Development of Scholarship Information and Consultation Center Website for Straya Institute Using Prototyping Method

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The rapid development of information technology has had a significant impact on the efficiency of education administration, especially in managing scholarship information. However, many institutions still face obstacles in data management and limited access to scholarship information. This research aims to design and develop a Scholarship Information and Consultation Center website for Straya Institute using the prototyping method. The prototyping approach allows for iterative system development, so that user needs can be accommodated through continuous feedback and revision. The system built facilitates access to scholarship information, program registration, providing applicant reports and consultation for users. Evaluation was conducted through black-box testing and User Acceptance Testing (UAT) involving both administrative and general users. The results showed a very high level of user satisfaction, with an average UAT score of 98.2%, confirming the efficiency, ease of use, and usability of the system. This research contributes to an effective digital solution for scholarship management, improving accessibility, and optimizing administrative operations in an educational environment. Future research can examine the development of scholarship file selection automation features and artificial intelligence-based recommendation systems to improve user experience.

Keywords Web-Based Scholarship System, Scholarship Information System, Consultation System, Prototyping Method, Education.

I. INTRODUCTION

The use of information technology in education administration has grown rapidly as the world becomes increasingly digitized. By utilizing modern technology, scholarship information systems allow educational institutions to manage user data in real-time, while simplifying the registration process as well as the information search process. In addition, the transparency of this system can also help reduce the potential for fraud and ensure that all interested parties have clear and accurate access to scholarship information. Therefore, the implementation of a web-based scholarship administration system is an important strategic step to improve the standard of education services and expand access for students. Additionally, this system can enhance efficiency by reducing administrative workload [1]. The use of a website as a scholarship information system can improve the efficiency of data management and simplify user access to information. The previously difficult procedure of registering and searching for scholarship information is simplified and accelerated by using this method. This study shows that by offering a platform that facilitates simpler and easier-to-use user registration, a web-based scholarship information center can speed up the registration and information search process. Without having to physically come to the office, users can view the available scholarship requirements and prepare the necessary files. Therefore, the implementation of a web-based information system encourages equal access to education at all levels in addition to improving operational efficiency [2].

STRAYA Institute is an English course institution that aims to help participants improve their English language skills for academic, professional, and test preparation purposes such as IELTS and TOEFL. The institute also offers a scholarship consultation program for participants who wish to continue their studies abroad. However, STRAYA Institute faces a number of problems. Some of these include limitations in disseminating the latest information on programs and scholarships, as well as the fact that the registration process is still done manually, which reduces efficiency. Therefore, STRAYA Institute needed a website that would serve as an information hub, make it easy for participants to access the latest news, and allow them to register for courses and scholarship consultations online. With this website, the institute can improve operational efficiency and expand their services to more potential participants.

In information system development, the prototyping method is used to identify user needs, create a prototype, test, refine, and develop a production version. This approach allows users to provide feedback during the development process, so that the resulting system is more in line with their needs. Prototypes that have been evaluated become references in the creation of the final system. Some variants of prototyping include sample, simulation, functional, and evolutionary [3].

This method is able to reduce the likelihood of design errors and application failures because improvements can be made before they are implemented in their entirety. Studies show that the prototyping method helps reduce the risk of project failure and ensures that the system matches the needs and expectations of users [4].

The utilization of the prototyping model in designing the scholarship information center information system is expected to be able to overcome various problems faced by users in finding and managing scholarship information. With a computerized information system, it is expected that the process of delivering information can run faster, more accurately, structured, and can improve services to students and scholarship managers. This research also aims to get feedback from users through prototype testing, so that the design solutions made can be validated and adjusted to the needs and problems of users [5].

Collecting, processing, storing, and disseminating information in an organization is the purpose of an information system, which is an organized combination of hardware, software, human resources, communication networks, and data. Providing accurate and timely information is the main goal of information systems. This is done to aid decision-making and problem-solving effectively and efficiently [6].

The purpose of this research is to find out how successful and efficient the prototyping method is in creating a scholarship information and consultation system. The prototyping method used in the creation of the scholarship information and consultation system, ensures that the developed system can meet user needs precisely and improve data processing efficiency. With a methodology that emphasizes the creation of initial models to obtain continuous feedback, the development process can be completed more quickly and responsive to user needs.

II. LITERATURE REVIEW

The creation of a scholarship information and consultation center information system has been studied by previous researchers. Some information systems made by previous researchers are as follows:

This research entitled "Application of the Prototype Method in Designing a Web-Based Service Information System at Sido Motor Workshop". In order to solve inefficiencies in manual service operations, such as long lines, delayed transaction management, and report creation. The prototyping approach, which consists of steps including requirement analysis and collection, rapid design modeling, prototype development, and iterative evaluation based on user feedback, was used to create the system. UML was used to show the functionality and flow of the system [7].

This research entitled "Application of Prototype Method on Website-Based Course Program Information System at Lkp Indojaya Kebumen" in order to solve issues with traditional information display and accessibility, this study focuses on creating a web-based course program information system. PHP and MySQL were used in the system's construction, which followed the prototype process, which entails gathering requirements, creating a design, and testing it. An early prototype was created using user input, tested, and improved. The system had a 91.7% success rate in black-box testing, demonstrating a significant improvement in information services. Academic publications on web-based information systems, education management, and system design methodologies are also cited in the study [8].

This research is entitled "Web-Based School Academic Information System Using Prototype Model (Case Study: SMK Bina Mandiri Depok)" which focuses on the development of information systems for academic data management at SMK Bina Mandiri Depok. The system was designed using the prototyping approach, which involved gathering requirements, designing the system, prototyping, evaluating users, and making adjustments depending on their comments. The findings demonstrate that the system increases academic data management accuracy and efficiency while facilitating speedy access to grade information for both teachers and students. In order to improve academic data management at the school, the study makes reference to scholarly works on information systems, education management, and system design approaches [9].

This research entitled "Implementation of the Prototype Method in the Design of a Web-Based Outstanding Student Selection Decision Support System," focuses on developing a system to support the selection of outstanding students at STMIK KHARISMA Makassar. The existing process is considered subjective, leading to inaccurate scholarship distribution. Using the prototyping method which involves stakeholder communication, requirements planning, risk analysis, and iterative testing the system aims to ensure fairer and more accurate student selection. The study draws on scholarly references in system design, education management, and information systems. [10].

This research entitled "Using Prototyping Method for Analysis and Design of Information System for Student Enrollment at Master School," aims to address inefficiencies in traditional registration methods such as long queues and document processing issues. By applying the prototyping method including requirements gathering, rapid design, prototype development, user evaluation, and refinement a web-based enrollment system was developed. The results show improved efficiency, enabling parents and students to register online and access information in real time. The study references relevant literature on information systems, education management, and system design. [11].

This research entitled "Application of the Prototype Method in Developing an Online Queue System at the Ministry of ATR/BPN Kab. Sukabumi." Enhancing the efficacy and efficiency of service procedures. A basic model of the system was created using the prototype technique, enabling developers to assess and improve it prior to complete implementation. The system's evaluation revealed that it improved service processes' efficacy and efficiency, resulting in lower wait times for patients and simpler registration processes. It is suggested that the prototype approach may be a useful way to improve the Sukabumi Regency Land Office's service effectiveness and efficiency [12].

III. RESEARCH METHODOLOGY

A. Research Flow

The following is a flowchart that explains the flow of this research.



Fig. 1. Research Flow

As shown in Figure 1, the prototype system development begins with a literature review and user requirements analysis. This stage is followed by the initial design and evaluation. Once the design is approved, the coding process is carried out. After development, system testing is conducted. If the system fails the testing phase, revisions are made; if it passes, the system is deployed and becomes ready for use. This iterative process ensures that the system meets user needs and functions effectively.

B. Literature Study

The first stage in designing the Scholarship Information and Consultation Center Information System is a literature study. This study was conducted by studying and understanding the literature related to the research. The literature that has been obtained from journals, and previous research also studies matter related to the design of the Scholarship Information and Consultation Center Information System.

C. Prototyping Method

C.1. Identifying User Requirements

Data collection is a crucial initial step in developing the Scholarship Information and Consultant Center System, conducted as part of the first stage in the prototyping method. To identify user requirements, interviews and literature studies were used as data collection and analysis methods.

C.2. Developing Prototype

Before developing a prototype, it is essential to first design the system. In this study, the Unified Modeling Language (UML) is used to represent various aspects of the system comprehensively. UML consists of multiple diagram types that provide a visual overview of system functionality and structure. The diagrams used include use case diagram, entity relationship diagram, class diagram, activity diagram, and sequence diagram. These diagrams serve as the foundation for understanding how the system will operate.

Following the UML design stage, the prototyping process begins. This process involves two stages: lowfidelity and high-fidelity prototyping. Low-fidelity prototypes are simple and conceptual representations used to visualize the basic structure, layout, and overall functionality of the system. They help in gathering early feedback and validating initial ideas. Once the low-fidelity prototype is reviewed and approved, a high-fidelity prototype is developed. This version is more detailed and interactive, closely resembling the final product in terms of functionality, appearance, and user interface. The purpose of these stages is to progressively refine the system design and ensure alignment with user expectations before full implementation.

C.3. Prototype Evaluation

After a prototype has been created, evaluation takes place in two main stages such as an internal review of the prototype itself and a submission for direct customer feedback. This process ensures that the prototype meets user needs before proceeding with development.

D. Coding System

At this stage, system development is performed, by creating a website. Implementation is done in stages to ensure smooth operation and adaptation by users. With this strategy, it is believed that the scholarship information and consultation center information system will meet the company's goals while increasing user satisfaction.

E. System Testing

The implemented system undergoes acceptance testing to evaluate its quality and ensure it meets user requirements. The software is assessed by relevant stakeholders, including end users, to verify that it aligns with the initial specifications agreed upon during the requirement analysis stage.

F. Evaluation System

Once the system was declared fit for purpose, the scholarship information and consultation center was officially launched. At this stage, continuous integration takes place to ensure the system remains relevant and supports future iterations of service development. Regular maintenance ensures the information is always up-to-date and reliable for users.

IV. RESULTS AND DISCUSSION

In this section will be discussed the results of the prototyping method that has been carried out, including identifying user needs, developing prototypes, evaluating prototypes, coding systems and testing systems.

A. Identifying Problem Requirements

The data collection methods used are interviews and literature studies to analyze user needs. A direct interview was conducted with owner of Straya Institute, on November 13, 2024, and January 14, 2025, with ten questions asked.

TABLE I. TEN QUESTIONS ASKED

No.	Questions
1.	What is the vision and mission of Straya Institute in
	providing English language courses?
2.	What challenges are currently faced in offering courses and TOEFL/IELTS programs?
3.	How is the registration process for courses and scholarship consultations currently conducted?
4.	Are there any difficulties in managing student data for courses and consultations?
5.	What features are expected to be included in the system being developed
6.	How can this system help improve the efficiency of services at Straya Institute?
7.	How can the system help manage student data for courses and consultations more effectively?
8.	How can the system assist in scholarship consultations and providing the latest information?
9.	Will the system be used only by administrators or also by students?
10.	How does Straya Institute currently promote its programs, and can the new system help with this?

Table I, are the ten questions asked to owner of Straya Institute during the interview, The results indicate the need for a system to assist in offering courses, TOEFL and IELTS programs, scholarship consultations, and user consultations regarding available courses and the main users of the website will be admin, guest, and user.

B. Developing Prototype

B.1. Use Case Diagram

The Use Case Diagram design of the Straya Institute scholarship information and consultation center information system is described as shown below.



Fig. 2. Use Case Diagram

In Figure 2, shows the use case diagram of the STRAYA Information System with three main actors: Admin, Member, and Guest. The admin has full control over the system, including managing programs and scholarships (adding, changing, deleting), confirming payments, printing attendance, and managing website content and users. Members can search and view program and scholarship details, register or log in to the website, apply for programs, make payments, and contact STRAYA. Guests can only search and view information, register, log in, and contact STRAYA but cannot apply for programs. Several use cases, such as registration and payment, are connected using an "extend" relationship to show optional or related actions.

B.2. Entity Relationship Diagram (ERD)

The ERD design of the Straya Institute scholarship information and consultation center information system is described as shown below.



Fig. 3. ERD System

In Figure 3, shows the Entity Relationship Diagram of the STRAYA Information System. This diagram highlights the core entities involved in the system, including User, Admin, Course, Scholarship, and Registration, along with their attributes and interrelations. Each User is identified by an ID and has attributes such as full name, email, and password, and can perform actions like registering for courses, accessing scholarship information, and contacting admin. The admin entity has similar personal attributes and holds the responsibility of managing course and scholarship data within the system. The Course entity contains detailed information such as course name, price, time, description, and quota. The Registration entity records the enrollment process, including payment details, status, and scores. Meanwhile, the Scholarship entity stores various information like name, description, mission, vision, and associated benefits. Through these relationships, users interact with the system by enrolling in programs and exploring scholarships, while admins maintain the integrity and availability of educational content. This structure supports the operational flow of the system and ensures effective management of learning opportunities offered by STRAYA.

B.3. Class Diagram

The Class Diagram design of the Straya Institute scholarship information and consultation center information system is described as shown below.



Fig. 4. Class Diagram

In Figure 4, the class diagram of the STRAYA information system is shown, consisting of five main classes: admin, t_user, t_course, t_scholarship, and registration. The admin is responsible for managing courses, scholarships, and overseeing user registrations within the system. The t course class contains attributes such as course name, description, price, time, quota, and image, which provide detailed information about each available course. The t scholarship class stores scholarship-related information, including vision, mission, motto, benefits, and images, offering users insight into the available opportunities. The t user class represents user identity, including email, full name, password, and role, allowing for personalized interactions within the system. The registration class acts as the bridge between users and the courses they select, storing important details like registration date, payment method, status, and test scores. This diagram illustrates how users interact with courses and access scholarship information within the system, while admins manage content, ensuring the platform remains updated and functional.

B.4. Activity Diagram

The Activity Diagram design of the Straya Institute scholarship information and consultation center information system is described as shown below.



Fig. 5. Activity Diagram for Admin Manage Program

In Figure 5, the process starts when the admin logs into the system, after successful login, the system will display the home page. The admin can then click on the program page, the system will display the corresponding program page. After that, the user can edit or manage the program page, and the program information will be updated according to the changes made. During the program management process, the Interaction between the user and the system is depicted in this diagram, from initial access to changes to the stored data.



Fig. 6. Activity Diagram for Guest View Scholarship Information

In Figure 6, the process starts when a guest (user) opens the website and is taken to the home page. Then, the system displays the list of available scholarships page. Next, the user clicks on the scholarship page to view the various scholarship options. After that, the guest selects one of the scholarships they want to see, and the system displays detailed information about the scholarship. The simple and systematic interaction between the guest and the system is depicted in this diagram.





In Figure 7, the process begins when the user logs into the system, and the home page is displayed. The user then navigates to the program page by clicking the relevant option, and the system responds by displaying the program page. Next, the user clicks the "register" button to enroll in a program. The system processes the registration after user fill all the form needed and saves the data. This diagram illustrates the structured interaction between the user and the system during the registration process.

B.5. Sequence Diagram



Fig. 8. Sequence Diagram for Admin Manage Scholarship

In Figure 8, the process begins with the admin login to the website, where the POST method is used to send an authentication request to the server; if successful, the server returns the admin dashboard page. Next, the admin can access the scholarship management menu, which sends a GET request to the server to retrieve the scholarship data from the database. Once the changes are made, the server returns a success or failure status, which is displayed in the browser for the admin.



Fig. 9. Sequence Diagram for Guest View Courses

In Figure 9, the process starts when a guest accesses the website through a browser and sends a GET /Straya/ request to the server to retrieve program data. The server receives the request and forwards it to the database to query the program data. After the database returns the requested data, the server processes it and sends it back in the form of an HTML page containing the list of programs. Next, the browser displays the page to the guest user. The structured communication process between the browser, server, and database allows guest users to view program information without login or authentication, as shown in this diagram.

B.6. Interface Design

The first stage of designing interface design using low fidelity, an example of interface design using low fidelity on the home page and program page can be seen in the picture below.



Fig. 10. Prototype Low Fidelity Home Page

In Figure 10, is a low fidelity prototype of the home page which only contains an empty initial display.



Fig. 11. Prototype Low Fidelity Program Page

In Figure 11, is a low fidelity prototype of the program page which only contains the initial display of the column fields that the program will fill in.



Fig. 12. Prototype High Fidelity Home Page

In Figure 12, a high-fidelity prototype of the home page that has been completely filled with contents and the straya logo.



Fig. 13. Prototype High Fidelity Program Page

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In Figure 13, a high-fidelity prototype of the program page that has been completely filled with the existing program.

C. Prototype Evaluation Results

After the system was evaluated by the head of the Straya Institute, several improvement suggestions emerged to enhance its functionality, including adding a program registration feature for users to sign up directly through the system.

From the suggestions above, here are some features and displays that have been adjusted.



Fig. 14. Addition of Program Register Feature



Fig. 15. Addition of Program Registration Form





Fig. 17. Addition Payment Feature



Fig. 18. Addition Display User Data & Pre-Made Attendance List D. Coding Result

After the prototype evaluation is done, the system will begin to be built by coding. Coding is done using the PHP programming language.



Fig. 19. Component from Straya Institute System

In Figure 19, the folder and file structure of a PHPbased project is shown in the figure above. The project has several directories, including admin, assets, database, templates, and users, which are used to organize the various components of the system. In addition, there is a configuration.htaccess file, which is used for server settings. Other main PHP files include scholarship.php (which contains information about the scholarship), register.php (which serves as the registration page), index.php (which serves as the main page), connection.php (which contains the database connection configuration), and program.php (which runs the course program).



Fig. 20. Index.php Code



Fig. 21. Beasiswa.php Code



Fig. 22. Program/Course.php Code



Fig. 23. View Program/Course Code



Fig. 24. View Beasiswa Code

In Figure 20 to 24, are the project-owned codes used to build the system according to each feature.

E. System Testing

Once the development process is complete, the next stage is system testing using black boxes to ensure the system runs according to specifications and meets its functional needs, as well as to find errors. By avoiding examining the internal code structure, these tests concentrate on the functionality of the system without examining its inner code structure. Scenarios used include error handling (clear error messages), edge cases (extreme or boundary values), functional flows (such as login or data submission), and input validation (checking responses to valid or invalid data).

TABLE II. RESULT OF BLACK BOX TESTING

No	Tested Feature	Result
1	Login	Valid
2	Admin Manage User	Valid
3	Admin Manage Program/Courses	Valid
4	Registration for New User	Valid
5	Registration Program for User	Valid
6.	Users Access Scholarships Information Page	Valid
7.	Admin Manage Scholarship Information Page	Valid

Table II, is the result of Black Box Testing, which aims to evaluate the essential functions of a system based on the output it produces without looking at its source code. The five features in this table were tested to ensure that they function properly. The features are Login, Admin User Management, Program/Course Management, New User Registration, and User Program Registration. The test results show that all features are given a Valid status. This indicates that the system runs correctly without any errors in the test.

E.1. User Acceptance Testing (UAT)

To evaluate the responses of users who have used the system is the final step in the development of this Scholarship Information and Consultation Center website. To find out the extent to which the system has met the needs and expectations of Straya users, researchers utilize user feedback. User data analysis was conducted to find potential improvements or developments. User Acceptance Testing (UAT) is the final phase of the system testing process, which completes the system development stage, and serves to ensure that features run according to user needs. This test was carried out by 30 respondents consisting of 5 people with Admin actors, and 25 people with User actors who would answer the questionnaire in Table III with a weighted scale of 1 for Strongly Disagree (SD), 2 for Disagree (D), 3 for Moderately Agree (MA), 4 for Agree (A), and 5 for Strongly Agree (SA).

TABLE III. ADMIN ACTOR QUESTIONNAIRE

Variable	No.	Questions	(Q)
System	1	The system provides	Al
Functionality		complete features to	
Evaluation		manage program data.	
(V1)	2	System features are	A2
		easy to understand and	
		use.	
System	3	Program registration	A3
Performance		time is fast and	
Evaluation		efficient.	
(V2)	4	The system runs stably	A4
		without frequent	
		interruptions or errors.	
System	5	The system interface is	A5
Experience &		easy to use and	
		understand.	

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Interface Evaluation (V3)	6	The system interface design is professional and attractive.	A6
Efficiency & Productivity Evaluation (V4)	7	The system helps me manage program and scholarship data more efficiently.	Α7
	8	With this system, my work has become faster and more organized.	A8

Variable	No.	Questions	(Q)
System Functionality Evaluation (V1)	1	The system provides complete features to view program and scholarship data.	U1
	2	System features are easy to understand and use.	U2
System Performance Evaluation	3	The system runs stably without frequent glitches or errors.	U3
(V2)	4	Program registration time is fast and efficient.	U4
System Experience & Interface	5	The system interface is easy to use and understand.	U5
Evaluation (V3)	6	The system interface design is professional and attractive.	U6
Efficiency & Productivity Evaluation (V4)	7	The system helps me register for programs and view scholarship information more efficiently.	U7

TABLE IV. USER ACTOR QUESTIONNAIRE

<i>E.1</i> .	User A	lcceptance	Testing	(UAT)	Calculation

The data that has been obtained from the distribution of questionnaires is sorted based on the answers to each variable grouping question, then summing the scores into a percentage (%) to determine the test results.

E.1.1. Assessment Weight

To find out the results of the User Recognition Test (UAT), first calculate the evaluation percentage using the formula. Here, the Recommended Weight is the actual score that the tester gave for each test, and the Maximum Weight is the ideal score if all tests were successful. This calculation yields the percentage of system feasibility measured by comparing the actual system performance to the ideal standard.

Assessment Weight = Number of Answers x Weight

TABLE V. ADMIN ASSESSMENT WEIGHT

Q	SD x 1	D x 2	MA x 3	A x 4	SA x 5	TOTAL
A1	0	0	0	0	25	25
A2	0	0	0	0	25	25
A3	0	0	0	0	25	25
A4	0	0	0	0	25	25
A5	0	0	0	0	25	25

A6	0	0	0	0	25	25
A7	0	0	0	0	25	25
A8	0	0	0	0	25	25

TABLE VI. USER ASSESSMENT WEIGHT

Q	SD x 1	D x 2	MA x 3	A x 4	SA x 5	TOTAL
U1	0	0	3	20	95	118
U2	0	0	0	12	110	122
U3	0	0	3	12	105	120
U4	0	0	0	12	110	122
U5	0	0	0	12	110	122
U6	0	0	3	12	105	120
U7	0	0	3	12	105	120

E.1.2. Score Interpretation

The next step is to find a percentage which is used as a reference to find the average percentage in determining the feasibility of the system. To find the mean value and percentage can use the following formula.

$$Percentage = \frac{\left(\frac{Rating Weight}{Number of Respondents}\right)}{Maximum Weight} \times 100\%$$

The following are the mean and percentage values for each actor.

TABLE VII. ADMIN PERCENTAGE

Q	PERCENTAGE (%)	
A1	100%	
A2	100%	
Mean V1	100%	
A3	100%	
A4	100%	
Mean V2	100%	
A5	100%	
A6	100%	
Mean V3	100%	
A7	100%	
A8	100%	
Mean V4	100%	
Total Mean	100%	

TABLE VIII. USER PERCENTAGE

Q	PERCENTAGE (%)
U1	94,4%
U2	97,6%
Mean V1	96%
U3	96%
U4	97,6%
Mean V2	96,8%
U5	97,6%
U6	96%
Mean V3	96,8%
U7	96%
Mean V4	96%
Total Mean	96,4%

The following score interpretation criteria indicate the feasibility of the system:

TABLE IX. SCORE INTERPRETATION

Percentage	Description
0% - 20%	Poor
21% - 40%	Less Good

41% - 60%	Fairly Good
61% - 80%	Good
81% - 100%	Very Good

In Table IX, the calculation results of the UAT questionnaire evaluation are interpreted using rating categories adapted from the System Usability Scale (SUS) guidelines. A score of 81-100% is classified as *Very Good*, indicating that the system meets all requirements without critical issues and is ready for use. A score of 61-80% (*Good*) suggests the system functions well overall but may require minor improvements. Meanwhile, a score of 41-60% (*Fairly Good*) indicates the system only partially meets user needs and needs further refinement. These thresholds help stakeholders assess system readiness and prioritize enhancements. The summarized results based on the UAT evaluation are presented as follows.

TABLE X.	FINAL RESULT OF UAT CALCULATION

Actor	Variable	Value	Description
Admin	System Functionality Evaluation (V1)	100%	Very Good
	System Performance Evaluation (V2)	100%	Very Good
	System Experience & Interface Evaluation (V3)	100%	Very Good
	Efficiency & Productivity Evaluation (V4)	100%	Very Good
User	System Functionality Evaluation (V1))	96%	Very Good
	System Performance Evaluation (V2)	96,8%	Very Good
	System Experience & Interface Evaluation (V3)	96,8%	Very Good
	Efficiency & Productivity Evaluation (V4)	96%	Very Good
TEST I	RESULT	98,2%	Very Good

V. CONCLUSION AND SUGGESTION

This study demonstrates that the prototype approach was used to create a scholarship information and consultation system for Straya Institute, which successfully boosted efficiency in information dissemination and scholarship registration. The established system makes it easy for consumers to read program details, register, and inquire about available scholarships. The findings of User Acceptance Testing (UAT) demonstrate that this system has a very high level of user satisfaction, with an average score of 98.2%, indicating that the features and interfaces provided are appropriate for user demands. Despite the positive results, this study has some limitations that need to be considered i.e. scalability which has not been tested under high load conditions.

The suggestion given so that this system can be developed for the better is to consider adding a program registration payment feature directly on the website. With this feature, the transaction process can be done more easily and efficiently, as well as adding suggestions for testing or compiling UIUX using the design thinking method.

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REFERENCES

- K. Kurniati, "Penerapan Metode Prototype Pada Perancangan Sistem Pengarsipan Dokumen Kantor Kecamatan Lais," J. Softw. Eng. Ampera, vol. 2, no. 1, pp. 16–27, 2021, doi: 10.51519/journalsea.v2i1.89.
- [2] I. D. P. Suyadnya, "Implementasi Digitalisasi Administrasi Pendidikan di SMP Negeri 3 Bangli," *Metta J. Ilmu Multidisiplin*, vol. 4, no. 1, pp. 38–54, 2024, doi: 10.37329/metta.v4i1.2915.
- [3] F. A. Ulandari and Z. Fatah, "Gudang Jurnal Multidisiplin Ilmu Sistem Informasi Pengajuan Beasiswa Berbasis Web Pada Bagian Kesejahteraan Rakyat Bondowoso," vol. 2, pp. 367–373, 2024.
- [4] A. R. Bintoro, R. A. Widyanto, and D. Sasongko, "Implementation of the prototyping method in the development of information systems (case study: pelangi laundry)," *Borobudur Informatics Rev.*, vol. 2, no. 2, pp. 103–112, 2022, doi: 10.31603/binr.6968.
- [5] A. Z. Al Muhtadi and L. Junaedi, "Implementasi Metode Prototype dalam Membangun Sistem Informasi Penjualan Online pada Toko Herbal Pahlawan," J. Adv. Inf. Ind. Technol., vol. 3, no. 1, pp. 31–41, 2021, doi: 10.52435/jaiit.v3i1.88.
- [6] M. Syarif and D. Risdiansyah, "Pemanfaatan Metode Prototype Dalam Perancangan Sistem Informasi Penjualan Berbasis Website," *JATI (Jurnal Mhs. Tek. Inform.*, vol. 8, no. 4, pp. 7945–7952, 2024, doi: 10.36040/jati.v8i4.10467.
- [7] M. I. Saputri, V. R. Handayani, E. Rahmawati, and C. Kesuma, "Penerapan Metode Prototype Dalam Perancangan Sistem Informasi Service Pada Bengkel Sido Motor Berbasis Website," *Informatics Comput. Eng. J.*, vol. 4, no. 2, pp. 39–47, 2024, [Online]. Available: https://jurnal.bsi.ac.id/index.php/ijec/
- [8] M. H. Hajron and Yuminah, "Penerapan Metode Prototype pada Sistem Informasi Program Kursus Berbasis Website di Lkp Indojaya Kebumen," J. Ris.

Teknol. Inf. dan Komput., vol. 1, no. 2, pp. 29–35, 2021, doi: 10.53863/juristik.v1i02.357.

- [9] A. Saripudin and M. Ardhiansyah, "Sistem Informasi Akademik Sekolah Berbasis Web Menggunakan Model Prototype (Studi Kasus : Smk Bina Mandiri Depok)," *Pros. SINTAK*, vol. 5, no. 1, pp. 86–100, 2020.
- [10] H. Angriani, Y. Saharaeni, and H. Hasniati, "Implementasi Metode Prototype pada Rancang Bangun Sistem Pendukung Keputusan Pemilihan Mahasiswa Berprestasi Berbasis Web," J. INSYPRO Inf. Syst. Process., vol. 8, no. 1, pp. 1–7, 2023, [Online]. Available: http://journal.uinalauddin.ac.id/index.php/insypro
- [11] G. E. Saputra, R. B. Utomo, and E. Wiseno, "Using Prototyping Method for Analysis and Design of Information," *Int. J. Sci. Technol.*, vol. 1, no. 2, pp. 19–29, 2022.
- [12] D. Y. Descania, "Penerapan Metode Prototype Pada Pengembangan Sistem Antrian Online Di Kementrian Atr/Bpn Kab. Sukabumi," *Indexia*, vol. 5, no. 01, p. 1, 2023, doi: 10.30587/indexia.v5i01.5165.