

MedAce: A Smart Web-Based Review and Progress Tracker for Allied Health Licensure Exams:



**Presented to: Faculty of Information Technology and Research Department,
World Citi Colleges – Quezon City**

July 2025

GROUP MEMBERS AND THEIR ROLES

**ARCAYERA, ALLAIN LOUIS | DATABASE
AUSTRIA, MAVERICK RUSSELL | DOCUMENTATION &
RESEARCH**

COPRADO, JUSTIN | WEB DEVELOPER

**DELA CRUZ, MARIAH KRISHTEL J. | FRONTEND
DEVELOPER**

SANTOS, RUSSEL JERARD | FRONTEND DEVELOPER

BITS VISION AND MISSION

VISION STATEMENT

The College of Information Technology Education (CITE) envisions itself to become a center of excellence that produces globally competitive, self-righteous, expert and innovative ITE professionals.

MISSION STATEMENT

The College of Information Technology Education is committed to produce globally competitive graduates that are responsive to the industry needs locally and internationally, God-fearing, and can deliver and do research which are original, innovative and relevant.

AREA OF THE STUDY

- This study integrates the following Information Technology fields:
 - Educational Technology: Utilizes digital tools to support nursing instruction.
 - Academic Performance Monitoring: Tracks students' progress and exam readiness.
 - Online Review Systems: Provides mock exams and quizzes aligned to the curriculum.
 - Nursing Education: Focused on supporting nursing students' academic needs.

BACKGROUND OF THE STUDY

- **Allied health students face major barriers when preparing for licensure exams:**
 - Exam anxiety, poor time management, content overload
 - Inconsistent study methods and outdated materials
 - Lack of critical thinking training for board-style MCQs
 - Limited structured review programs
- These problems reduce academic readiness and increase exam pressure.

BACKGROUND OF THE STUDY

- Schools often cannot offer personal coaching due to faculty workloads.
- Many students rely on informal, non-standardized materials like social media threads.
- Despite growing digital tools, students lack access to structured, localized, and adaptive review systems.
- Gaps in both individual and institutional support highlight the need for a centralized platform.

KEY CHALLENGES IN NURSING EDUCATION

- PNLE weak points: Maladaptive Behaviors, Psychiatric Nursing, Fluid & Electrolyte Balance
- Students struggle in high-cognitive areas despite doing well in foundational subjects.
- Lack of focused review, remedial instruction, and feedback limits performance.
- Academic support must be restructured to meet discipline-specific weaknesses.

RESEARCH GAP / PROBLEM

- Despite the existence of review tools and centers, students face:
 - Expensive, scattered, or irrelevant study materials
 - No clear tracking of progress or personalized feedback
 - Tools that are generic or focused on international content
- Technology and education gap: There is no centralized, locally-relevant, and adaptive review system aligned with PRC formats.
- Students need tools to boost confidence, structure, and exam readiness.

PROPOSED SOLUTION - MEDACE

- MedAce is a smart web-based platform for board exam review and analytics.
- It focuses on these disciplines:
 - Nursing, Medical Technology, Psychology, Physical Therapy, Radiologic Tech, Nutrition
- Core Features:
 - Mock exams per subject with feedback and analytics
 - Adaptive testing and learning recommendations
 - Simulated PRC-style exams and dynamic dashboards
 - Mentor access for progress monitoring

SYSTEM CAPABILITIES

- Subject-specific content for allied health courses
- Visual analytics on performance and study trends
- Personalized quiz paths based on weaknesses
- Adaptive tracker that evolves with user progress
- Local content only: Fully aligned with Philippine licensure standards
- Mentor interface for guided support

BENEFICIARIES

- Primary: WCC Allied Health 4th-year students and board exam reviewees
- Secondary: Educators needing insight into student progress
- Benefits:
 - Improved academic readiness
 - Increased motivation and reduced anxiety
 - Better exam outcomes and employability

REFERENCES

- **Salvosa & Malijan (2023), Enoc et al., Gaa et al.**
- **Standard Insights (2023), Abdusamed & Beshir (2023)**
- **1NURSE (2023), Course Hero Review Docs**
- **IRJMS Multidisciplinary Scope (2025)**



**Thank You
Questions &
Clarifications**