

**Project Title:** The Notification Gap

**Name:** Sean Gabriel G. Vinluan

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## I. Introduction

The transition to digital-first learning has unintentionally made it harder for students to focus. While learning management systems (LMS) were designed to streamline education, there's too many PDFs, email threads, and multiple portal logins just to monitor work that needs to be done. This report addresses the growing difficulty students face in tracking assignments.

This issue is highly relevant because as educational technology scales, the cognitive load on students to manage that technology scales with it. The impact also extends to educators who face higher rates of late submissions.

## II. Problem Description

The core problem is not a lack of student effort, but the exhaustion of mental energy caused by navigating different sources of information. Students today are often required to check a minimum of two to five different interfaces. Such as Google Classroom, personal email, and Moodle, just to check if they've missed a due date.

### Observations and Data

- **System Overload:** 47% of college students have missed critical deadlines (assignments, payments, or registration) because they were simply unaware it was due. (**Pathify, 2025**).
- **Stress Correlation:** Institutional digital systems are a primary stressor; 57% of students say their school's digital experience causes them stress, and 41% report this stress negatively affects their academic success (**Pathify, 2025**).

### Limitations and Challenges

Current solutions, such as manual planners or generic calendar apps, require manual entry.

## III. Proposed Solution

We will create a centralized deadline aggregator designed to visually lay out tasks in a clean, intuitive interface. Basically a "single source of truth" by utilizing automation and AI to bridge the gap between data sources.

### Key Features

- **Scrape and Parse:** Use OCR technology and free cloud AI LLMS to instantly turn activities into a calendar of actionable tasks.
- **API Integration:** Securely connects to major LMS platforms (Moodle) to pull real-time updates on assignments.

- **Priority Heatmap:** A visual dashboard that color-codes tasks based on their impact on the final grade versus the time remaining.
- **One-Click Notifications:** Scheduled push notifications that provide a direct link to the specific submission portal.

## **Target Users and Expected Impact**

The primary users are high school and college students. The expected impact is a measurable reduction in late submissions and a significant decrease in anxiety. By automating the tracking process, the solution restores student focus to the actual learning material rather than the logistics of submission.

## **IV. Conclusion**

This systemic issue is caused by the rapid and uncoordinated growth of educational software. This system offers a bridge that creates a clear visual roadmap for activities. By reducing the cognitive load of assignment tracking, we empower students to spend less time "managing" their education and more time actually learning.

## **V. References**

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