1279-GC

Leaty: An AI-Assisted Academic Organizer for Course Planning and Prioritization

Abstract

Leaty converts course documents into reviewed semester information and explainable academic priorities. AI-assisted interpretation identifies candidate deadlines, assessments and policies. Students correct and confirm these details before planning. A Flutter application connects to a TypeScript backend and persistent academic records. Evaluation uses regression tests, controlled backend checks and recorded demonstrations. An attendance and priority checkpoint passed 271 backend tests and 70 offline mobile tests. Results support the covered workflows. Document selection, some same-day priority cases and further device validation remain open.

Problem and scope

Students coordinate deadlines, assessment requirements and course policies across several classes. A useful organizer must preserve those details and explain which obligation needs attention.

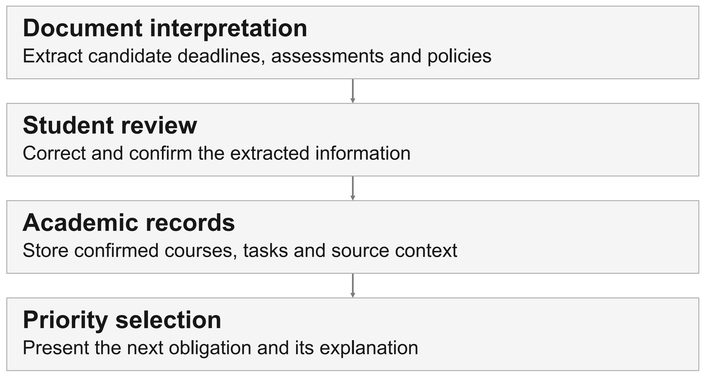
This capstone connects document interpretation, student confirmation and academic priority logic in one mobile workflow.

Project objectives

1. Structure course information for student review.
2. Organize confirmed work across a semester.
3. Explain priorities using academic evidence.
4. Confirm changes before saving them.

System approach

The student reviews high-impact information before the backend uses it for planning. Each layer has a distinct responsibility.

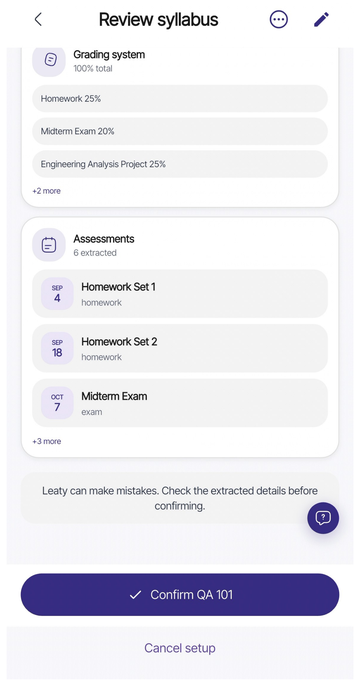


Flutter, TypeScript/Express, MongoDB

Product demonstration

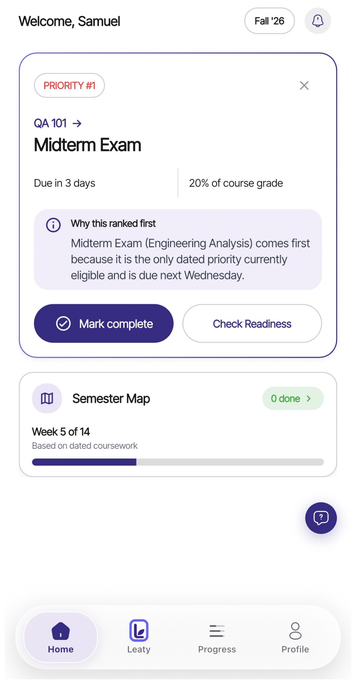
Recorded interface examples from October 2026 [2]

Review and confirm



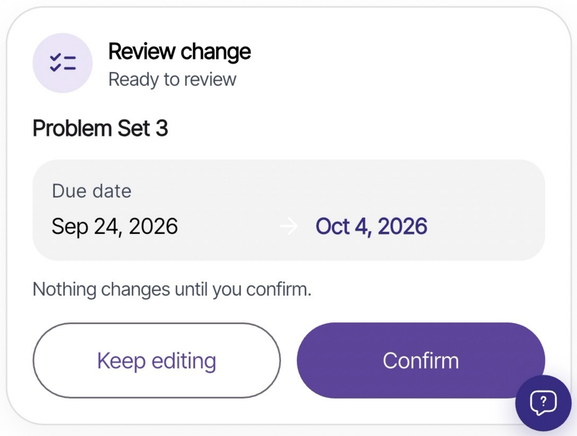
QA101: extracted assessments and the confirmation control

See why it comes first



QA101: the selected exam and its stated ranking reason

Confirmed changes



QA102 is a separate example. The student reviews the proposed date and confirms it before saving.

Technical results

Attendance and priority checkpoint
October 4, 2026 [1]

271
backend tests passed
15 focused suites

70
offline mobile tests passed
3 parser/repository files

Checks across three example courses confirmed upcoming attendance generation while preserving an earlier homework deadline as the overall priority.

Evaluation method

Automated regression fixtures cover schedule boundaries, timezone behavior, ordering and inactive-course exclusions.

Read-only backend checks examine generated obligations and priority queues. Recorded walkthroughs document review and confirmation controls. Device observations remain a separate evidence category.

Limitations

Focused suites passed. The broader repository run retained baseline failures. Test counts do not measure extraction accuracy or student benefit.

Later device checks left document selection and some same-day priority cases unresolved [3]. Notification delivery remains unverified. Student feedback and usability evaluation will follow.

Preliminary conclusion

Leaty implements a document-to-plan workflow with student confirmation and explainable priorities. The evidence supports specific tested behaviors and defines the remaining validation work.

Evidence and project

[1] Leaty attendance/priority verification record, Oct. 4, 2026.
[2] Recorded product walkthroughs, Oct. 2026.
[3] Engineering handoff and device observations, Oct. 9, 2026.
Project: leaty.ai

KENNESAW STATE UNIVERSITY
COLLEGE OF COMPUTING AND SOFTWARE ENGINEERING

Author(s): Kingsley Ndupu, Abel Uzoka, Samuel Owoade
Advisor: [Name to be added]

Master's Capstone
C-Day 2026