#### A STUDENT VISA RENEWAL FEEDBACK PLATFORM

# ZHANG XIAOYA DR. KOK VEN JYN

Faculty of Information Technology & Science, National University of Malaysia

#### **ABSTRACT**

International students at Universiti Kebangsaan Malaysia (UKM) often face difficulties during the visa renewal process due to unclear procedures, language barriers, and miscommunication, leading to delays and unnecessary stress. To address these challenges, this project proposes a Student Visa Renewal Feedback Platform that helps students upload the necessary documents, give feedback, monitor the progress of application status, and get immediate notification on a centralized platform. The frontend is based on Vue.js, the backend on Spring Boot, data is stored in MySQL in a structured form, and notification services are provided via Firebase, which guarantees scalability, security, and convenience. The Incremental Development Model was realized, which permits to refine of the platform functions and improve the functions further through user feedback during development. Among the most important platform features are document upload, application status tracking, real-time feedback, and automated reminders, which free up as much sorting as possible in favour of optimizing the renewal process. The stability and reliability of the platform have been proven through testing and certifying its effectiveness in handling visa renewals of international students. The portal promotes contact between students and the administration, eliminates mistakes, and offers a precise, simplified path to visa extension. International students at UKM will be able to renew their visas with ease and reduce the pressure of finding the time to renew them because of the increased efficiency that this platform will bring to the university, and the university will be able to work more efficiently and provide their international community with better service.

### 1 INTRODUCTION

The Student Visa Renewal Feedback Platform functions to help international students resolve significant difficulties related to their visa renewal obligations. Students encounter significant difficulties during visa renewal because they are unfamiliar with guidelines, complicated procedures, and insufficient resources. Language barriers and misunderstandings create more complex problems, resulting in students submitting incomplete work and unnecessarily delaying visa renewal.

Such difficulties result in severe problems. Students who do not renew their visas within time limits will encounter financial consequences, risk visa termination, and have their academic programs interrupted. These situations simultaneously stress students while causing serious academic and career development challenges. Administrative staff deal with repetitive inquiries in addition to error correction for all students, which produces both resource drain and inefficient management.

The proposed solution is to develop an international student-tailored feedback platform to create a comprehensive feedback management platform. Students can expect to find

structured guidance and prompt support for their inquiries, as this platform helps streamline the entire visa renewal process. The platform has three primary purposes: reducing student stress and confusion, improving workflow efficiency, and preventing application errors.

The Student Visa Renewal Feedback Platform eliminates challenges between educational administrators' procedures and student interaction. It strives to establish a reliable, user-friendly platform that will enhance smooth visa renewals for students and staff by addressing the core causes of frequent problems.

#### 2 PROBLEM STATEMENT

Renewing visa applications presents significant hurdles to most international students when studying abroad. The process becomes more complex because students are unfamiliar with the necessary documentation and processes, which causes numerous errors in their applications. Students and administrative staff must conduct repeated consultations because unclear documentation leads to document rejections, thus increasing costs and delaying the visa renewal process.

The current process burdened students with excessive expenses from penalties and caused delays along with severe stress, which they must endure. A problem is worsened by an absence of central information management that offers step-by-step instructions and feedback administration. The lack of integrated administrative support platforms results in both confusion for staff due to redundant requests and additional mistakes for which they need to find solutions thereby depleting institutional resources.

Students who lack enough support and sufficient resources face severe disruptions to their academic and personal existence, leading to performance deterioration and challenges in achieving long-term objectives. Improving these platform deficiencies will help achieve faster visas for students and cut their academic disturbances while easing administrative carryout. A unified feedback and management platform is essential in enhancing operational effectiveness and efficiency, ultimately leading to better quality service delivery for every participating party.

#### 3 OBJECTIVES OF THE STUDY

- a. International students face various challenges because they are unfamiliar with the guidelines and find limited resources to manage their visa renewal applications. The project establishes a unified platform that supplies detailed guidance and dependable instructions to help students successfully complete their visa applications.
- b. The combination of recurring errors with inadequate application submission creates a situation where students need to consult administrative personnel multiple times, leading to additional time-consuming inefficiencies. The project deploys real-time feedback and automated error alerts as part of its features to decrease submission errors during visa renewal procedures while maintaining timely completion times.
- c. The extended visa renewal process produces two severe problems: it creates mental stress for students and interrupts their educational journey and personal routines. The user-friendly platform under development will tackle these problems by lowering errors and delays while offering immediate assistance to students to reduce stress and ensure smooth renewal operations.
- d. Students face challenges because they have no way to review information related to their issues and solutions applied in similar cases independently. The research initiative designs a platform search integration into the knowledge base, which enables students to solve their concerns independently before requiring direct administrative support.

#### 4 RESEARCH METHOD

In this chapter, the process used to create the Student Visa Renewal Feedback System will be described. The methodology was conceptualized into five major stages, namely: planning, analysis, design, development, and testing. Every stage was properly carried out, so that the system could meet the user requirements and functional specifications, as well as the standards of usability. It was an incremental development project, and features were implemented and then checked one by one, creating the possibility of making adjustments and receiving feedback

earlier. This enabled the team to adapt the system to the real-world needs and, at the same time, make the product stable, user-friendly, and technically sound.

#### 4.1 Planning Phase

This project was initiated by a planning process whereby the project wanted to know the actual needs of the international students regarding visa renewal at Universiti Kebangsaan Malaysia (UKM). To downplay this thesis initially, a user research task was conducted with the help of a Google Form, with a specific focus on the sample of students who had gone through the rest of their visas. Through the responses gathered, major problems were found to be a language barrier, insecurity about how to submit the documents, as well as emotions of not finding a channel through which they can get feedback. This helped to outline the scope of the project, and the final product had to deal with real user pain points.

### 4.2 Phase of analysis

After data gathering, functional requirements and non-functional requirements had been prescribed. The system was also supposed to be functional by supporting user registration, submission of feedback, uploading of files, staff response, and monitoring of progress. Also, there were real-time alerts and a dashboard that both student users and staff users are concerned.

Non-functional requirements on accessibility (including mobile-friendliness), support of a multilingual interface (English, Malay, Chinese), and usability, no less important, guaranteed that the system could be used even by students with a rather modest technical education.

#### 4.3 Design Stage

The design activity consisted of drawing some wireframes and system flowcharts. The structure used was a role-based system, and the students and the staff were provided with different dashboards and permissions.

The system architecture is conceived in terms of a client-server model. Its user interface was constructed by Vue.js to get the responsive front end, and the back end was constructed by Spring Boot to expect the RESTful APIs and work together with MySQL database. Firebase was incorporated to deliver push notifications to users about their feedback on the visa and visa updates.

# 4.4 Development stage

The development used the incremental model, meaning the various modules were introduced and tested one after another. The student module enabled users to provide feedback regarding their visa, upload supporting documents (e.g., passport, offer letter), and get a reply from staff. The staff module had the features to manage feedback, view documents, and notifications.

The implementation of multilingual support was carried out through i18next, and it is easy to change languages. Authentication and authorization were also done on the basis of roles, so that only authorized people could read the feedback and respond.

# 4.5 Testing and Evaluation Project Phase

The built system was subjected to black-box testing that involved checking whether all functions performed according to the user's view. Test cases included login/logout, file upload, feedback submission, anonymity mode, notification delivery, and multilingual rendering test cases. A small-scale user evaluation was done after internal testing. More than 80 percent stated that the system enabled them to punctually file documents relating to the visas. The majority of the users scored the system at 5 out of 5 concerning ease of use, the multilingual support, and satisfaction.

# 5 RESEARCH RESULTS

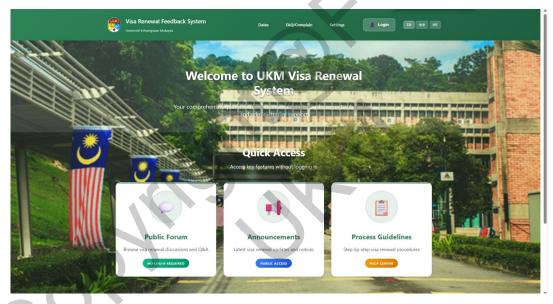


Figure 1 Main Page

Figure 2 represents the student-side login page where international students can represent the student-side login page where international students can readily use the Visa Renewal Feedback Platform safely. When logging into the platform, students type in their email, and password, and go through an easy captcha to verify. The interface will be user-friendly but easy to access yet secure.

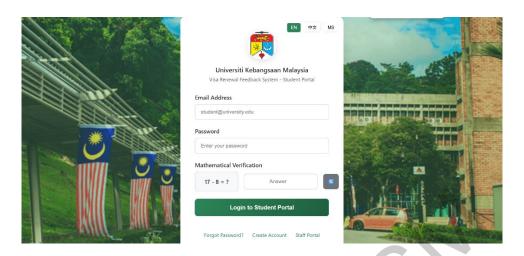


Figure 2 Student Login Page

In Figure 3, the staff log in is shown, in which the staff members may enter with credentials to access the administrative role of the platform. Staffs could choose their access the level (staff or the admin version), before signing in, just like in the student version of the login page the requirement of verifying captcha access is incorporated to increase the level of security.

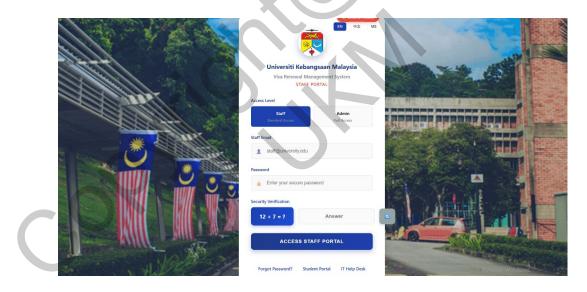


Figure 3 Stuff Login Page

Students can submit visa-related queries or issues with optional anonymity and upload supporting documents to assist staff in addressing the issue.

Figure 4 shows the page where students submit feedback regarding visa renewal issues. Students can select the category, set priority, provide a detailed description, choose privacy settings (real name or anonymous), and upload supporting documents. Notification preferences (email or SMS) can also be selected to receive updates on their submission, ensuring streamlined and organized feedback submission.

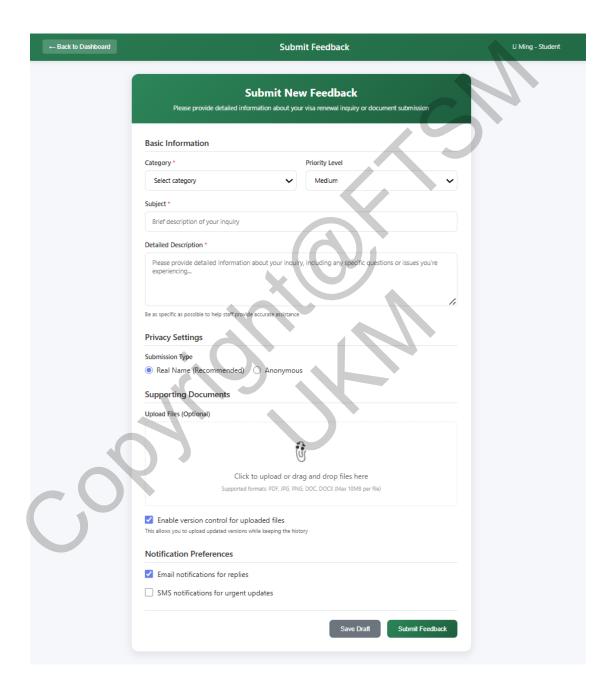


Figure 4 Feedback Submission Page

Figure 5 illustrates the staff view when responding to student feedback. It displays the feedback content, uploaded documents, student information, and the status management panel where staff can mark the feedback as "In Progress" or "Resolved." Staff can compose and send replies with optional notifications to the student, ensuring clear communication during the resolution process.

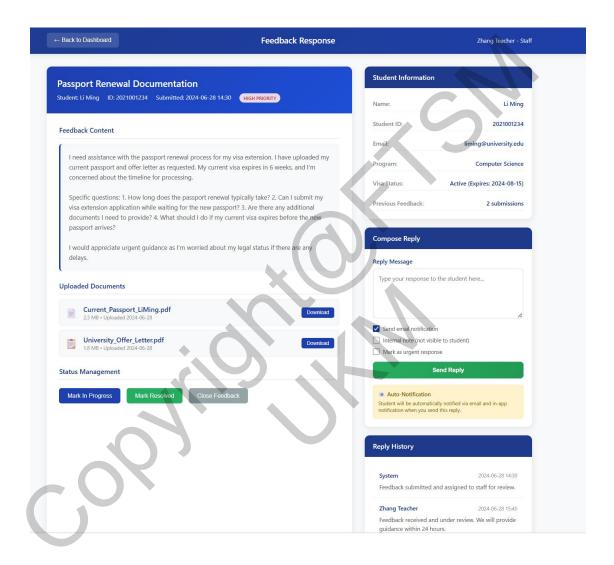


Figure 5 Feedback Response Page

Figure 6 shows students can view the status of their submitted feedback, track progress, and receive notifications regarding their visa renewal.

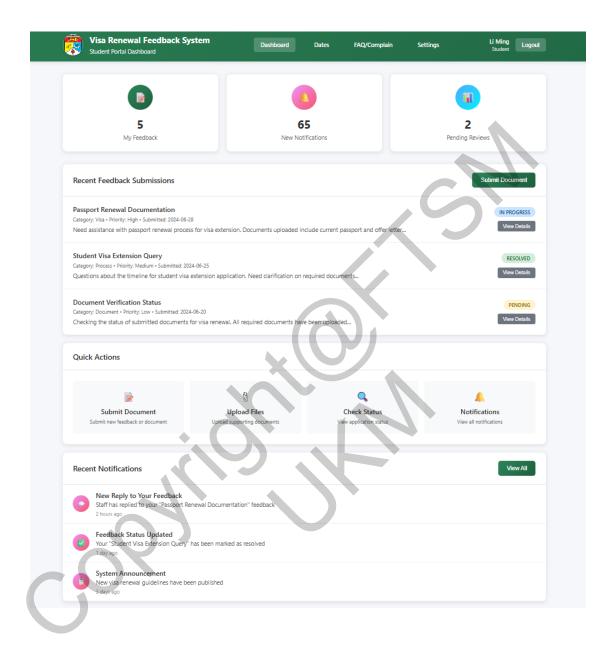


Figure 6 Student Dashboard

Figure 7 shows staff can view, categorise, and manage feedback submitted by students, and respond promptly to support the visa renewal process.

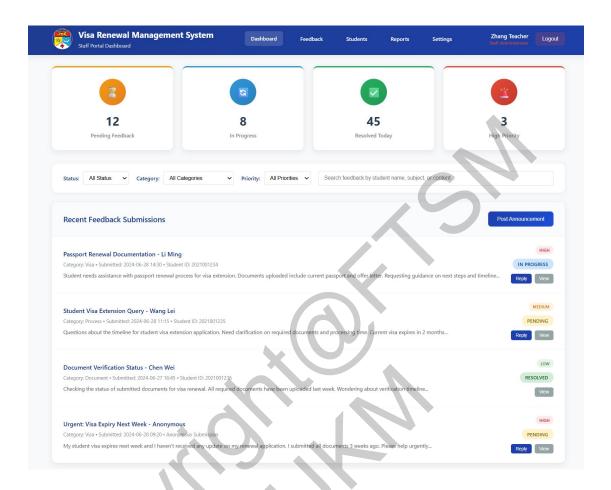


Figure 7 Staff Dashboard

Figure 8 and 9, Students receive real-time notifications regarding staff responses and important visa renewal deadlines, ensuring timely action.

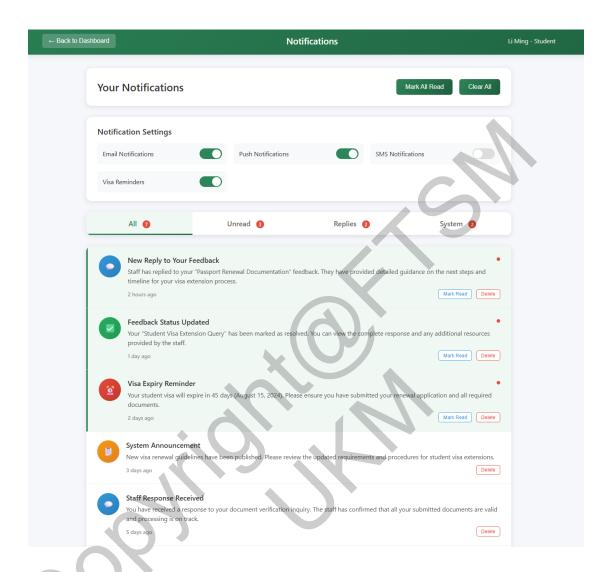


Figure 8 Student Notification Display

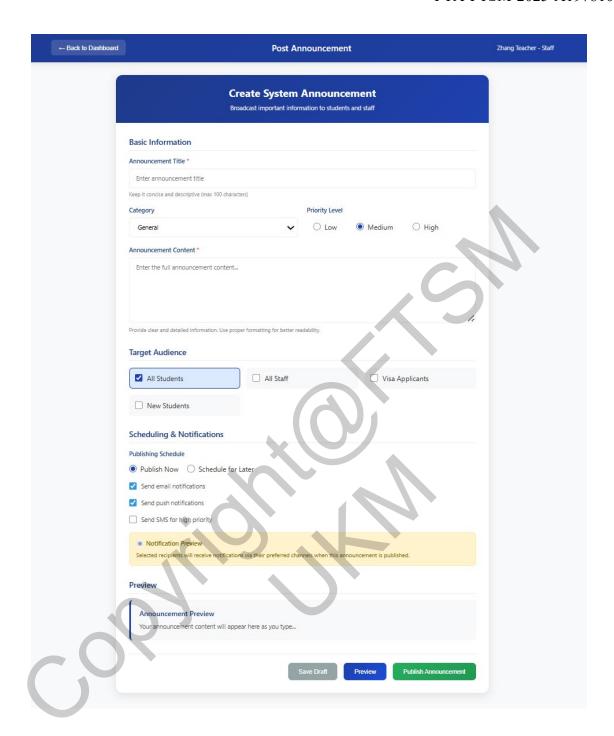


Figure 9 Stuff Notification Display

Figure 10 shows students can upload required documents securely, which will be used to support their visa renewal feedback submission.

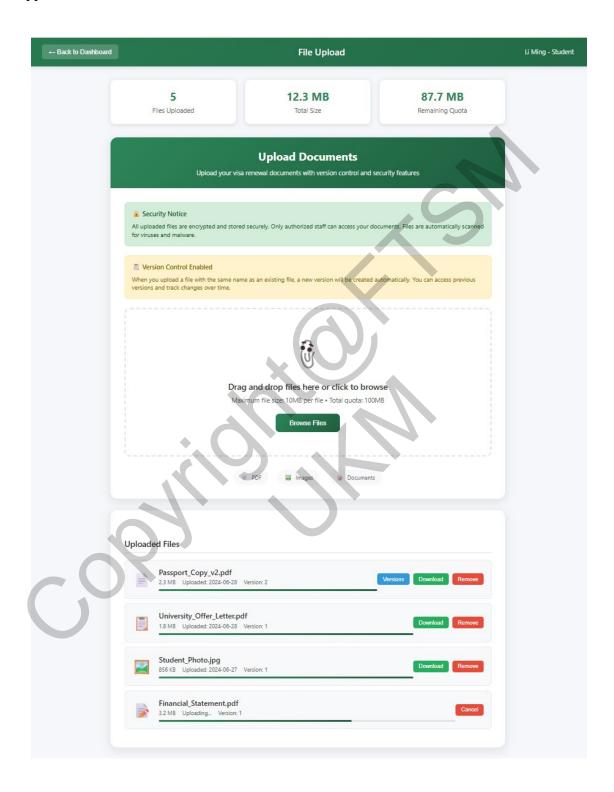


Figure 10 File Upload Page

This Figure 11 shows the MySQL database structure used by the platform. It includes tables for user authentication, visa submission, document management, reminders, and platform configurations, demonstrating how data is structured and managed to support platform operations efficiently.

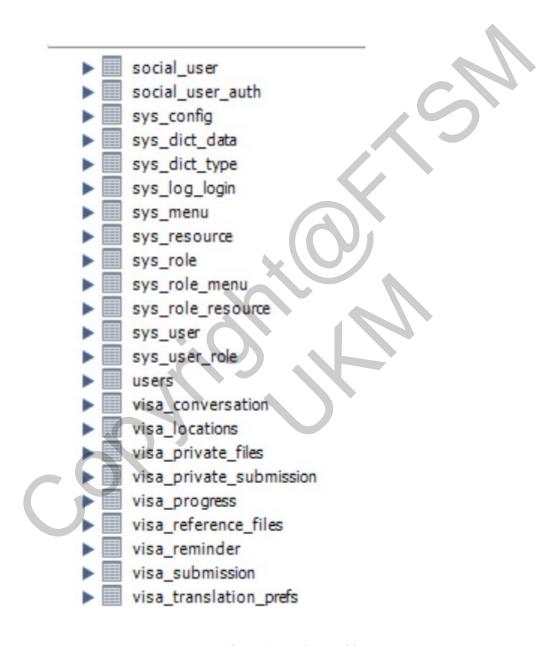


Figure 11 Database Table Structure

This Figure 12 displays the message confirming successful login, indicating that user authentication functions correctly and the user has been granted access to the platform.

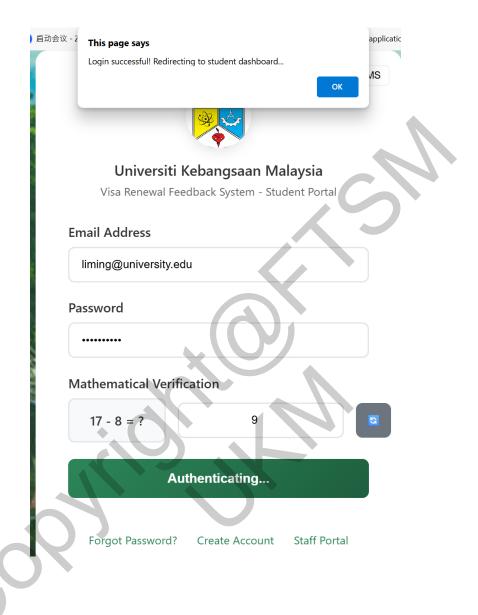


Figure 12 login Success Confirmation

This Figure 13 presents the notification displayed to students after successfully submitting feedback, confirming that the platform correctly processes and acknowledges student feedback submissions.

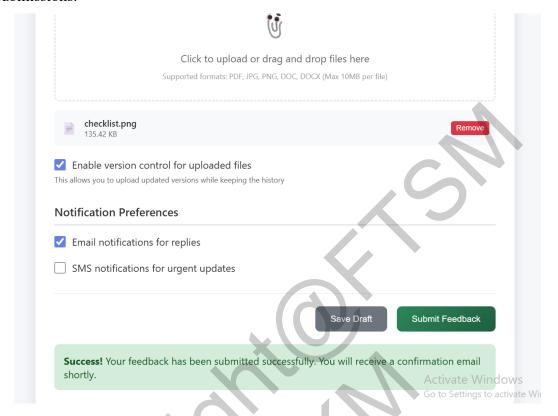


Figure 13 Feedback Submission Confirmation

This Figure 14 shows the interface where students can view the status of their submitted feedback, provide transparency and enabling students to track the progress of their requests.

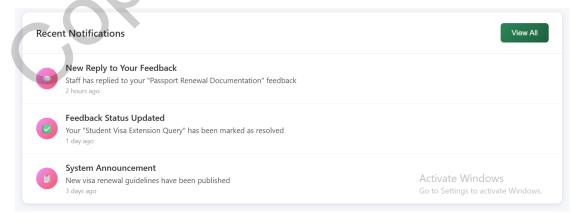


Figure 14 Feedback Status Display

This Figure 15 demonstrates the forum page where public feedback entries are displayed, allowing students and staff to browse shared feedback for transparency and reference.

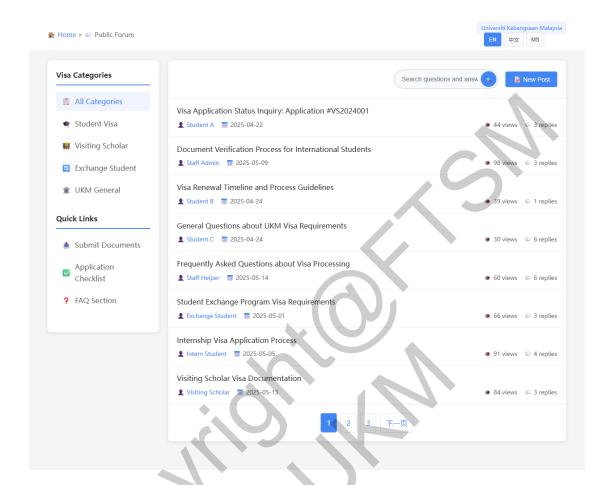


Figure 15 Forum Page Display

This Figure 16 shows a student's post regarding visa application status, along with multiple user comments and an official reply from staff. It demonstrates the communication flow and staff-student interaction on the platform.

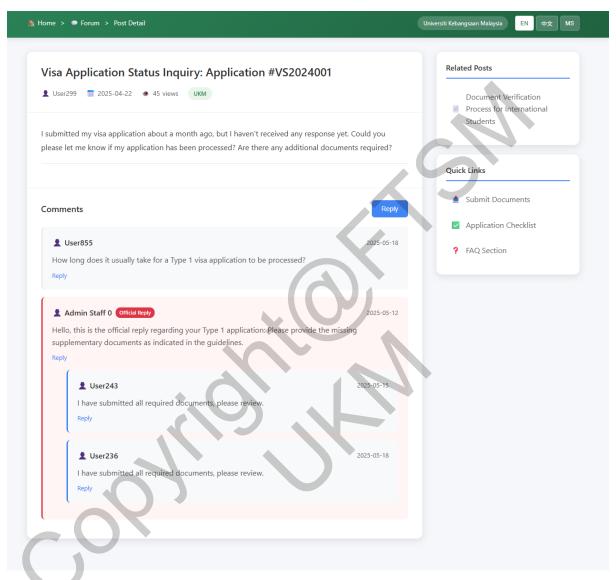


Figure 16 Post Detail - Visa Application Inquiry Thread

### **TEST SCOPE**

This platform testing scope deals with all major functional modules and users and platform interactions so that this platform will be correct, usable, secure, and reliable. Table 1 shows the detailed scope.

Table 1 Detailed scope

Module	Description	
User Registration	Testing registration with valid and invalid data, duplicate email	
	checks.	
User Login	Testing login with correct and incorrect credentials, role-based	
	access control.	
Feedback Submission	Testing feedback submission with and without file	
	attachments, form validation.	
File Upload	Testing file type and size validation with correct error prompts.	
Feedback Status	Testing viewing submitted feedback with accurate status	
Tracking	updates.	
Forum Viewing	Testing public feedback browsing by students and staff for	
	transparency.	
Staff Feedback	Testing staff capabilities to view, filter, and update feedback	
Management	statuses.	
Logout	Testing logout functionality to ensure session clearance and	
	redirection.	

The simulation of the testing was conducted to test the features of the Student Visa Renewal Feedback Platform in real-life settings. Table 2 below summarizes the results per each test case.

Table 2 Test Execution Summary

Test Case II	O Test Objective	Actual Result	Test Status
TC-001	Student Registration	User registered and redirected to login page	Passed
TC-002	Student Login	User logged in, dashboard displayed	Passed
TC-003	Invalid Login Handling	g "Invalid email or password" displayed	Passed
TC-004	Feedback Submission	Feedback submitted, confirmation shown	Passed
TC-005	File Size Validation	File upload rejected with error message	Passed
TC-006	View Feedback Status	Feedback list with status displayed	Passed
TC-007	Forum Viewing	Public feedback posts displayed	Passed
TC-008	Logout	User redirected to login page, session cleared	l Passed

#### 6 CONCLUSION

This project has accordingly found a way to create a web-based feedback portal that would be used by the international students to enhance the process of renewing their student visas. The feedback service and the opportunity to upload documents and monitor the progress in real-time provide the students and the university services with enhanced communication. The support of multilingual solutions and anonymous feedback opportunities further increases the accessibility of different users with various backgrounds.

The advantages of the system are associated with its centralized communication pattern, user-friendliness, and the incorporation of web innovations like Vue.js, Spring Boot, MySQL, and Firebase. The combination of these tools presents a scalable, responsive, and practical solution to issues that were identified in the planning stage.

However much there are strengths to using the platform, there are also shortcomings. It is now focused on one institutional environment and does not have the option of real-time communications. Also, analytics and reporting of the user are not comprehensive.

To improve in the future, the system might be expanded to cater to the larger institutional requirements and have real-time chat or ticketing modules, as well as dashboards to allow staff and administrators to access patterns of submission and trends in student feedback. These addons would also make this platform more useful and effective.

### 7 REFERENCES

Firebase. (n.d.). Firebase Documentation. Retrieved from <a href="https://firebase.google.com/docs">https://firebase.google.com/docs</a>

Google Forms. (2025). Student Visa Renewal Feedback System Questionnaire. Retrieved from https://forms.gle/Nn5ez9c1mtdMeFYEA

Mozilla Developer Network. (n.d.). Web Technology Documentation. Retrieved from <a href="https://developer.mozilla.org/">https://developer.mozilla.org/</a>

Morris-Lange, S. (2019). Bridging Communication Gaps In International Student Support. Student Mobility Studies Journal, 22(1), 15-29.

MySQL. (n.d.). MySQL Documentation. Retrieved from <a href="https://dev.mysql.com/doc/">https://dev.mysql.com/doc/</a>

Spring Boot. (n.d.). Spring Boot Reference Documentation. Retrieved from <a href="https://spring.io/projects/spring-boot">https://spring.io/projects/spring-boot</a>

UKM. (2024). Garis Panduan Projek Tahun Akhir UKM. Bangi: Universiti Kebangsaan Malaysia.

UNESCO. (2023). The Role Of Feedback In Enhancing Student Experiences. Retrieved from <a href="https://www.unesco.org/education">https://www.unesco.org/education</a>

Vue.js. (n.d.). Vue.js Documentation. Retrieved from https://vuejs.org/

W3Schools. (n.d.). HTML, CSS, JavaScript Tutorials. Retrieved from https://www.w3schools.com/

Zhang Xiaoya (A197810) Dr. Kok Ven Jyn Faculty of Information Technology & Science, National University of Malaysia