



# UNIVERSITY OF MAKATI

*J.P. Rizal Extension West Rembo Makati City*

## College of Computing and Information Sciences

### GROUP 10 CAPSTONE-2

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### Latest Audit Report:

#### Objective Alignment Evaluation

#### 1. Improve access to research outputs:

- Audit Findings:
  - Metadata-driven search is operational and supports advanced filtering.
  - File upload functionality is being enhanced with watermarking using a Python library.
- Recommendations:
  - Complete and test the watermarking feature to ensure secure and authentic document uploads.
  - Expand user feedback collection on search and document retrieval efficiency.

#### 2. Ensure secure handling of academic data:

- Audit Findings:
  - Security protocols, including SHA-256 encryption and multi-factor authentication, are in place.
  - Audit trails are functional, with added emphasis on securing uploaded files via watermarking.
- Recommendations:
  - Continue watermarking tests to ensure effectiveness.

#### 3. Simplify retrieval and management of academic resources:

- Audit Findings:
  - Automated citation and document watermarking are partially integrated, with final adjustments ongoing.
  - GCash payment method for resource access is under development, modeled after the University of Makati's scan-to-pay enrollment method.
- Recommendations:



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- Finalize GCash integration and ensure secure transaction handling.
- Provide documentation and user training for new payment workflows.

### 4. Scalable system architecture:

- Audit Findings:
  - Cloud-based hosting has been tested and validated for scalability.
- Recommendations:
  - Extend testing to verify payment system compatibility with scalability requirements.

### 5. ISO 25010 Standards Compliance:

- Audit Findings:
  - The system aligns with functionality and usability standards, with security features nearing full compliance.
- Recommendations:
  - Conduct full ISO compliance validation, including payment system security.

## Project Status Report:

### Current Progress

#### 1. Prototype Development:

- Completed core functionalities, including:
  - Metadata-driven search and role-based user management.
  - Automated citation tools and document watermarking (polishing in progress).
- Presented progress to:
  - **January 8, 2025 – Stakeholders Briefing**
    1. Presented the **project brief** to key stakeholders, introducing the system's goals, objectives, and key features.
    2. Received initial feedback and suggestions for improvement.
  - **January 10, 2025 – Presentation to Professor Edgardo T. Cruz (CCIS)**
    1. Presented the project's progress to **Professor Edgardo T. Cruz**, the **BSIT Department Head** from the College of Computing and Information Sciences (CCIS).
    2. Professor Cruz requested that the project be presented to **Dean Dr. Joel B. Mangaba** for further evaluation and feedback.



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### ■ January 17, 2025 – Follow-up Presentation

1. Instead of presenting to Dean Dr. Joel B. Mangaba as originally requested, it was suggested that the project be presented to **College Secretary Professor Janice Pola D. Congzon** instead.

### ■ January 17, 2025 – Presentation to Professor Dennis T. Montealegre (CTM Process Owner)

1. Presented the project's progress to **Professor Dennis T. Montealegre**, the process owner from the College of Technology Management (CTM).
2. Received valuable feedback specific to CTM's processes and requirements.

### 2. New Additions:

- Watermarking for file uploads is under final development using a Python library.
- GCash payment method is being developed, modeled after the University of Makati's scan-to-pay system.
- Reporting functionality is being further enhanced with the PHP Office library to enable exporting reports to Excel format, improving user data analysis and accessibility.

### 3. Pending Tasks:

- Finalize and test watermarking and GCash integration.
- Prepare for the CCIS process owner presentation on January 28, 2025 College Secretary Professor Janice Pola D. Congzon.
- Gather and incorporate feedback from CTM and CCIS stakeholders.

### 4. Challenges Encountered:

- Some delays in mobile responsiveness optimization.
- Difficulty in accessing detailed documentation or insights about other university systems, limiting the depth of comparison.
- The learning curve for integrating Python and PHP Office libraries has proven time-consuming and hard.

### 5. Next Steps:

- Complete the watermarking feature and GCash payment integration.
- Validate system scalability, focusing on payment method compatibility and reporting features.