Web-Based TOEIC Registration System Front-End Design at the Banyuwangi State Polytechnic Language Center Using Human-Centered Design

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***Abstract*— The TOEIC registration service system at UPT Bahasa starting from registration, payment, test schedule, test results and printing of TOEIC certificates is still manual and not in line with the program launched by the Banyuwangi State Polytechnic, namely Digitalization, so it is not effective. The solution from researchers to help with the problems faced by the Banyuwangi State Polytechnic Language UPT is to design a web-based TOEIC registration system. In an effort to provide a good appearance for users, the TOEIC registration system requires a user-friendly Design Interface (UI) and User Experience (UX), where researchers can increase user satisfaction and make it easier to understand the web-based registration system. Therefore, the TOEIC Registration System was created using several main components that support the front-end design of this system, namely design design using Figma and Front-End development using the ReactJS framework. Using the Human Centered Design (HCD) method with stages of data collection, inspiration, education, implementation, and testing. Apart from that, usability testing was carried out based on the System Usability Scale (SUS) questionnaire method. SUS is a questionnaire model that functions to evaluate the level of user satisfaction when using the system. The hope is that by creating this system display, it can provide satisfaction and quality of service to users. By paying attention to the UI/UX design criteria, the TOEIC registration system can be an effective solution to improve TOEIC registration services at the Banyuwangi State Polytechnic language UPT. The test results show that the designed registration system gets a SUS score of 80, which is in the "good" category based on adjective assessment. This score indicates that the system has a high level of usability, meeting user expectations in terms of comfort, efficiency and satisfaction of use. This confirms that the HCD approach is successful in creating an effective and enjoyable user interface.**

Keywords*— *Front-End, HCD, SUS, System, TOEIC Registration System.

I. INTRODUCTION

The Language Service Unit (UPT) of the Banyuwangi State Polytechnic is a supporting division within the Banyuwangi State Polytechnic. UPT Bahasa is a language institution that provides instructional services, such as teaching and training in foreign languages for the academic community of Banyuwangi State Polytechnic and the general public [1]. Many services are available at UPT Bahasa, including a language laboratory, which serves as a supporting element to assist the teaching and learning process by enriching students' knowledge of English. Additionally, UPT Bahasa is also used for the Test of English for International Communication (TOEIC)[2]. TOEIC is an English proficiency test designed to measure the ability to use and understand English in an international work environment [3]. Banyuwangi State Polytechnic has made TOEIC a graduation requirement for students. Students can take the TOEIC after registering as test participants at UPT Bahasa Banyuwangi State Polytechnic.

The TOEIC registration system at UPT Bahas, including registration, payment, test scheduling, test results, and TOEIC certificate issuance, is still manual. For instance, registration is still paper-based, test schedules are posted on bulletin boards, and participants must visit UPT Bahasa to view their test results and collect their TOEIC certificates. Additionally, the UPT Bahasa admin manually manages TOEIC participant data, leading to inefficiencies and delays in data processing and response times for applicants. Considering that students from all departments of the Banyuwangi State Polytechnic register for TOEIC, the manual registration system consumes a lot of paper, effort, and time, which is not in line with the Polytechnic's digitalization program, making it ineffective.

Based on the issues, the researchers propose a web- based TOEIC registration system to help address the problems faced by UPT Bahasa Banyuwangi State Polytechnic. To provide a good user experience for the TOEIC registration system, the researchers emphasize a user-friendly Design Interface (UI) and User Experience (UX) to enhance user satisfaction and ease of understanding[4]. Besides online registration, users can also view schedules and information related to the exam and their scores. From the admin side, a web-based TOEIC registration system can help improve efficiency, accuracy, and security in data management[5].

Therefore, the TOEIC Registration System was created for UPT Bahasa Banyuwangi State Polytechnic. The researchers used several key components for the front-end design, including design planning using Figma and front-end development using the ReactJS framework. The method used is the Human Centered Design (HCD) method, which includes

stages of inspiration, ideation, implementation, and testing. By using the HCD method, the design of the TOEIC registration system's Interface Design and User Experience is expected to be user-centered, providing a strong empathetic approach to users. This allows designers to become users of the system, gaining a better understanding of the system's features and functions. Additionally, usability testing is conducted using the System Usability Scale (SUS) questionnaire method. SUS is a questionnaire model used to evaluate user satisfaction when using the system. The aim is that the system design will provide satisfaction and quality service to users. By paying attention to UI/UX design criteria, the TOEIC registration system can effectively improve the TOEIC registration service at UPT Bahasa Banyuwangi State Polytechnic.

II. METHOD

The method used in this research is the HCD method. This development method involves users in the design process. In HCD there are 4 (four) stages in the UI/UX approach, namely the stages of data collection, inspiration, editing, implementation and testing [6]. The stages of the Human Centered Design (HCD) method used in this research are illustrated in Fig. 1.

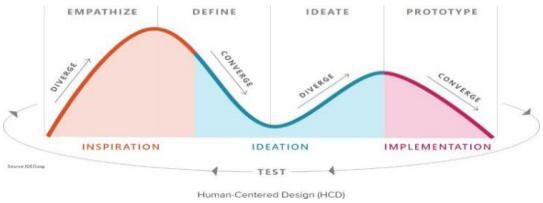

Figure 1. Human Centered Design Method

A. Inspiration

At the inspiration stage, researchers dig deeper or draw conclusions about the problems experienced by users and their needs. This stage is very important to get an initial picture that matches the user's expectations. This section will explain what is needed to build a TOEIC registration system. Data collection carried out in this research was interviews and distribution of questionnaires[7].

1) Interview

In this research, the author collected data using the interview method, namely by asking directly to interested parties, namely the head of the Banyuwangi State Polytechnic Language UPT and other potential users, namely students, by distributing questionnaires. For a list of interview questions totaling 7 questions. Questions are made in the form General information regarding TOEIC registration at Banyuwangi State Polytechnic. The list of interview questions used in this research is presented in Table I.

TABLE I
INTERVIEW QUESTIONS

No	Question
1	How is the TOEIC registration process currently carried out at the Banyuwangi State Polytechnic Language UPT?
2	What documents are needed to register for TOEIC at the Banyuwangi State Polytechnic Language UPT?
3	What is the limit on the number of participants in one TOEIC test session at the Banyuwangi State Polytechnic Language UPT?
4	How can participants find out the TOEIC test schedule at the Banyuwangi State Polytechnic Language UPT?
5	How do you pay the TOEIC registration fee at the Banyuwangi State Polytechnic Language UPT?
6	What information is provided by UPT Bahasa on the notice board related to TOEIC?
7	What is the view of the Banyuwangi State Polytechnic Language UPT regarding the idea of switching to online registration?

2) Questionnaires

Apart from conducting interviews with the Head of the Language UPT directly, the author also distributed questionnaires to Banyuwangi State Polytechnic students from all departments as potential users of the TOEIC registration system, to gain a better understanding of their needs and expectations for the system that will be built. The following are the questionnaire questions that will be distributed to potential system users. The questionnaire questions distributed to potential system users are presented in Table II.

TABLE II
QUESTIONNAIRE QUESTIONS

No	Question
1	So far, how satisfied are you with offline/paper-based TOEIC registration?
2	If it is developed into an online website, what features do you expect? add feature suggestions to other options if any
3	What do you think about the colors that will be used in the TOEIC registration system display?
4	Do you have any suggestions for what should be displayed on the home page to increase the attractiveness of the TOEIC registration system besides information about TOEIC?
5	What do you think about buttons that are suiTable and easy to use in the TOEIC registration system that will be created?
6	What is your impression of the consistency of color and style across the pages of the TOEIC registration system?

B. Ideation

In this ideation stage, researchers develop ideas and solutions by paying attention to business processes in creating the TOEIC registration system. When developing ideas, authors position themselves as users so they can get the best ideas and solutions for users. By creating a system overview and user flow[8].

1. Mind Mapping : idea mapping stage to make it easier for designers to develop the system
2. System overview : In this process a general system description will be created to give the designer a general idea of the system to be created.

C. Implementation

At this implementation stage the researcher pours out the ideas and solutions that have been obtained from the previous stage into the form of a system display. The system display role is carried out using the ReactJS framework. The results of the system display are useful for getting responses or feedback from users regarding interactions with the system from which the conclusion will be drawn that the TOEIC registration system has met the needs of prospective users which will be carried out at the next stage, namely by testing[9].

D. Testing

At this stage the author tested the System Usability Scale (SUS) by distributing questionnaires on the results of the TIOEIC registration system via Google Form which contains 10 questions regarding the usability of the system and the ease of using the system by respondents[10]. There are several technical aspects that researchers need to pay attention to, namely as follows. The SUS questionnaire testing process used in this research is illustrated in Table III.

TABLE III
INTERVIEW ANSWERS

No	Questions
1	I think that I would like to use this system again
2	I find the system unnecessarily complex
3	I think the system is easy to use
4	I think that I would need the support of a technical person to be able to use this system
5	I find the various functions in this system are well integrated
6	I think there is too much inconsistency in this system
7	I would imagine that most people would learn to use this system very quickly
8	I find the system very cumbersome to use
9	I feel very confident using the system
10	I need to learn a lot of things before I could get going with this system

1. Of the total 10 questions, for the 5 questions with odd numbers the score is obtained based on the value of the respondent minus 1. For the 5 questions with even numbers, the score is obtained by subtracting the value of 5 from the value obtained from the respondent.
2. To get the average value, the sum of all scores obtained from each number will be calculated and the result will be multiplied by a factor of 2.5. SUS = ((R1-1)+ (5-R2)+….+ (R9-1)+….+ (5-R10) x 2.5
3. SUS scores can be interpreted in the categories very poor, poor, average, good, and very good.

In usability testing using SUS it was shown that the average score from SUS was around 68, so if the average SUS test result from the TOEIC registration system was more than 68 then it could be concluded that the quality of the system was average and worthy of development, but if the results less than 68 then the system needs to be repaired for adequate quality. The SUS testing and scoring process used in this research is illustrated in Fig. 2.

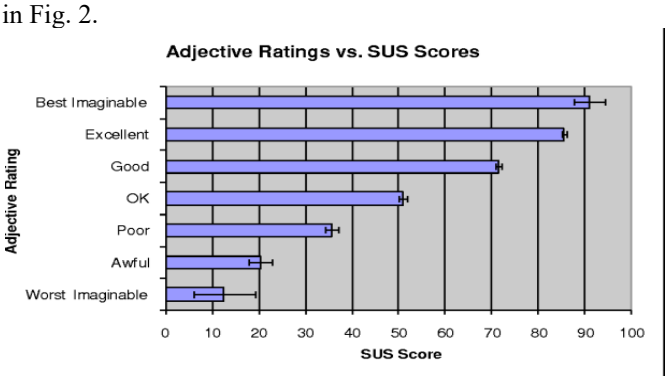

Figure 2. Testing Diagram

III. RESULTS AND DISCUSSION

From the previous discussion, the following are the results obtained from front-end design using the human centered design method from the Banyuwangi State Polytechnic Language TOEIC UPT Registration System.

A. Inspiration

At this inspiration stage the author digs deeper into solutions to problems and user needs by conducting interviews with the head of the Language UPT and distributing questionnaires to Banyuwangi State Polytechnic students. The following are the results of interviews and distribution of questionnaires regarding website platform user problems related to business concepts and the appearance of the TOEIC registration interface as follows. The results of interviews conducted with the head of the Language UPT regarding the current TOEIC registration process are summarized in Table IV.

1) Interview

TABLE IV
INTERVIEW ANSWERS

No	Answer
1	The TOEIC registration process still uses the written paper method, starting with filling out the registration form which can be taken directly at the Banyuwangi State Polytechnic Language UPT. After that, participants must submit a complete registration form along with supporting documents to the Banyuwangi State Polytechnic Language UPT.

No	Answer
2	Required documents include a completed registration form and proof of payment of the TOEIC registration fee.
3	We have a limit on the number of participants in one session, namely 25 to 30 participants depending on room capacity and logistical needs such as computers.
4	Participants can see the test schedule from the information provided by the UPT Bahasa admin via wa/email.
5	The registration fee can be paid via bank transfer to the Banyuwangi State Polytechnic account number which will be provided by the UPT Bahasa admin and proof of payment printed to be submitted to the UPT Bahasa as a supporting document
6	There is guidance information provided by the Language UPT on the notice board which includes important information regarding exam rules, schedules and TOEIC preparation. The test results are in the form of a certificate which can be taken directly at the Language UPT.
7	Yes, we strongly support the idea of switching to online registration, because we realize that online registration can improve efficiency for participants and ease of data management. Because the TOEIC registration which is still written is not in line with the program launched by the Banyuwangi State Polytechnic, namely Digitalization.

2) Questionnaires

The following is a discussion that will explain the results of research into designing a TOEIC registration user interface system using the Human Centered Design Method. The design was designed according to the results of the user questionnaire summary and will be explained as follows.

a. Features that Users expect

Regarding the percentage of respondents who need features for the system to be built, namely, 92.1% want registration features, 76.3% want to see the schedule, 76.3% want to see results and another 1% want registration information for each session. The distribution of user-required features is shown in Fig. 3. Therefore, a TOEIC registration system was created at the Banyuwangi State Polytechnic Language UPT by paying attention to the features desired by users, namely by creating a TOEIC registration system where users can see the test schedule for each class, see the TOEIC results printed on the certificate on the certificate download page, and information for every TOEIC session/class.

Figure 3. Features That Users Expect

b. Use of Color

Presenting the colors expected by users in the TOEIC registration system, namely 94.7% chose the characteristic blue color of the Poliwangi logo and another 1% chose orange green and suggested yellow and blue, so it can be concluded that users prefer to use the characteristic blue website color from the Poliwangi logo. Therefore, a TOEIC registration system was created at the Banyuwangi State Polytechnic Language UPT by paying attention to the color desired by the user, namely blue, the characteristic of the Poliwangi logo. The color preferences of users for the TOEIC registration system are shown in Fig. 4.

Figure 4. Use Of Color

c. Usage Button

In finding out what users want regarding the form of button that will be implemented in the system, the author gives two button options and provides space for users if they have suggestions or other ideas. The percentage of button shapes that users expect in the TOEIC registration system is 73% choosing option 1 and 27% choosing option 2. So it can be concluded that they will use option 1 to be implemented in the TOEIC registration system because users are more interested in option 1. The comparison of button design options preferred by users is presented in Fig. 5.

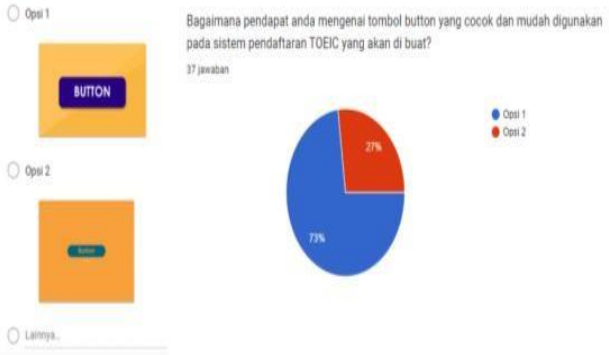

Figure 5. Usage Button

d. Consistency of Color and Style

To find out users opinions regarding color consistency in the TOEIC registration system, the author opens up answers to users so that users can give an impression regarding color consistency and style. From the results of the questionnaire, consistent color and style according to users is very important because users can be comforTable when registering and users

can receive information well because colors and styles are consistent so that it can reduce confusion when using the system, as shown in Fig. 6.

Figure 6. Consistency of Color and Style

3) User Requirement Specifications

From the data collection stages in the form of interviews, distribution of questionnaires, and literature review, a needs analysis and mind map will be created with user personas which are divided into 2 users, namely students and admin of the Banyuwangi State Polytechnic Language UPT. The following are the functional and non-functional requirements of the TOEIC registration system which describe the processes or services provided by the system, as listed in Table V.

TABLE V
FUNCTIONAL AND NON-FUNCTIONAL REQUIREMENTS

Functional Requirements	Non-Functional Requirements
Information viewing function. This function is used to view detailed information regarding announcements, activities or results from TOEIC.	The user interface on the system is simple.
Registration function. This function is used to register prospective TOEIC participants.	The system is equipped with a password.
The system is able to display a report on the list of potential participants and display proof of payment.	Admin information is private and not published to the public.
The system can display a registration form and store data on potential participants.	

B. Ideation

1) Mind Mapping

For a mind map with user personas divided into 2 users, namely students and admin of the Banyuwangi State Polytechnic Language UP, is shown in Fig. 7.

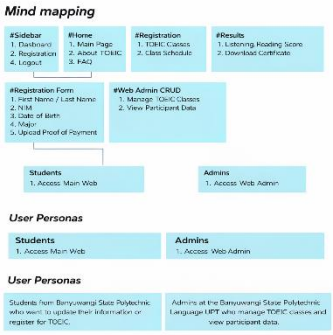

Figure 7. Mind Mapping

2) Overview System

Researchers develop ideas and solutions by paying attention to the business process in creating the TOEIC registration system, namely by creating a system description. An overview of the TOEIC registration system that describes the overall business process is presented in Fig. 8.

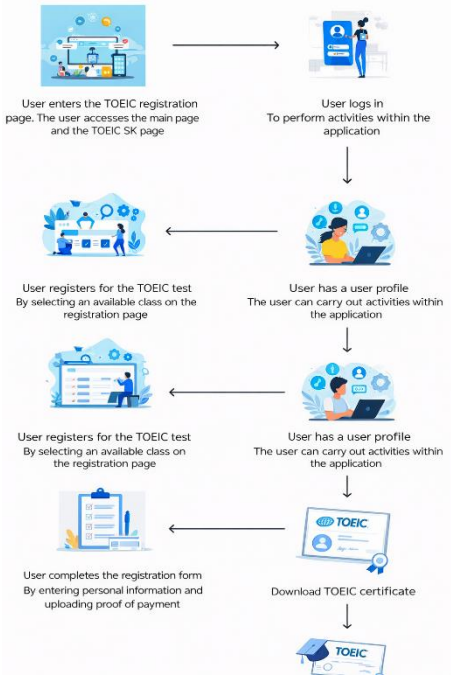

Figure 8. Overview System

C. Implementation

The results obtained from the Implementation stage or final stage, the author made a Front-End plan for the TOEIC Registration System at the Banyuwangi State Polytechnic Language UPT. It is hoped that this will help TOEIC users and admins in the future registration process.

1) Login

On this page is the Login page for the Web-Based TOEIC Registration System at the Banyuwangi State Polytechnic Language UPT. This login page is used by admins and students to enter the Web-Based TOEIC Registration System at the Banyuwangi State Polytechnic Language UPT. However, students do not need to log in when they only want to access TOEIC information, but simply open the TOEIC Registration System link which will lead to the Dashboard. The login interface of the Web-Based TOEIC Registration System used by both students and administrators is shown in Fig. 9.

Figure 9. Login

2) Dashboard

This page is the main page of the Web-Based TOEIC Registration System at the Banyuwangi State Polytechnic Language UPT. Web-Based TOEIC Registration System Dashboard Page at Banyuwangi State Polytechnic Language UPT which displays the main page of the system when the user accesses the web address, this page displays information related to TOEIC such as terms and conditions, registration flow, and FAQ, is shown in Fig. 10. When a user wants to enter the system and register, the user is required to log in first and if the user has not logged in, the menu on the dashboard will lead to the login page

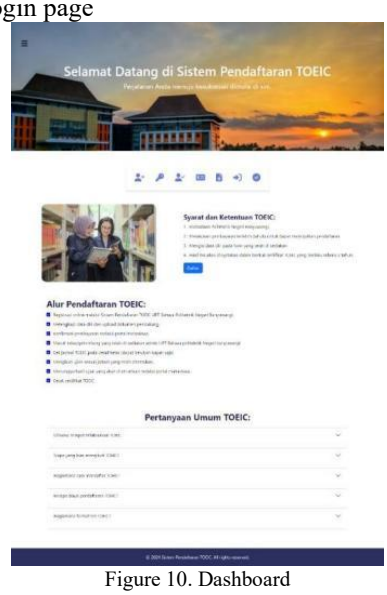

Figure 10. Dashboard

3) Registration Form

On this page is the Registration Form page for the Web-Based TOEIC Registration System at the Banyuwangi State Polytechnic Language UPT. This registration form page is the page where students fill in their personal data including supporting documents and confirm their data before entering the TOEIC class. The registration form page used by students to fill in personal data and supporting documents is shown in Fig. 11.

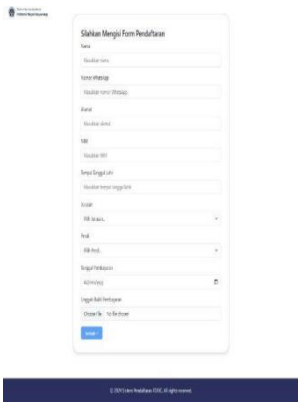

Figure 11. Registration Form

4) Class List

The class list page displays TOEIC classes that have been created by the Banyuwangi State Polytechnic Language UPT admin. The class registration page will appear after students have filled in all the TOEIC requirements on the registration form. Students can enter the classes available on the class list page, each class has a quota which has been confused by the Banyuwangi State Polytechnic Language UPT admin, if the class is full there is a complete class description then the student cannot enter the class and the student looks for another class where there is still a quota. The list of available TOEIC classes along with their respective quotas is displayed in Fig. 12.

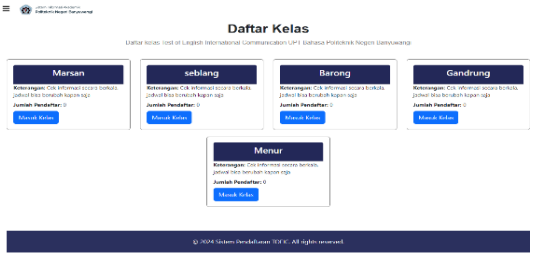

Figure 12. Class List

5) Class Details

The class detail page contains TOEIC class information such as class name, schedule, class description, and applicant quota. Apart from that, on the class details page you can also see which students have registered for that class. Detailed information of a TOEIC class, including schedule, description, quota, and registered participants, is shown in Fig. 13.

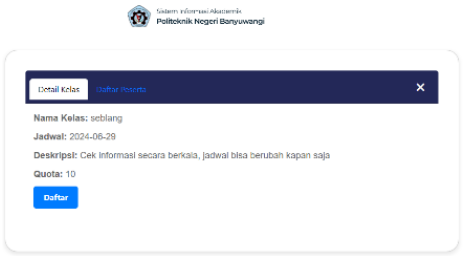

Figure 13. Class Details

6) Download Certificate

The certificate download page will display a TOEC result certificate which students can download directly. The certificate download page that allows students to download their TOEIC result certificates is shown in Fig. 14.

Figure 14. Download Certificate

7) Dashboard Admin

The admin dashboard page displays detailed information on the number of registrants and the average TOEIC reading and listening scores from all majors at the Banyuwangi State Polytechnic. The admin dashboard displaying the number of registrants and average TOEIC scores across departments is shown in Fig. 15.

Figure 15. Dashboard Admin

8) Registrant Data

The registrant data page displays the name, WhatsApp number, address, NIM, date of birth, major, study program, payment date, upload proof of payment, and grades of students who have registered for the TOEIC class. This page also provides filtering of registrant data to make it easier for admins to carry out the process of managing TOEIC registrant data. The registrant data management page used by administrators to manage student TOEIC data is shown in Fig. 16.

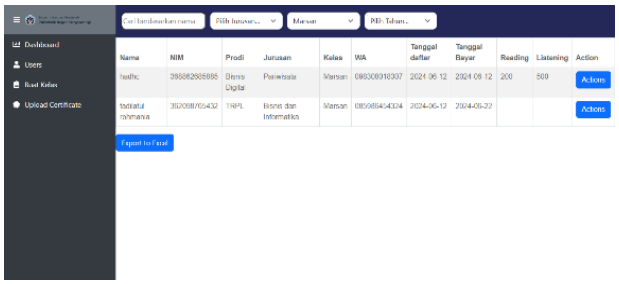

Figure 16. Registrant Data

9) Download Certificate

On the download certificate page, the admin can manage data on students who have taken the TOEIC test, namely by entering the TOEIC result scores and uploading the TOEIC certificate. The admin interface for uploading TOEIC certificates and inputting student scores is shown in Fig. 17.

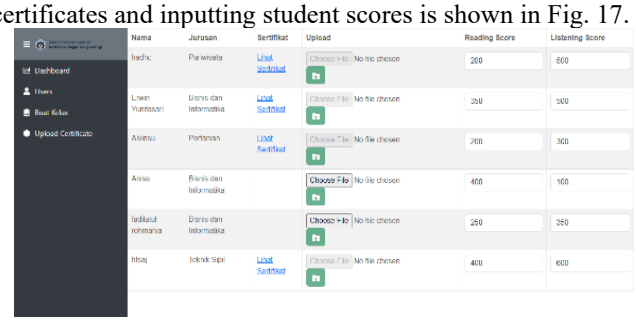

Figure 17. Download Certificate

D. Testing

In testing the TOEIC registration system using the System Usability Scale satisfaction aspect, this questionnaire was announced to Banyuwangi State Polytechnic students from all departments. This questionnaire consists of 10 questions regarding the usability of the system and the ease of using the system by respondents. Respondents must answer based on the respondent's level of agreement with each question asked by the researcher. This SUS data collection consisted of 35 respondents with the results of the level of satisfaction with the TOEIC registration system as follows, The distribution of respondents' answers based on the System Usability Scale questionnaire is shown in Fig. 18.

Responden	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
R1	4	3	3	3	3	3	4	3	3	3
R2	3	3	3	3	3	3	3	3	3	3
R3	4	3	3	3	4	3	3	3	4	3
R4	3	4	3	4	3	3	4	4	3	3
R5	1	4	1	0	4	0	4	0	1	4
R6	3	3	3	3	3	3	3	3	3	3
R7	4	4	3	2	4	4	3	3	4	3
R8	4	3	4	3	4	3	4	3	4	1
R9	4	3	4	2	4	2	4	3	4	3
R10	3	3	3	3	3	4	3	4	3	3
R11	4	3	3	3	3	3	3	3	3	3
R12	4	4	4	4	3	3	4	3	4	4
R13	3	3	3	3	3	3	3	3	3	3
R14	2	3	4	4	2	1	4	3	2	4
R15	4	4	4	3	3	3	4	3	3	3
R16	3	2	3	4	3	3	3	3	3	2
R17	3	3	3	3	3	4	3	4	3	3
R18	3	3	4	3	3	3	3	3	3	3
R19	4	4	4	3	3	4	3	3	4	3
R20	3	3	3	3	3	2	3	3	3	1
R21	3	3	4	3	3	3	4	3	3	3
R22	3	3	4	2	3	2	4	3	3	3
R23	3	3	3	1	2	4	2	4	4	1
R24	4	3	3	3	3	3	3	4	3	3
R25	3	3	3	4	4	3	2	4	3	3
R26	3	3	4	3	3	3	4	2	3	3
R27	3	3	3	3	3	3	2	2	3	3
R28	4	4	4	4	4	4	4	4	4	4
R29	3	3	3	3	3	3	3	3	3	2
R30	3	3	3	3	3	3	3	3	3	3
R31	4	4	4	4	4	4	4	4	4	4
R32	4	3	3	4	3	3	3	3	3	4
R33	3	3	3	2	4	3	4	3	2	4
R34	4	4	4	4	4	4	4	4	4	4
R35	4	4	4	4	4	4	4	4	4	4

Figure 18. System Usability Scale Answer

After data from respondents is collected based on responses to the TOEIC registration system, a satisfaction score will be calculated with the provisions of odd questions being positive and even questions being negative from all audiences being added up and then multiplied by 2.5 and divided by the number of respondents, thus the satisfaction score will be obtained. The calculation results of the System Usability Scale score are presented in Fig. 19.

Responden	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Skor SUS
R1	4	3	3	3	3	3	4	3	3	3	32
R2	3	3	3	3	3	3	3	3	3	3	30
R3	4	3	3	3	4	3	3	3	4	3	33
R4	3	4	3	4	3	3	4	4	3	3	34
R5	1	4	1	0	4	0	4	0	1	4	19
R6	3	3	3	3	3	3	3	3	3	3	30
R7	4	4	3	2	4	4	3	3	4	3	34
R8	4	3	4	3	4	3	4	3	4	1	33
R9	4	3	4	2	4	2	4	3	4	3	33
R10	3	3	3	3	3	4	3	4	3	3	32
R11	4	3	3	3	3	3	3	3	3	3	31
R12	4	4	4	4	3	3	4	3	4	4	37
R13	3	3	3	3	3	3	3	3	3	3	30
R14	2	3	4	4	2	1	4	3	2	4	29
R15	4	4	4	3	3	3	4	3	3	3	34
R16	3	2	3	4	3	3	3	3	3	2	29
R17	3	3	3	3	3	4	3	4	3	3	32
R18	3	3	4	3	3	3	3	3	3	3	31
R19	4	4	4	3	3	4	3	3	4	3	35
R20	3	3	3	3	3	2	3	3	3	1	27
R21	3	3	4	3	3	3	4	3	3	3	32
R22	3	3	4	2	3	2	4	3	3	3	30
R23	3	3	3	1	2	4	2	4	4	1	27
R24	4	3	3	3	3	3	3	4	3	3	32
R25	3	3	3	4	4	3	2	4	3	3	32
R26	3	3	4	3	3	3	4	2	3	3	31
R27	3	3	3	3	3	3	2	2	3	3	28
R28	4	4	4	4	4	4	4	4	4	4	40
R29	3	3	3	3	3	3	3	3	3	2	29
R30	3	3	3	3	3	3	3	3	3	3	30
R31	4	4	4	4	4	4	4	4	4	4	40
R32	4	3	3	4	3	3	3	3	3	4	33
R33	3	3	3	2	4	3	4	3	2	4	31
R34	4	4	4	4	4	4	4	4	4	4	40
R35	4	4	4	4	4	4	4	4	4	4	40
											1120

Figure 19. The Results of the System's Usability Scale

The Table shows the results from respondents with a total SUS value of 1120 x 2.5 and divided by the number of respondents and the resulting conversion value for applying the SUS method is 80. The percentage representation of the System Usability Scale score is shown in Fig. 20.

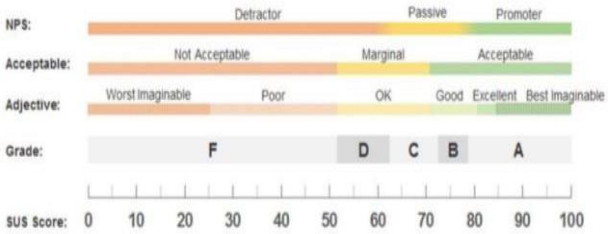

Figure 20. Percentage of the System's Usability Scale

SUS scores are presented in percentage form, ranging from 0 to 100. The average SUS score is 68 and the perfect score is 100% which indicates perfect usability and a great user experience. Meanwhile, the SUS calculation score from the TOEIC registration system is 80, so the usability test results using the SUS method are promoter in terms of NPS, Acceptability in terms of Acceptability, Good in terms of Adjective Rating, and A in terms of Grade Scale. This score indicates that the system has a high level of usability, meeting user expectations in terms of comfort, efficiency and satisfaction of use.

IV. CONCLUSION

Based on the design results that have been carried out in this research, it can be concluded that this proposal proposes a front-end design for the TOEIC registration system with a Human Centered Design (HCD) approach. The HCD method ensures that the design system focuses on the needs, preferences, and engagement of the end user, thereby creating an optimal user experience and insight. To understand the effectiveness of the resulting design, this proposal uses the System Usability Scale (SUS) method in the testing process. SUS is a simple but powerful evaluation tool for measuring system usability through a standardized questionnaire administered to users after interaction with the system. The test results show that the designed registration system gets a SUS score of 80, which is in the "good" category based on adjective assessment. This score indicates that the system has a high level of usability, meeting user expectations in terms of comfort, efficiency and satisfaction of use. This confirms that the HCD approach is successful in creating an effective and enjoyable user interface.

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