ujian Online, TOEC/IKLA

A. Introduction

The digital age refers to a period in which digital technology has become essential to human existence.[1] Digital technology has revolutionized our lifestyle, professional endeavors, and means of communication. The digital age has had a profound impact on human existence. Digital technology has not only altered our interactions with the world, but it has also enhanced our connectivity with others, increased our access to knowledge, and improved our productivity.[2]

The recent advancements in information technology in the services sector have greatly enhanced the efficiency, efficacy, and precision of services.[3] Efficiency refers to the act of performing a task in a manner that

[1] Dian Sudiantini et al., "Penggunaan Teknologi Pada Manajemen Sumber Daya Manusia Di Dalam Era Digital Sekarang," *Digital Bisnis: Jurnal Publikasi Ilmu Manajemen Dan E-Commerce* 2, no. 2 (May 26, 2023): 262–69, https://doi.org/10.30640/digital.v2i2.1082.

[2] Wawan Setiawan, "Era Digital Dan Tantangannya," accessed June 21, 2024, https://core.ac.uk/reader/87779963.

[3] Cahyo Puji Asmoro, Hana Susanti, and Iin Maemunah, "Implementation of Laboratory Equipment Loan System in SiDal (BigData Laboratory System): Penerapan Sistem Peminjaman Alat Laboratorium Pada SiDal (Sistem BigData Laboratorium)," *Edulab : Majalah Ilmiah Laboratorium Pendidikan* 8, no. 2 (2023): 210–23, https://doi.org/10.14421/edulab.2023.82.07.

aligns with its intended goal. In contrast, effectiveness refers to the act of performing a task accurately and in line with its intended purpose.[4]

The use of digitalization has become prevalent in many service systems, wherein computer-based information systems aid service organizations in efficiently managing data and information. Consequently, this enables them to provide faster, more precise, and more pleasant services to UPT service consumers.[5] Sunan Kalijaga Yogyakarta UIN Language Development Center is one of the UPTs in the UIN Sunan Kalijaga campus in Yogyakarta in the field of foreign language training and certification services. The UIN Language Development Center Sunan Kalijaga Yogyakarta has a role in the development and improvement of foreign language skills, in particular Arabic and English, for academic civitas (students, lecturers, and educational staff) UIN Sunan Kalijaga Yogyakarta and the general public.

Service in the Indonesian dictionary is defined as an effort to serve the needs of others. Service, according to Ratminto and Winrsih, is an activity or series of activities of an invisible nature carried out by a person or a group of people based on material or non-material factors to provide satisfaction to the customer or recipient of the service.[6]

Service is an invisible activity or activity involving human effort and the use of equipment and interaction to assist, prepare, and take care of goods or services from one party to another.[7] Another definition is expressed in Heryanto, which is that service is any profitable activity within a group of units and offers satisfaction even if the result is not physically bound to a product.[8]

Based on some of the definitions above, it can be concluded that service is an activity carried out by a person or organization to satisfy the needs of others. Service can be physical or non-real. Rinaldi mentioned that five general dimensions can be used to assess the quality of services in the service industry[9], namely:

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[4] Suhartoyo Suhartoyo, "Implementasi Fungsi Pelayanan Publik Dalam Pelayanan Terpadu Satu Pintu (PTSP)," *Administrative Law and Governance Journal* 2, no. 1 (2019): 143–54, https://doi.org/10.14710/alj.v2i1.143-154.

[5] Ida Fitriana Ambarsari et al., "Digitalisasi Informasi dan Peningkatan Kualitas Pelayanan Publik Transformasi Desa Digital Melalui Pengembangan Website Desa Klatakan," *I-Com: Indonesian Community Journal* 4, no. 1 (March 9, 2024): 396–405, https://doi.org/10.33379/icom.v4i1.4041.

[6] Ratminto and Atik Septi Winarsih, *Manajemen Pelayanan* (Jakarta: Pustaka Pelajar, 2005).

[7] Herlena, Jauhar Arifin, and Rahmi Hayati, "PELAYANAN UJIAN NASIONAL SISTEM BERBASIS ONLINE DILIHAT DARI ASPEK TANGIBLE (BERWUJUD) DI MTs NEGERI 4 TABALONG Herlena ; Jauhar Arifin *, Rahmi Hayati ** ABSTRAK Teknologi Komunikasi Dan Elektronik Sudah Berkembang Sedemikian Pesat , Sehingga Menyebabk," *JAPB* 3, no. 2 (2020): 30–42.

[8] Heryanto Monoarfa, "Efektivitas Dan Efisiensi Penyelenggaraan Pelayanan Publik: Suatu Tinjauan Kinerja Lembaga Pemerintahan," *Jurnal Pelangi Ilmu* 5, no. 1 (2012): 1–9.

[9] Rudi Rinaldi, "ANALISIS KUALITAS PELAYANAN PUBLIK(Studi Pada Biro Umum Sekretariat Daerah Propinsi Sumatera Utara)," *Jurnal Administrasi Publik* 66, no. 1 (2012): 37–39.

1. Reliability means the ability to provide the expected and timely service. Service provided following customer expectations means being timely, providing the same service for every customer, and doing so without error.
2. Responsiveness means a policy to help customers and provide quick service; letting customers wait for no apparent reason can lead to a poor perception of the quality of service. However, when poor service occurs, the ability to deal with the problem professionally can improve the perception of the quality of service.
3. Assurance means organizational or employee expertise in guaranteeing customer confidentiality.
4. Empathy means organizational or employee expertise in guaranteeing customer confidentiality.
5. Tangibles mean the physical appearance of facilities, equipment, staff, and means of communication. The physical condition around you indicates the attention and service provided by the service provider.

Given its purpose, the service has several purposes, which are as follows: 1) provide high-quality service to customers; 2) encourage customer decisions to buy or use the goods or services offered; 3) build customer confidence in the goods or services being offered; 4) prevent unnecessary demands later on against the manufacturer; and 5) create confidence and satisfaction for the customer.[10] A service system is a constantly changing enterprise that consists of various parts that are regularly connected and working together toward a goal.[11]

One of the services available at UPT Sunan Kalijaga Yogyakarta UIN Language Development Centre is a training program for achieving the standard TOEC/IKLA values based on one of the quality targets of UIN. The form of the service is the execution of the TOEC/IKLA exam, which is specifically also applied to students of UIN Sunan Kalijaga to obtain the score of the certificate TOEC/IIKLA as a condition to enroll in the trial examination.

The TOEC/IKLA test is a test that measures English and Arabic skills in general. The test consists of three parts: listening, reading, and writing. The TOEC/IKLA test service at Sunan Kalijaga Yogyakarta UIN is still done manually, so it takes a lot of time and effort. Besides, the service is also vulnerable to human error.

[10] Ika Widiastuti, "PELAYANAN BADAN PENYELENGGARA JAMINAN SOSIAL (BPJS) KESEHATAN DI JAWA BARAT," *Jurnal Administrasi Publik*, 2017, 91–101.

[11] Suhartoyo, "Implementasi Fungsi Pelayanan Publik Dalam Pelayanan Terpadu Satu Pintu (PTSP)."

TOEC/IKLA exams are still conducted conventionally, as evidenced by the way the test participants come to the UPT Language Development Centre to take the TOEC/IKLA exam. Participants work on the test using the test answer sheet given by the test supervisor along with the test questions. Then, on the test answer sheet, participants mark the selected answer using a pencil. After the participants have completed the test, the answer sheets are collected by the examination supervisor. Subsequently, the test answers will be corrected one by one by the UPT staff at the Language Development Centre.

The process of conducting the test, which is still conventional, has caused some obstacles to the speed and effectiveness of the TOEC/IKLA test service. It is due to the corrections carried out manually by making corrections on the participant's answer sheet one by one, resulting in the test score not being processed immediately and causing certificates for participants to be delayed. In addition to the obstacles, some obstacles, such as the limited availability of the test room, resulted in the test participants not being able to obtain the test schedule promptly due to the need to sign up to take it.

Asmoro also experienced a similar experience in his research, where the service in the physics laboratory of the University of Indonesia Education used a manual system in the process of lending and returning instruments at the laboratories. On its journey, it has encountered obstacles and shortcomings in the rendering of services and the loaning of tools. Based on this problem, Asmoro developed SiDal (a laboratory big data system) in the lab to serve the lending and return circuit so that the lab activities could run optimally. After testing and getting a positive response from 52 respondents, The results show that the system developed is more effective and practical.[12] The same goes for other public services, such as the development of e-government services by Basir,[13] Kurniawansyah,[14] and Tasyah.[15] All digital-based services are developed to provide more effective, efficient, and optimal services.

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[12] Asmoro, Susanti, and Maemunah, "Implementation of Laboratory Equipment Loan System in SiDal (BigData Laboratory System)."

[13] Abdul Basir Donny Polanunu and Najamuddin Khairur Rijal, "Menuju Good Governance: Inovasi Pelayanan Publik Berbasis Digital Di Kantor Imigrasi Kelas II Non-TPI Kediri Jawa Timur," *NeoRespublica : Jurnal Ilmu Pemerintahan* 3, no. 1 (August 5, 2021): 1–19.

[14] Arius Satoni Kurniawansyah and Rizka Tri Alinse, "DESAIN PROGRAM UNGGULAN PADA SISTEM ELECTRONIC-GOVERNMENT PEMERINTAH KABUPATEN SELUMA," *(JurTI) Jurnal Teknologi Informasi* 3, no. 2 (December 1, 2019): 130–34, https://doi.org/10.36294/jurti.v3i2.935.

[15] Amelia Tasyah et al., "Inovasi Pelayanan Publik Berbasis Digital (E-Government) Di Era Pandemi Covid-19," *Jurnal Ilmu Administrasi: Media Pengembangan Ilmu Dan Praktek Administrasi* 18, no. 2 (December 30, 2021): 212–24, https://doi.org/10.31113/jia.v18i2.808.

The advent of the era of digitalization and technological developments has had a significant impact on the world of work, including education, as mentioned in the preceding paragraph. The development of information and communication technology has led to a shift in service. The same is true of the test service that was previously conducted in a lot of ways (conventionally) and switched to an online test. The service uses information and communication technology to carry out the test process, ranging from registration execution to assessment. As noted by Etin, the integration of digital services systems plays an important role in improving the efficiency and quality of services provided by governments, companies, and other agencies. By integrating the various platforms and applications used in the service process, information can be quickly exchanged and accessed, reducing bureaucratic congestion and increasing responsiveness to the needs of the public.[16] Therefore, online test services have several advantages over conventional test services, namely:

1. Efficiency
   Online test services can save time and effort in the process of conducting the test. Users can sign up and take the test online, so there is no need to come to the test site.
2. Effectiveness
   Online test services can improve the effectiveness of the test execution process.
3. Accuracy
   Online test services can improve the accuracy of the test assessment process. The system performs the test evaluation automatically, minimizing the possibility of human error.

Based on the above problem description, an online TOEC/IKLA test service application is required. The application is expected to provide more efficient, effective, and accurate test services and improve the quality of TOEC and IKLA implementation standards. This study's goal is to enhance and create an online exam application system that can speed up and improve the quality of exam services for TOEC and IKLA at UPT UIN Language Development Centre Sunan Kalijaga Yogyakarta.

[16] Etin Indrayani, *Integrasi Sistem Layanan Digital*, 2024.

B. Method

The research uses a waterfall model to develop a TOEC/IKLA test service system. The stage of the waterfall model according to Sommerville in Hidayat[17] :

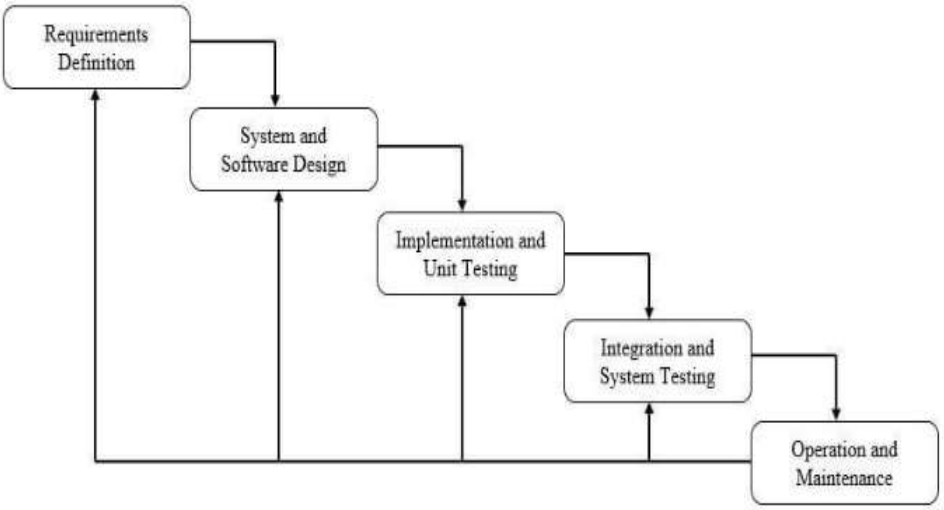

Figure 1. Stages of the Waterfall Model

1. Requirement Analysis
   This stage aims to understand the user's needs for the system to be built. User needs can be obtained through interviews, surveys, and observations. The result of this stage is a requirement specification document that contains a description of the functions, features, and limitations of the system.
2. System and Software Design
   This stage aims to produce system and software designs that meet user needs such as "ERD" creation. System design includes aspects of system architecture, components, and interfaces. Software design includes aspects of data structures, algorithms, and software architecture.
3. Implementation and Unit Testing
   This stage aims to build systems and software following the design that has been made.
4. Integration and System Testing
   The objective of this stage is to integrate software units into a complete system. System testing is carried out to ensure that the system can function properly following the requirements specifications.
5. Operation and Maintenance

[17] C Hidayat, "Pengertian Metode Waterfall Dan Tahap-Tahapnya," 2018.

This stage aims to maintain the system that has been finished and run including correcting errors that were not found in the previous step.

This article focuses on application system development in the implementation stage due to the author's limitations in continuing to the final stage of development. The data collection method in this study uses observation by observing the activities of the TOEC/IKLA exam implementation in the UPT Language Development Center of UIN Sunan Kalijaga Yogyakarta. Interviews were conducted directly with exam service users to find out obstacles or problems related to TOEC / ICLA exam services and Literature Studies, reading and studying books, journals, and related literature.

C. Results and discussion

Based on the description explained in the background, the need to develop this online exam system is motivated by several problems in the field and the situation and conditions of current developments in the process of implementing the TOEC/IKLA exam at UPT. The Language Development Center of UIN Sunan Kalijaga Yogyakarta is still conventional, causing several obstacles to the speed and effectiveness of TOEC/IKLA exam services. One of them is the delay in the correction process which causes the participant's certificate to be delayed. In addition to these obstacles, some obstacles such as the limited availability of exam rooms cause examinees cannot immediately get an exam schedule because they need to queue to take their exam schedule. So on this occasion, researchers developed an online TOEC / ICLA exam application to anticipate several shortcomings and obstacles in the field.

In the design stage, the author uses flowchart media to provide an overview of the steps and procedures systematically used in the design of the developed application. The flowchart shows the graphic sequence of program steps and procedures. It usually affects the resolution of certain problems that need to be studied and evaluated further.[18] *A flowchart consists of a collection of image symbols that indicate the flow of processes towards data. The symbols on the flowchart can be categorized as symbols for the program and symbols for the system*.[19] It can be concluded that a flowchart is a diagram that describes

[18] Ilham Budiman et al., "ANALISIS PENGENDALIAN MUTU DI BIDANG INDUSTRI MAKANAN(Studi Kasus: UMKM Mochi Kaswari Lampion Kota Sukabumi)," *Jurnal Inovasi Penelitian* 1, no. 0.1101/2021.02.25.432866 (2021): 1–15.

[19] Achmad Adi Subagja, Fitri Susanti, and Anang Sularsa, "Pembuatan Aplikasi Rapor Siswa Berbasis Web Di SD Slamet Riyadi Untuk Pengguna Admin Creating A Web-Based Student Report Card At Slamet Riyadi Elementary School For Admin User," *E-Proceeding of Applied Science* 6, no. 2 (2020): 4208–19.

the process or logic of a system. A flowchart uses standard symbols to indicate the activity, condition, and logical circuit of the described process.

Here is a flowchart that describes the design of the TOEC/IKLA online test service application system:

1. The administrator is configuring and installing the issue package.
   a. Question flowchart

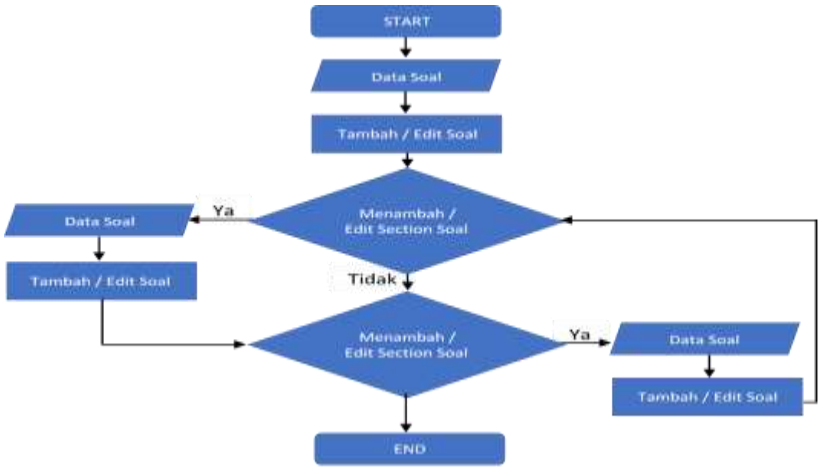

Figure 2. Question flowchart

2. The administrator sets the schedule for the TOEC/IKLA examination participants.
   b. Examination Schedule Flowchart

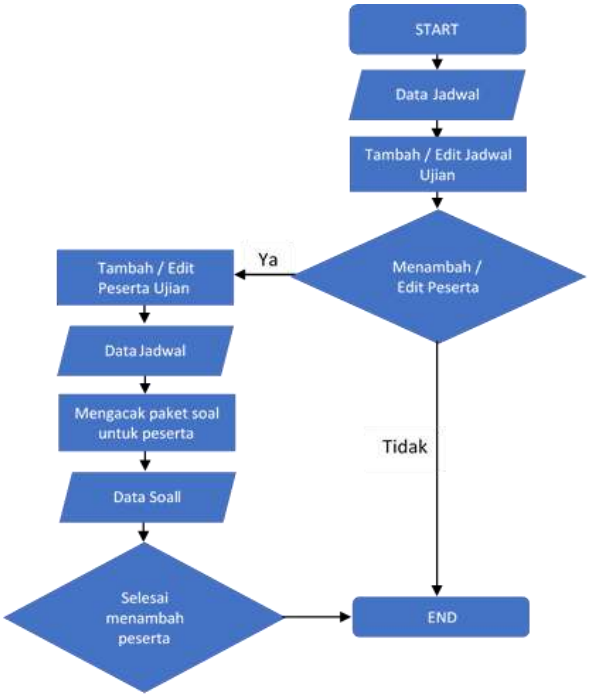

Figure 3. Examination Scheduling Flowchart

3. The officer reviews the validity of the questions.
   c. Question Review Flowchart

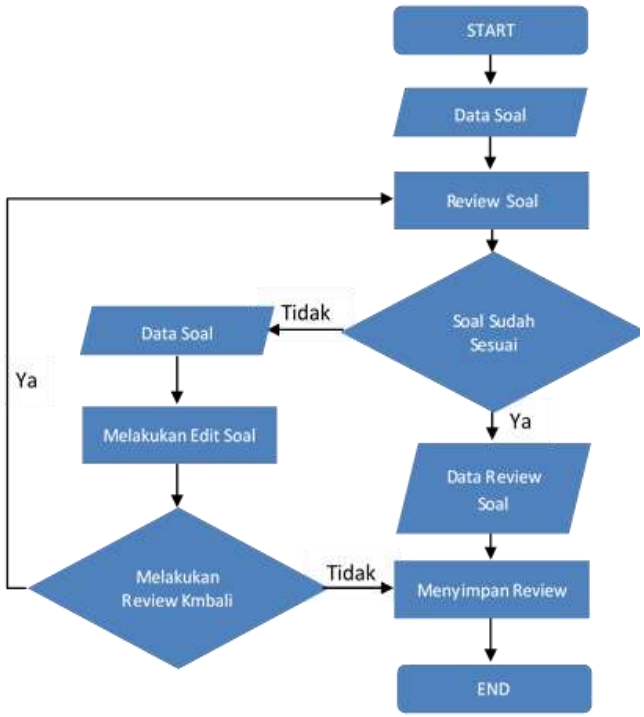

Figure 4. Question Review Flowchart

4. The supervisor is monitoring the test.
   d. Test Monitoring Flowchart

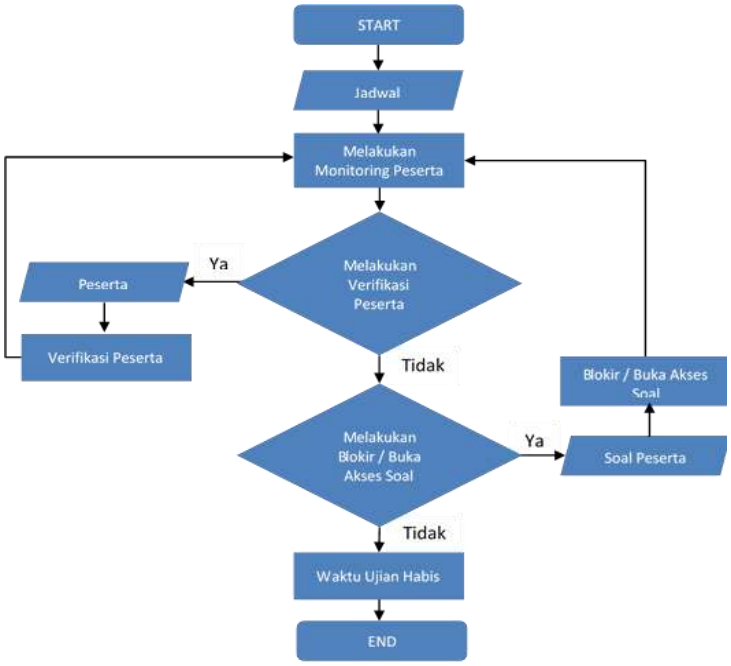

Figure 5. Test Monitoring Flowchart

5. Participants perform the TOEC/IKLA test process
   e. Flowchart for the IKLA/TOEC Exam

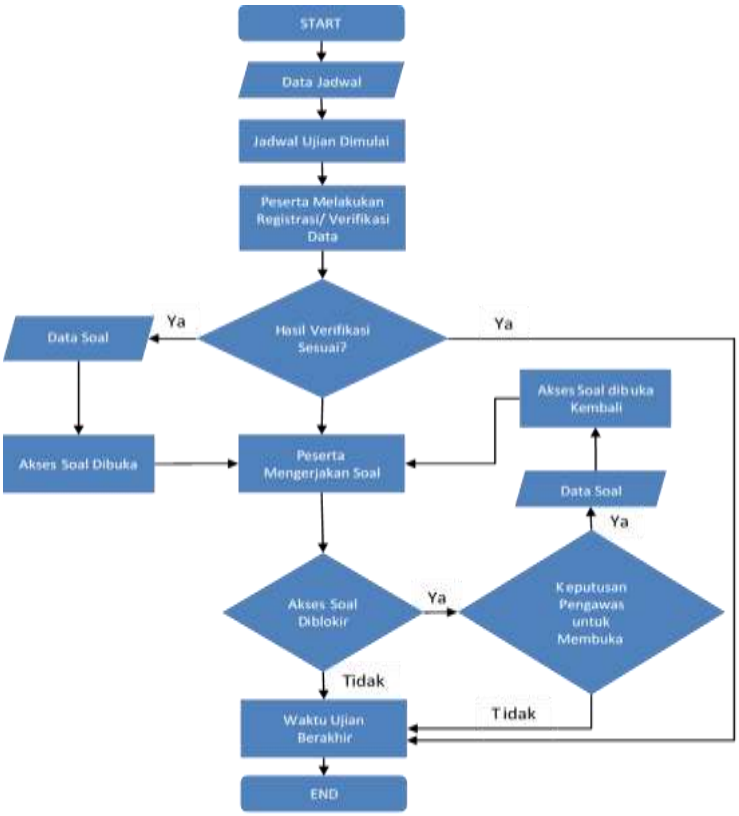

Figure 6. Exam Flowchart

According to Sulianta, the entity relationship diagram (ERD) is a diagram used to design tables implemented in a database.[20] ERD is used to design a database and detail the relationship between objects or entities and their attributes. Here is the ERD of an application-based TOEC/IKLA test service system.

[20] Akhmad Syukron and Maolana Hadi Abdurrazaq, "Perancangan Sistem Informasi Penggajian Karyawan Berbasis Website Dengan Metode Waterfall," *Jurnal Sistem Informasi Akuntansi (JASIKA)* 1, no. 2 (2021): 74–83, https://doi.org/10.31294/jasika.v1i2.624.

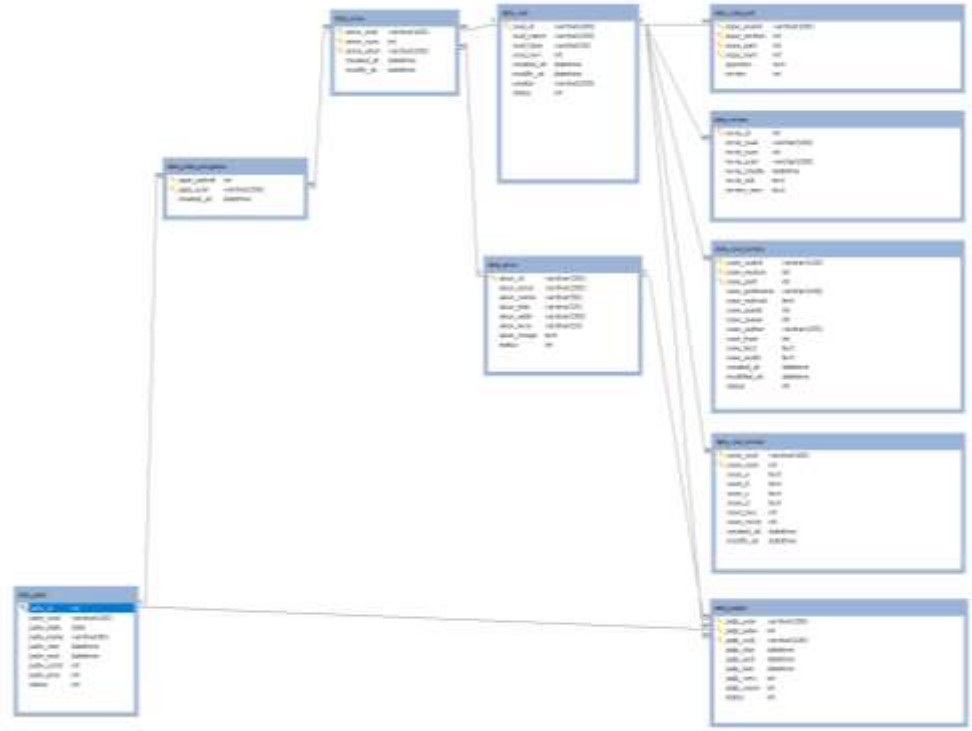

Figure 7. *Entity Relationship Diagram (ERD)*

Based on the design work that has already been done on the system and user interface, the next step is to put the design that was made earlier into action. This is the TOEC/IKLA application at the UPT. The applications and programming languages used in the creation and support of this information system are as follows:

1. Javascript
   JavaScript is a programming language that makes web pages more interactive and runs on the client side. It allows JavaScript to change the display of web pages in real-time.
2. PHP
   PHP (Hypertext Preprocessor) is a server-side programming language for dynamic websites. PHP runs on web servers and processes data, generates content, and interacts with databases.
3. MySQL Databases
   MySQL is a database management system that allows data management and access via the SQL (Structured Query Language) programming language. It has multiple uses, including business, web, and mobile applications.
4. Safe Exam Browser (SEB)
   Safe Exam Browser is software designed to prevent fraud in online examinations. SEB works by limiting test participants' access to other

applications that can be used to connect, such as web browsers, screen recorder apps, and screen-sharing apps.

5. Zoom
   Zoom is a video conference platform that allows users to communicate in real-time through video, audio, and screen sharing. Zoom can be used for various purposes, including meetings, presentations, and distance learning.

While the system requirements of the test participants are to use a laptop with Windows 8/10/11, 4GB of RAM, or a computer with Mac OS, 4 GB of RAM, and then a smartphone with Zoom installed, practically, the implementation of the system that has been created is as follows:

1. Administrator page display

Figure 8. Administrator page display

The role of administrator has the following authority:

a. Add or import questions about either TOEC or IKLA.
b. Making TOEC and IKLA deductions.
c. Adding a supervisor or reviewer to the issue

2. Question Reviewer View

Figure 9. Question Reviewer View

The reviewer of the assigned question ensures that the question meets the quality standards set in the TOEC/IKLA test material.

3. Website application view for TOEC and IKLA test.

Figure 10. Website application view for TOEC and IKLA test.

The initial view of the application is the first view that appears when you open a TOEC/IKLA website that is accessible to all users, whether they are admins, test participants, or supervisors. On the front page, figure 10 will display the inscription "Login." The user can enter a username and password, then select "Login." There is also a navigation button to see the password at the bottom left to make the password visible.

TOEC and IKLA Testing System

1. Administrator Dashboard Home Page

Figure 11. Administrator Dashboard Home Page

The main page of the administrator account contains information about profiles, test schedules, moderators, test participants, and test results. The administrator can know the test process that is being carried out and can control the test course when an error occurs.

2. Administrator Profile Page

Figure 12. Administrator Profile Page

The Profile menu contains information about the administrator's ID, name, e-mail, and phone number.

3. Exam Schedule Dashboard

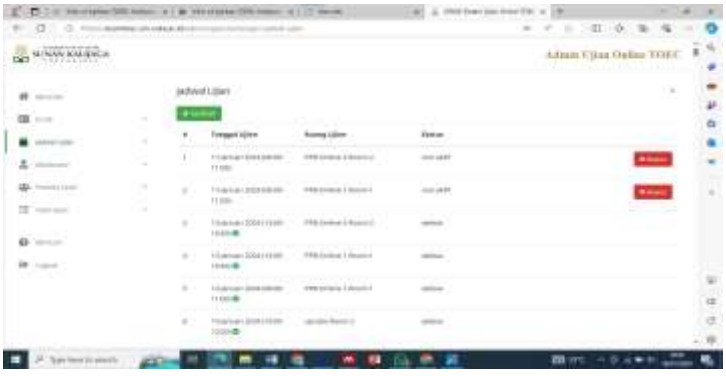

Figure 13. Exam Schedule Dashboard

The examination schedule page contains the examination date, examination room, and examination status. In the Examination Schedule menu, the Add menu is displayed to add the test schedule to Figure 14. In the Add Menu, the admin enters the date, start time, and room.

Figure 14. Add Schedule menu

4. Exam Moderator Page

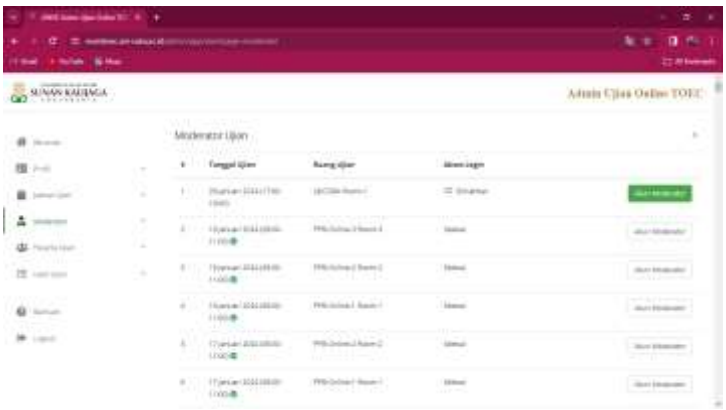

Figure 15. Exam Moderator Page

The moderator menu on the administrator dashboard will automatically expand according to the test schedule. The moderator has the authority to control the test and troubleshoot any problems while the test is going on. Besides, the moderator's task is to provide the examination supervisor access to the test link.

Figure 16. Moderator Account Page

5. Menu for Participants

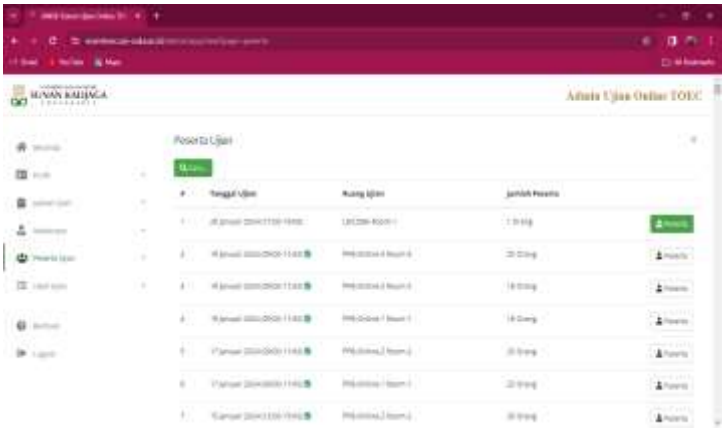

Figure 17. Menu for Participants

The moderator menu on the administrator dashboard will automatically expand according to the test schedule. The moderator has the authority to control the test and troubleshoot any problems while the test is going on. Besides, the moderator's task is to provide the examination supervisor access to the test link.

6. Menu for downloading scores

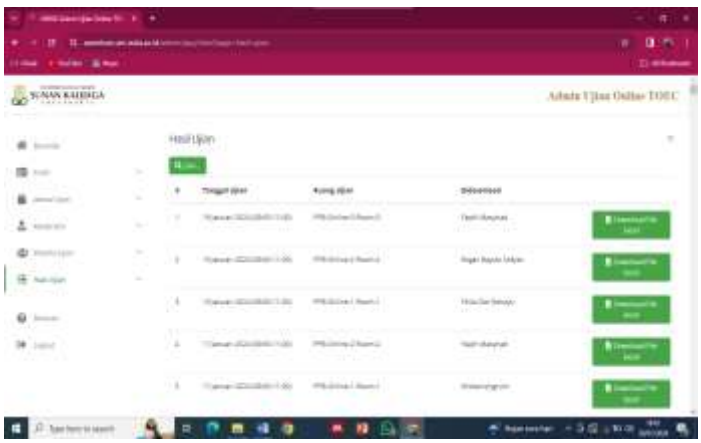

Figure 18. Menu for downloading scores

Only the administrator with the authority to download scores in Excel format on this menu will be inserted manually into the Academic Information System (SIA) UIN Sunan Kalijaga Yogyakarta.

TOEC/IKLA Exam Moderator

1. Moderator Dashboard Home Page

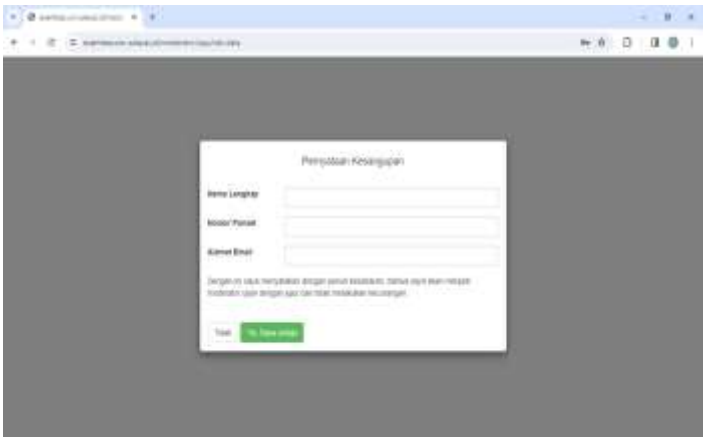

Figure 19. Statement of Commitment

Figure 20. Moderator home page

The moderator is responsible for completing the personal data and filling in the appropriate fields while on duty.

2. Page for Examination Session

Figure 21. A page for Examination Session

The examination session contains information on the schedule, the start or stop of the examination, and the supervisory link. The test link includes a link the moderator will give to the supervisor in charge, according to the test room.

3. Exam Participant Page

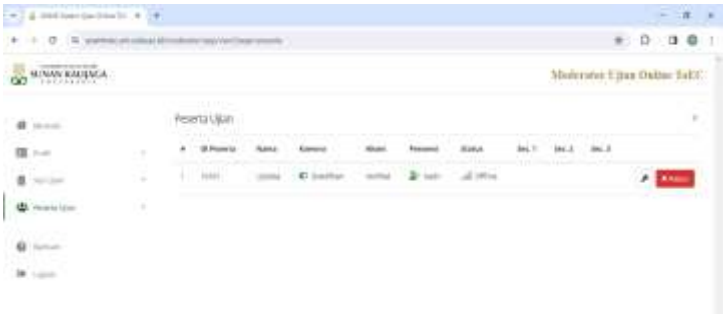

Figure 22. Exam Participant Page

Test participants contain information about the number of participants scheduled for the session. The moderator can control the course of the test online.

Supervisor for the TOEC/IKLA Exam

Some of the views and explanations made by the supervisor in the online TOEC/IKLA exam are as follows:

1. Homepage of the Supervisor Dashboard

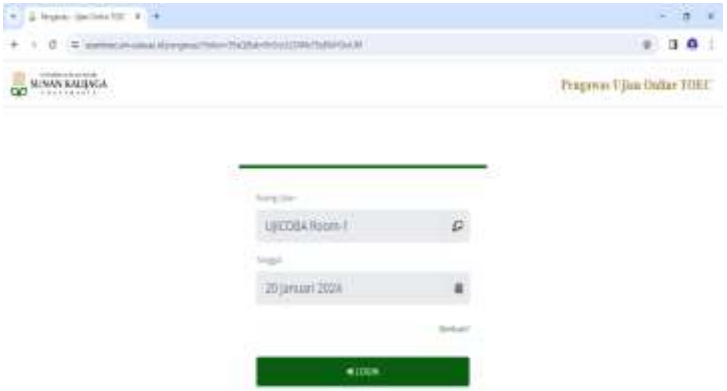

Figure 23. Homepage of the Supervisor Dashboard

In the test monitor dashboard view, there is information about the test room and the date of the test that has been automatically filled in according to the schedule already created by the administrator and the link provided by the moderator.

2. Test Participant Page

Figure 24. Test Participant Page

On the supervisor's dashboard page on the exam participant menu, the supervisor is required to verify the examinee by showing an identity card (KTM or KTP).

3. Examinee verification page

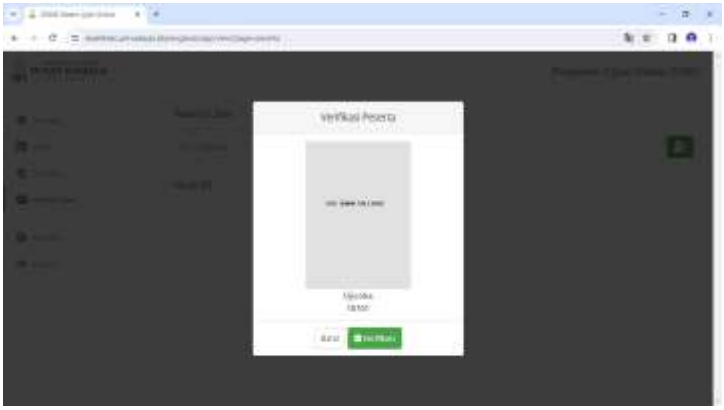

Figure 25. Examinee verification page

TOEC/IKLA Exam Participants

1. Installation Instructions

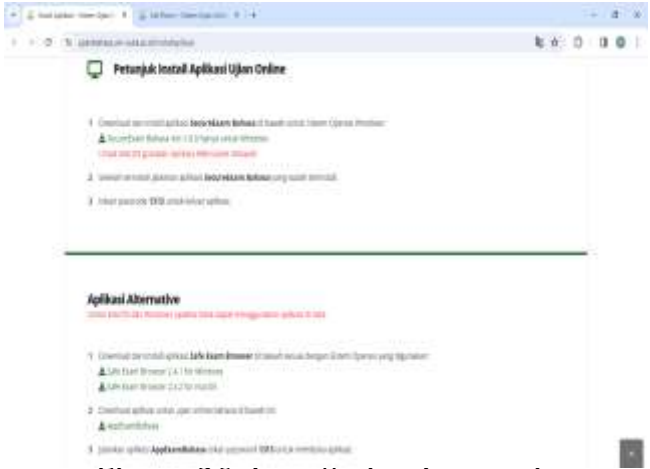

Figure 26. Installation Instructions

Before the test begins, participants must download and install the Safe Exam Browser (SEB) application on their laptops. In addition to SEB, participants must install Zoom on the HP to monitor the test.

2. Exam Participant Home Page

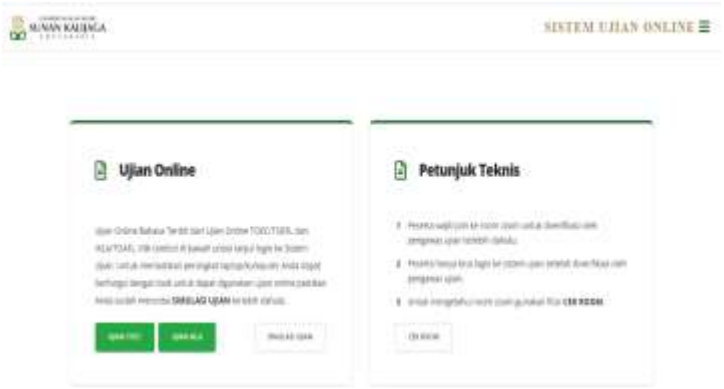

Figure 27. Exam Participant Home Page

There are two exam options for the TOEC and IKLA exam participants, and the test participants can choose which test to follow.

Currently, the UPT Language Development Center of UIN Sunan Kalijaga has implemented the online TOEC exam using a system design developed by researchers. In general, this online exam service received a positive response from various parties involved in using this application, both exam participants and employees on duty, so the TOEC online exam service application design can solve our internal problems in manual TOEC exam services.

In our opinion, like other online systems, this application can provide better exam services compared to the previous ones, which were still manual. Through this online examination system, users can save time and energy in the examination process. Starting from when users register and take the exam online, they do not need to go to the exam location. The test results can be processed and displayed automatically, so you don't have to wait long. Through the online exam system with this application, the exam assessment process is also carried out automatically by the system, thereby reducing the possibility of human error.

UIN Sunan Kalijaga uses the TOEC online exam service system to provide exam services for exam participants internally and externally to UIN. Other institutions that require online examination services can also use this application design.

Ultimately, the design of the online TOEC exam application system was in the development stage. However, due to the author's limitations, this research focuses on designing and implementing an online exam system.

Further research needs to be carried out on this application system to obtain more valid data and see the efficiency, effectiveness, and accuracy of the online examination system in its application.

D. Conclusion

Based on the research that has been done, it can be said that the online TOEC/IKLA examination service application that is currently being developed can solve problems that may arise in the TOEC or IKLA exam service. This application can provide more efficient, effective, and accurate test services. Here are some suggestions for developing an online TOEC/IKLA test service application: 1) The app needs enhanced security to protect the data of the test participants. A robust security system can prevent the misuse of the examiner's data. 2) Regular application maintenance must be done to ensure the application can function correctly. Updates and bug fixes are examples of maintenance. All in all, the online TOEC/IKLA examination service application that was created can provide the right solution to any problems that may arise in the TOEC/IKLA exam service.

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