



UNIVMETA

A WEB BASED APPLICATION



Academic Form Automation System (AFAS)

Enhancing Efficiency and Accuracy in University Processes

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FORM

TEAM DETAILS

[HOME](#)[STUDENT](#)[FACULTY](#)[ABOUT](#)

• • •

UNIVMETA 2024

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[DEEMED TO BE UNIVERSITY].

STREAM: BACHELOR OF COMPUTER
APPLICATIONS [BCA]

YEAR OF GRADUATION: 2026



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APPLICATIONS [BCA]

YEAR OF GRADUATION: 2026



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STREAM: BACHELOR OF COMPUTER
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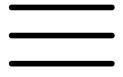
PROBLEM STATEMENT



In the academic environment, students, faculties and administrative staff members are constantly engaged in various activities that require meticulous planning and management. These activities consists of class schedules, assignments, exams, extracurricular events, research projects, and academic advising. The growing complexity and volume of these activities often lead to inefficiencies, missed deadlines, and increased stress among all stakeholders involved.

Solution : Planning and Management Systems for Academic related Activities

AGENDA



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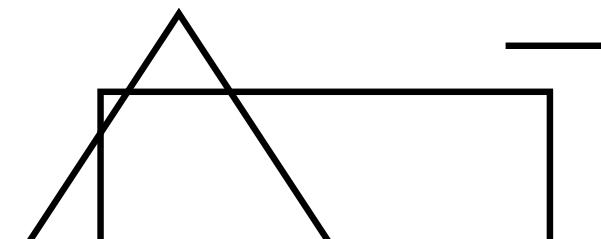
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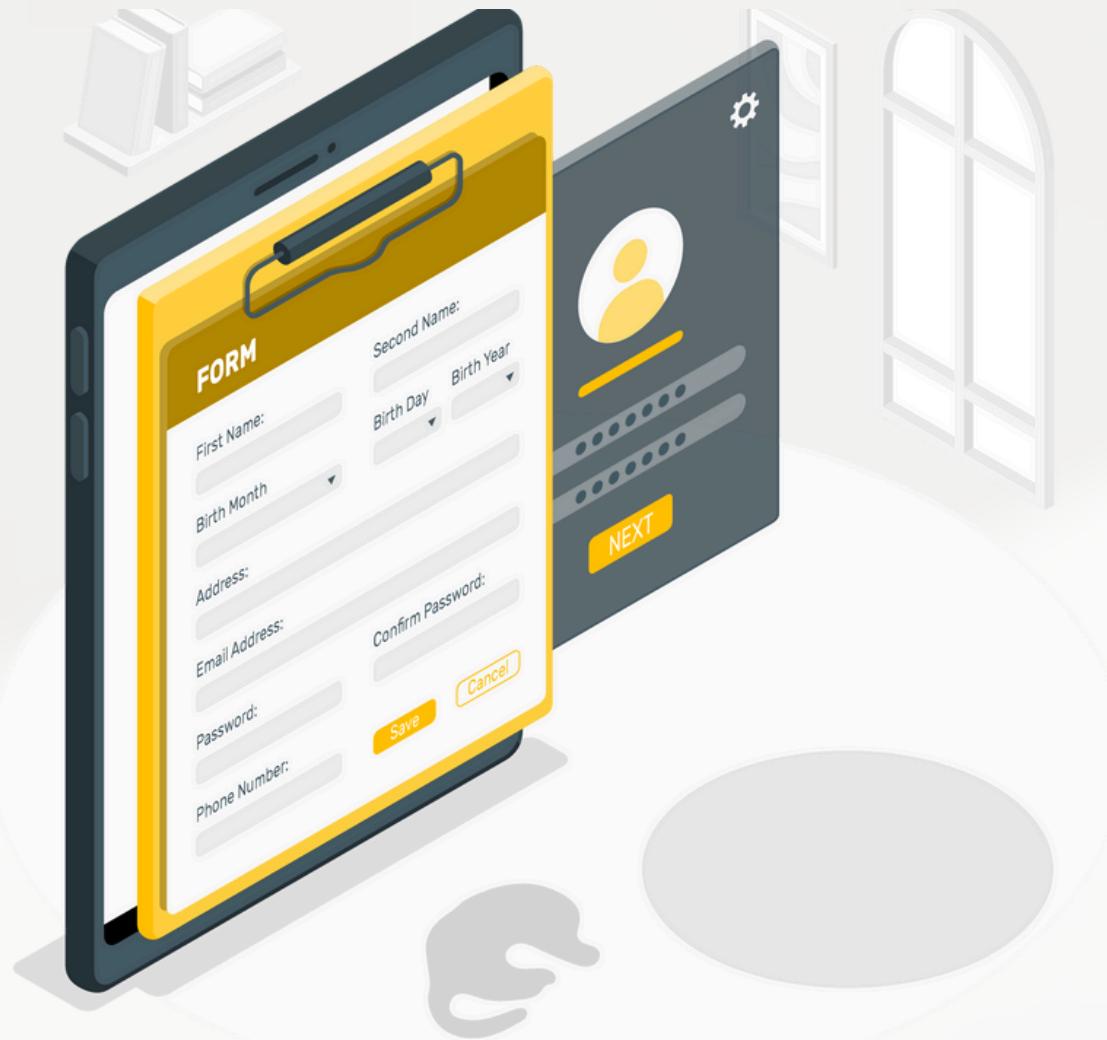
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Q & A





INTRODUCTION

- **Objective:** Automating the **manual processes** for applying for various **academic certificates, reducing delays, and enhancing accuracy.**
- **Motivation:** The current manual processes cause long waiting times, inaccuracies, and inconveniences for both students and administrative staff. **Our solution addresses these inefficiencies by digitizing the process.**

SURVEY METHODOLOGY

OBJECTIVE

To identify difficulties faced by students and faculty in Academics.

SURVEY TOOL

ZOHO SURVEY

SAMPLE SIZE

Number Of Respondents: [50]

TARGET AUDIENCE

Survey conducted among students and faculty members.

SURVEY DURATION

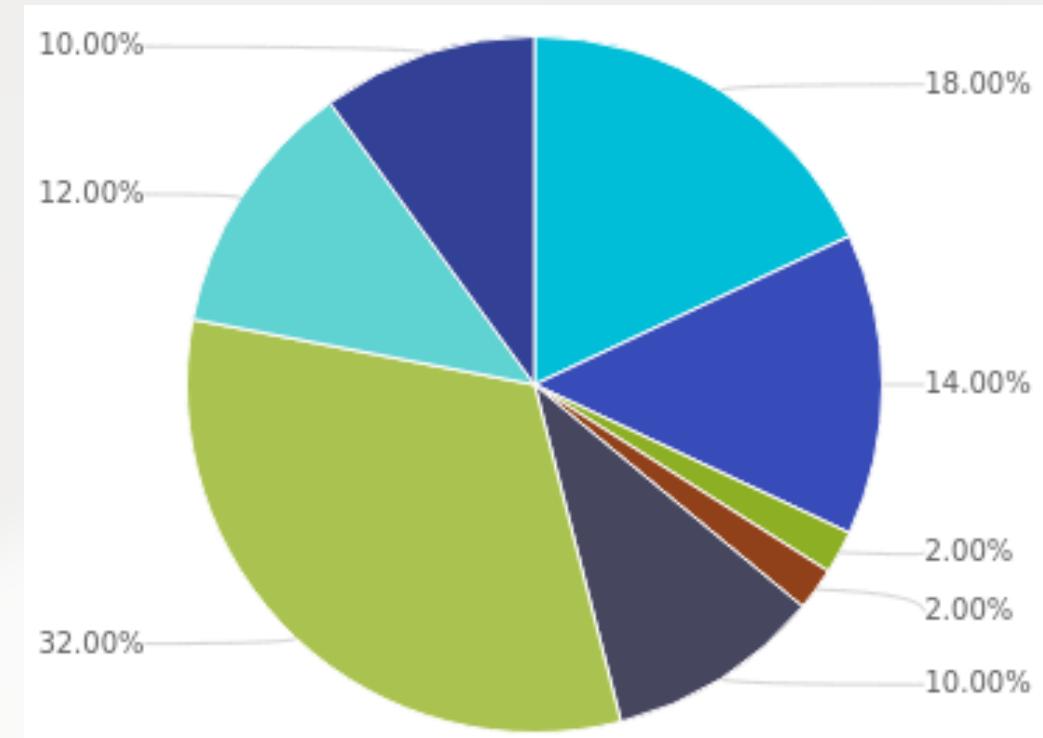
Survey was conducted through **ZOHO SURVEY** from **15/08/2024 to 21/08/2024**

PARTICIPANT DEMOGRAPHICS

- **Departmental Representation:** THE SURVEY

PARTICIPANTS WERE FROM THE FOLLOWING
DEPARTMENTS:

B.TECH - CSE – 18.00%
B.TECH - IT – 14.00%
B.TECH- ECE – 2.00%
B.TECH- EEE – 2.00%
BCA – 32.00%
MBA – 12.00%
B.SC - FSC – 10.00%
BA – ENGLISH – 10.00%



- **Year of Study:** Participants included students from various years, with the second year having the highest representation at 64%, followed by the fourth year at 20%, and the third year at 16%.

SURVEY FINDINGS

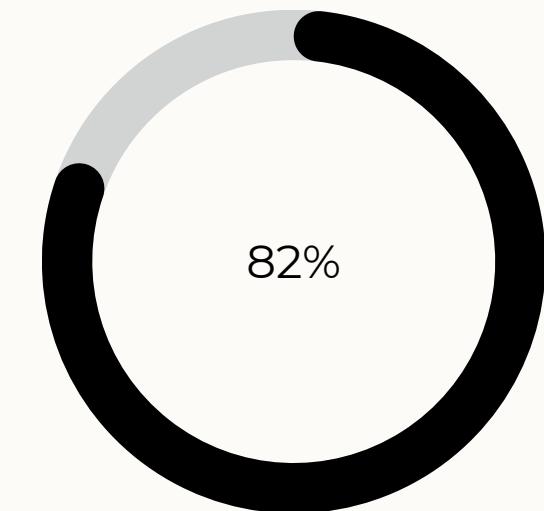
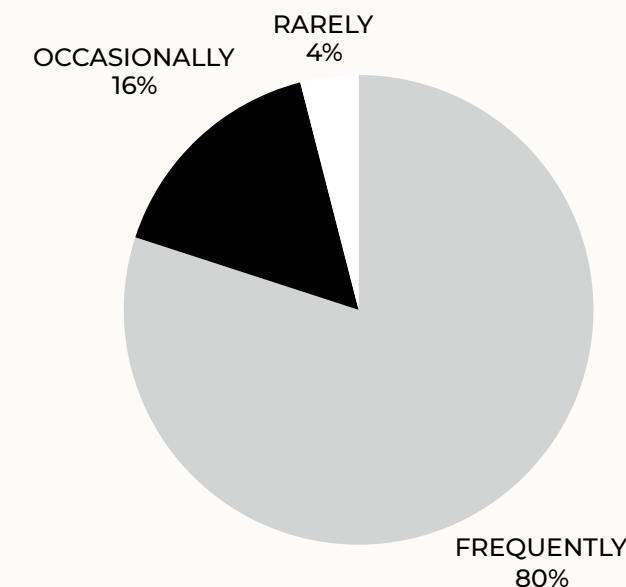
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- **Key Issues Identified:**

- Frequent delays in the **approval process, particularly for No Dues Certificates and Bonafide Certificates.**
- Students faced challenges with limited office hours, affecting when they could submit requests and follow up on approvals.

- **Results:**

- **50% of respondents** experienced these issues frequently.
- **82% expressed** that an automated solution would improve the process significantly.

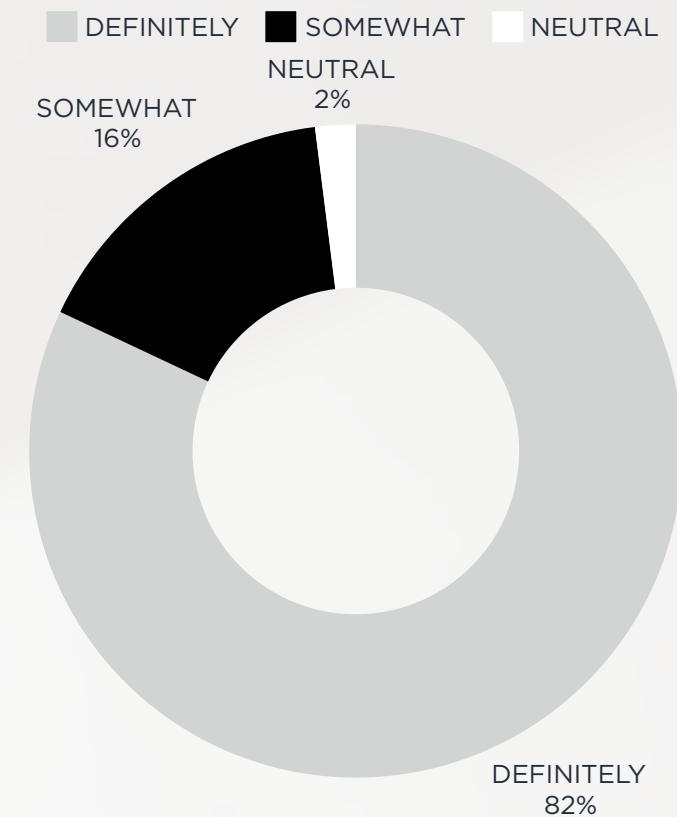


SURVEY RESULT-STUDENTS

- **Automation of Forms:** Implement an **automated system** to handle form **submissions, approvals, and tracking, reducing** the dependency on manual processes.
- **Improved Communication:** Enhance **communication between departments and students** to keep them informed of the status of their applications.
- **Flexible Access:** Consider extending or adjusting the hours of operation for form submission to accommodate students' schedules.

SURVEY RESULT-FACULTY

- Faculty members reported delays and lack of transparency in processing requests **like leave notifications and event requests.** This inefficiency affected their workflow, leading to frustration with manual processes.



PROBLEM IDENTIFICATION

Challenges in the Current System:

- **Manual submission of requests** for certificates such as Bonafide Certificates, Leave Applications, No Dues Certificates, and On Duty Forms.
- **Long processing times and frequent errors** due to manual data entry.
- **Inefficient tracking and approval processes** that depend heavily on office hours and physical paperwork.

Impact on Stakeholders:

- Students face inefficiencies and delays, often having to follow up multiple times to get approvals.
- Faculty members are burdened by a large number of manual approvals, which adds to their workload and delays processing.

PROPOSED SYSTEM

- **Web-Based Automation:** Students and faculty members will apply for and process certificates and forms online via a **unified platform**.
- **Real-Time Notifications:** Automated notifications will inform users of approval status and certificate readiness.
- **Digital Certificates:** Certificates will be generated digitally, **downloadable, and signed electronically**.

MODULES IN WEB APPLICATION

DESIGNED AND DEVELOPED BY : UNIVMETA.XYZ

MODULE

1

Frontend
Development

MODULE

2

Student
Login

MODULE

3

Application
status

MODULE

4

Faculty
Login

MODULE

5

Faculty
Approval

MODULE

6

Certificate
system

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SUBRAMANIAN M

MOHAMED FAIZ N

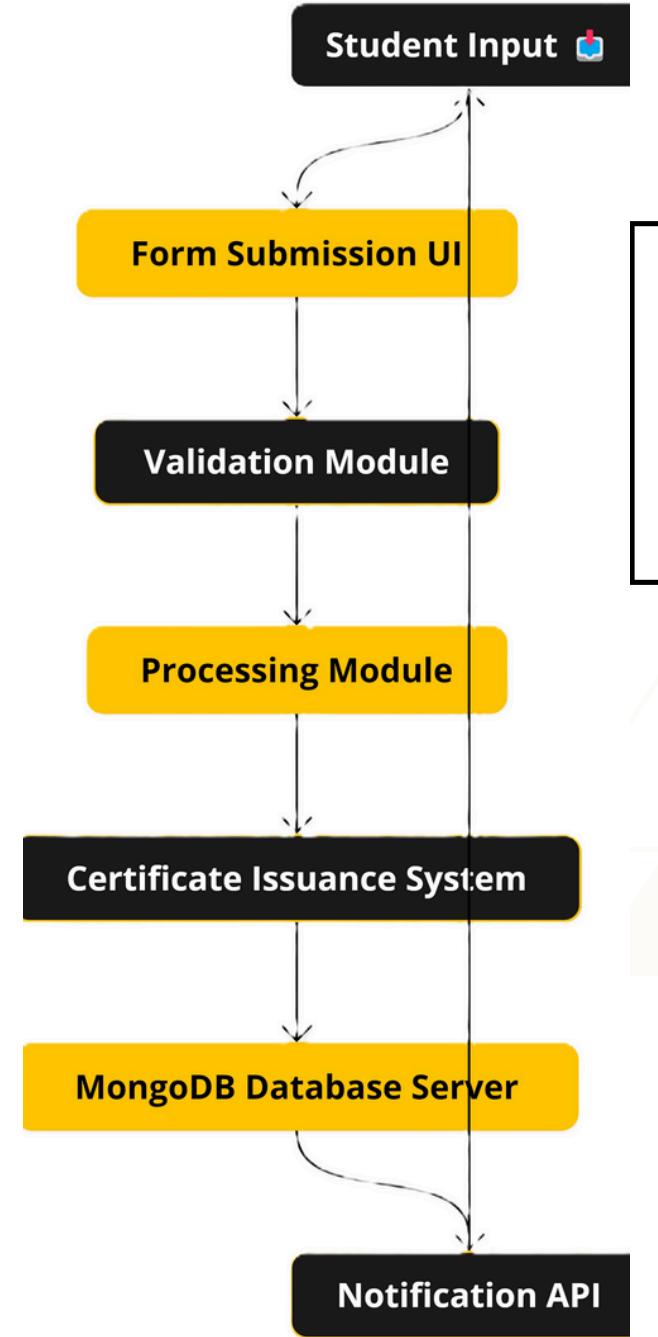
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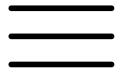
System Architecture and Workflows



Certificate Issuance System Flow

- **Student Input:** Student submits data through the form.
- **Form Submission UI:** The data is captured and sent for validation.
- **Validation Module:** The input is verified for accuracy.
- **Processing Module:** Validated data is processed for certificate generation.
- **Certificate Issuance System:** A certificate is created or issued.
- **MongoDB/MY SQL Database Server:** Data and certificates are stored securely.
- **Notification API:** Notifications are sent about certificate status.





BENEFITS OF AUTOMATION

ACCURACY

THE SYSTEM WILL MINIMIZE ERRORS CAUSED BY MANUAL DATA ENTRY.

ECO-FRIENDLY SOLUTION

THE CERTIFICATE GENERATION SYSTEM CONSUMES ZERO PAPER.

UTILIZING THE CLOUD OR LOCAL STORAGE HAS PROVED **THE SAME TO BE AS AN ECO-FRIENDLY SOLUTION.**

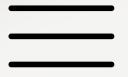
SMART & EFFICIENT

IT WILL SPEED UP FORM APPROVAL AND PROCESSING TIMES, REDUCING THE OVERALL TIME BY OVER 70%.

ECONOMICAL

AUTOMATED CERTIFICATE GENERATION SYSTEM REDUCES THE USAGE OF PAPER AND INK, **THUS PROVIDING A SUBSTANTIAL SAVING FOR THE UNIVERSITY AUTHORITIES.**

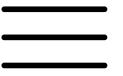
CONCLUSION



Summary

The Academic Form Automation System (AFAS) is set to streamline the university's certificate and form processes, enhancing efficiency, accuracy, and accessibility for both students and faculty. With its automated workflows, AFAS reduces manual errors and approval delays, providing real-time status updates.





Challenge 1: Initial resistance to adoption from students and faculty.

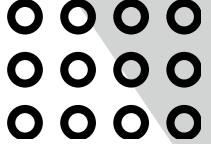
Solution: Conduct awareness workshops and offer detailed user guides.

Challenge 2: Ensuring system scalability for peak times.

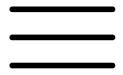
Solution: Implement cloud-based scaling to handle high demand during critical periods.

Challenge 3: Data security and privacy concerns.

Solution: Secure encryption protocols and compliance with university data policies.



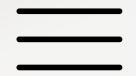
FUTURE ENHANCEMENTS



- **Internship Application Module:** Based on feedback, this has been included but could be further optimized.
- **Faculty Leave Notifications:** Automating the leave process for faculty is integrated.
- **Placement Data Management:** Recommended by coordinators, this can be refined further in future updates.
- **On-Duty Form Processing:** Still requires improvements in inter-departmental coordination as highlighted by the faculty.

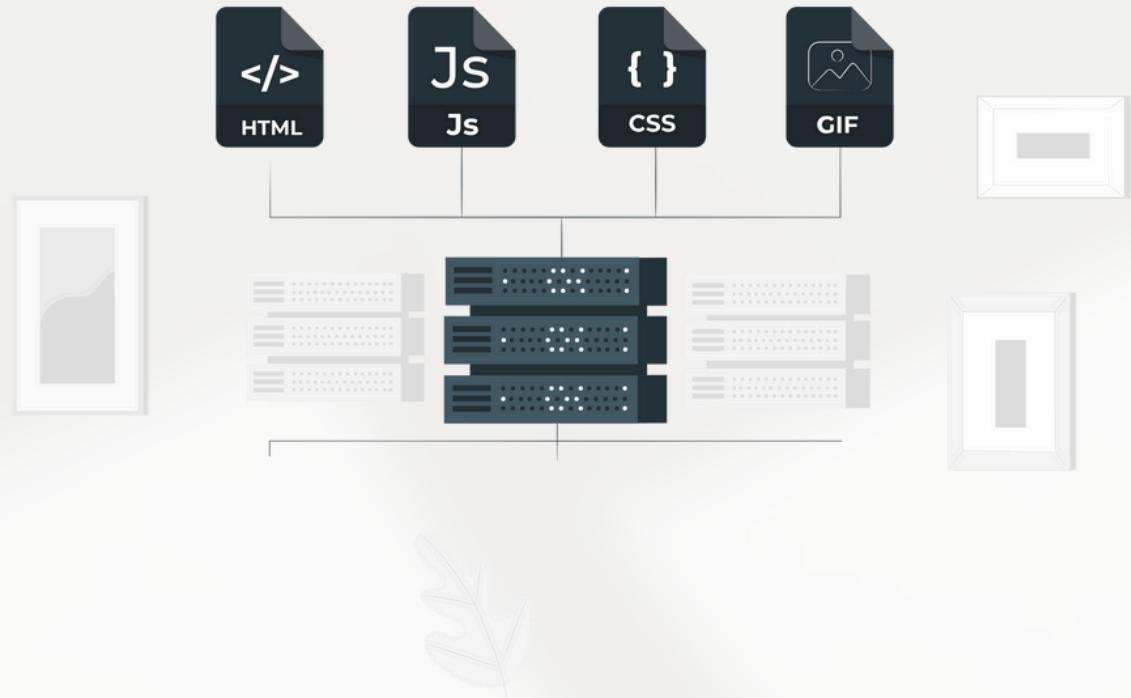
We look forward to deploying AFAS and refining it with continuous feedback for further optimization.

DEPLOYMENT STRATEGY



Deployment

- Deploying AFAS across university and cloud platforms.
- **Phased deployment:** starting with a pilot run in smaller departments and then expanding to the entire university.



Infrastructure Setup

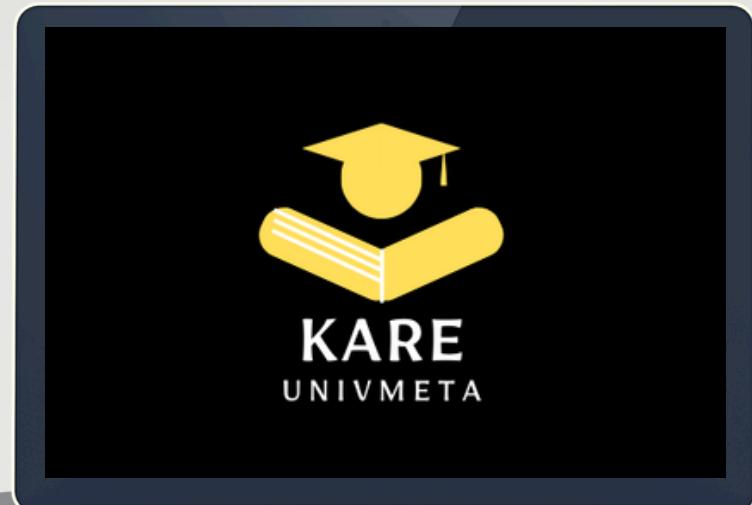
- Setting up hosting environments, servers, and database management systems for AFAS.
- Ensuring scalability and reliability for high user demand during peak times.
- Feedback will be gathered to address any bugs or usability issues.

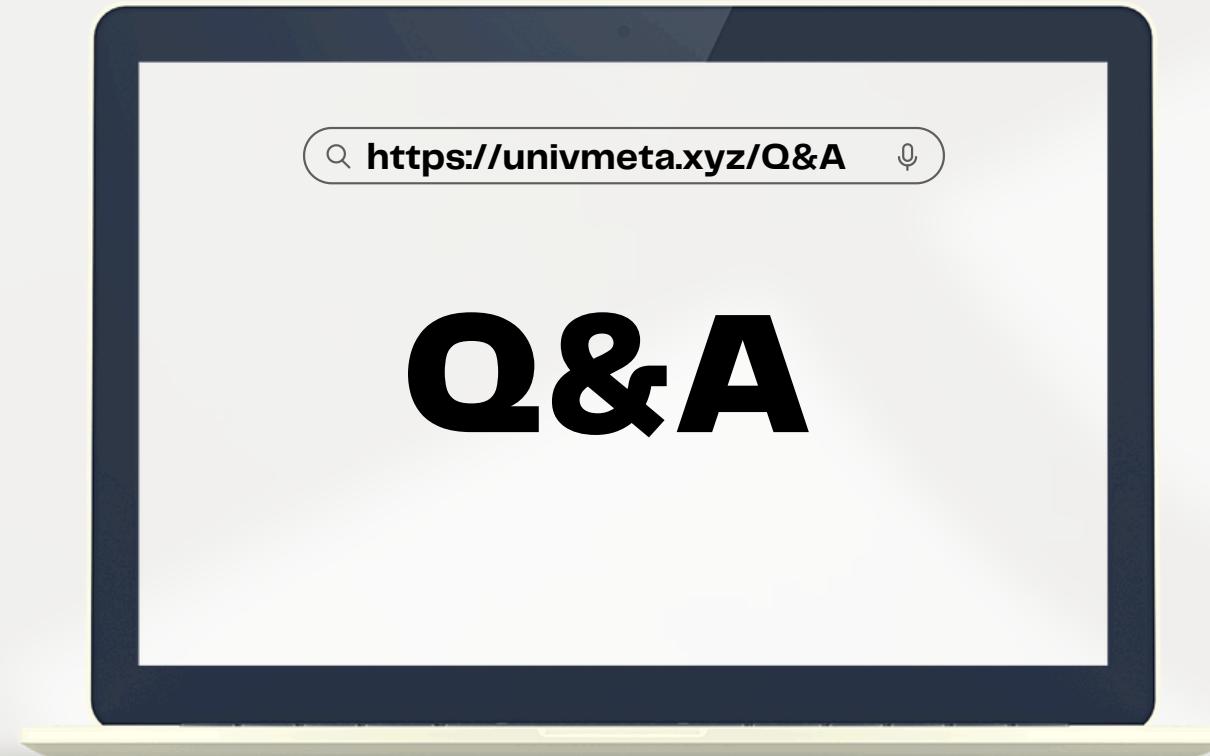
WEBSITE LAUNCH

ON NOV 01 2024



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THANK YOU

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