

DRP10 - HCD Portfolio

Ryan, George, Steven, Leonard

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User Stories

Alex



Alex, 1st Year Chemistry Student [1]

Alex is a 1st year Chemistry student who lives in halls and often studies alone. He finds it hard to start tasks unless deadlines are near. He's tried apps like Notion and Forest but finds them easy to ignore. He feels stuck in a cycle: procrastinating out of stress, and then stressing because he's behind. He thrives in social environments, but doesn't know many peers on the same schedule. However, once he starts working, he finds it easy to keep going, the momentum carries him to the finish line, often only barely before the deadline.

"It's a vicious cycle. I'm behind because of the stress from falling behind last coursework."

Elena



Elena, Postgraduate Student [2]

Elena is a final-year postgraduate student working on a thesis in a niche topic. She used to thrive in undergraduate group projects but now feels isolated. She finds it hard to track progress and misses having others to bounce ideas off. Without peers working nearby, she often loses motivation and procrastinates.

"I feel a positive pressure to contribute when I'm in a group, but I always lose track of my work on my own."

Stakeholders

Stakeholder	Interest Level	Notes
University Students	High	Core users — the app was designed with them in mind
General Student Population	Medium	Potential adopters, not directly involved
General Public	Low	Procrastination is a common issue for many people

Table 1: Main Stakeholders

Stakeholder	Interest Level	Notes
Student Societies	Medium	Could promote or test the app
Tutors/Mentors	Medium	Might recommend app if linked to productivity
Campus Well-being Officer	Medium	Procrastination correlates with stress and anxiety

Table 2: Potential Stakeholders

Our initial main stakeholder was the general public. Through research we then realized that students are more prone to procrastination, especially college students[3]. Hence our main focus shifted to primarily college students. University students in particular have the kinds of workloads than can cause stress, but also can be managed by productivity apps, in comparison to younger students or working adults respectively.

Although broader stakeholders such as mentors or wellness officers could potentially play a role in future institutional integration, we did not consider them active stakeholders in this project phase.

This focus helped us stay grounded in the peer-to-peer accountability dynamic and ensure that our design choices were closely tied to student needs and feedback.

Current State Mapping

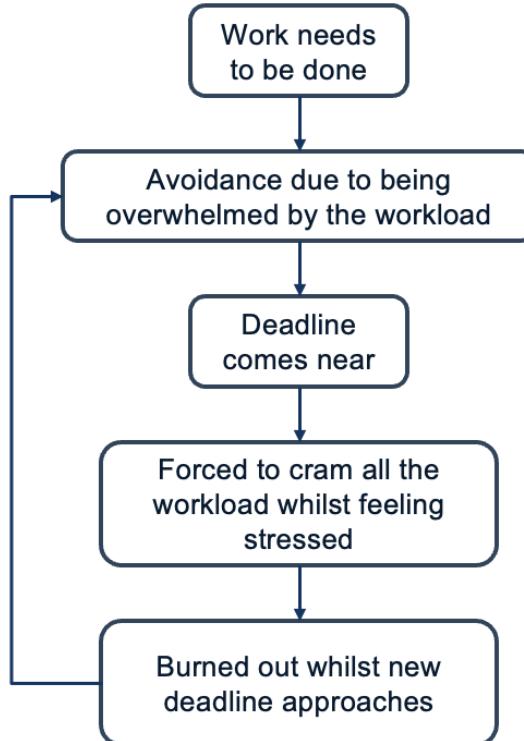


Figure 1: Current State Flowchart

Step	User Action	Thoughts	Feelings	Pain Points
1	Work is assigned	"This looks like a lot. I'll do it later."	Overwhelmed	No structure or motivation to get started
2	Avoids starting	Procrastinates	Anxious, Guilty	Paralysis from perceived workload
3	Deadline approaches	"Crap, I have no time left."	Panicked	Time pressure builds stress
4	Cramming to finish	Rushing through everything	Stressed	Low-quality work; poor time management
5	Barely finishes	"I'm exhausted. I can't do this again."	Burned out	No time to recover; cycle starts over

Table 3: Current State Table

Initial Qualitative Research

We conducted a survey with 30 participants, most of whom were college students as they are our target audience. Through quantitative research on motivation theory, we came to the conclusion that people procrastinate because they are unable to start their tasks. Hence our survey mainly focused on various metrics to help the user getting started.

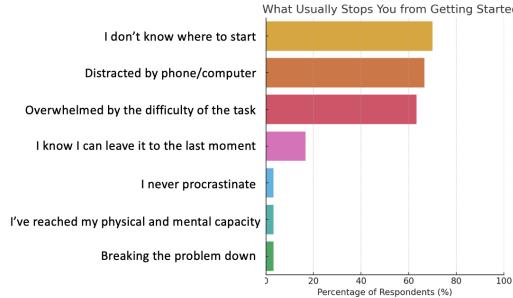


Figure 2: Survey question 1

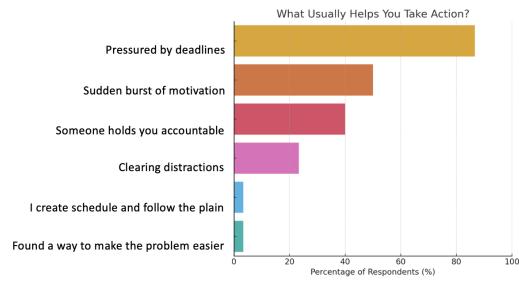


Figure 3: Survey question 2

Through analyzing the survey results, we realized that we need help the user to visualize the workload, help them start on their tasks through motivation, and ensure that they keep their momentum after they get started.

Problem Context & Opportunity Statement

Problem Context: Procrastination is a widespread problem, often linked to productivity and mental health. It is estimated that procrastination costs businesses an estimated \$10,396 per employee per year in lost productivity (2012)[4]. It has also been shown to correlate with higher levels of depression, anxiety, and stress[3].

Opportunity Statement: *"How might we help students build meaningful structure and motivation in their daily lives, so that they can get started and maintain their momentum"*

Mock-ups, Prototypes, and Evolution

Initial Mock-up

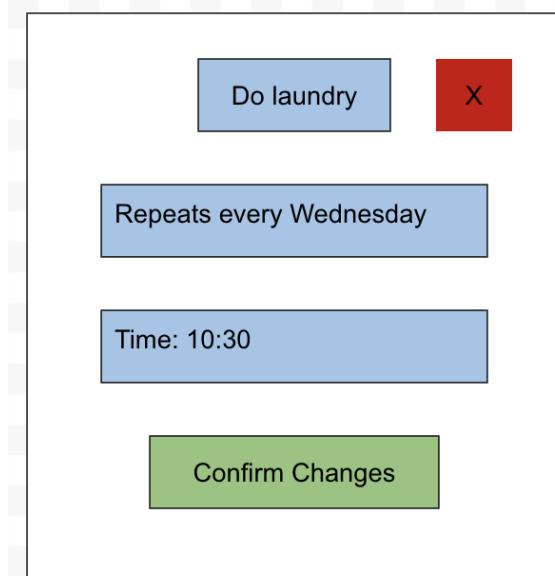
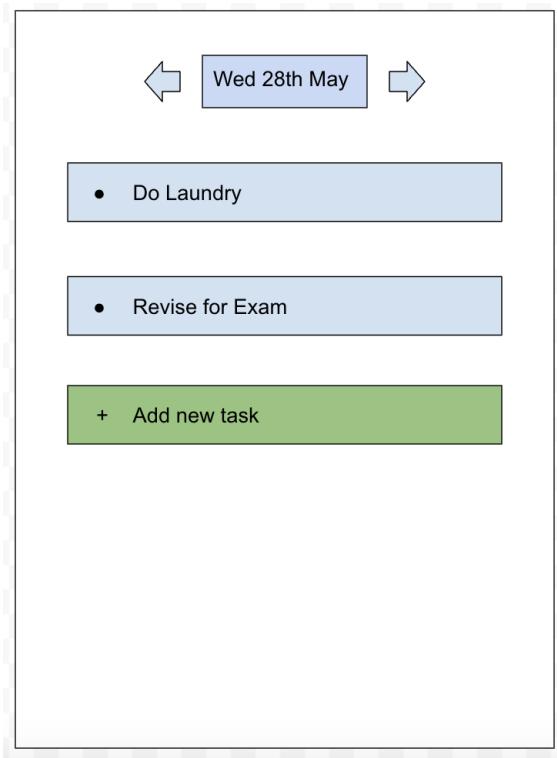


Figure 5: Mock-up task options menu

Figure 4: Mock-up task list

Iteration 1 - Task List(Baseline MVP)

What we built: A simple task list where users could log tasks.

Feedback insight: While users appreciated the clarity and simplicity, many admitted they still don't feel motivated.

Quote: "It looks clean, but I just don't feel like it's that helpful. Seeing the tasks doesn't actually prompt me to do them."

Progress tracking: The number of tasks marked done per user averages 2.1 per day during this stage.

Takeaway: Awareness alone wasn't enough to drive action — users needed external motivation.

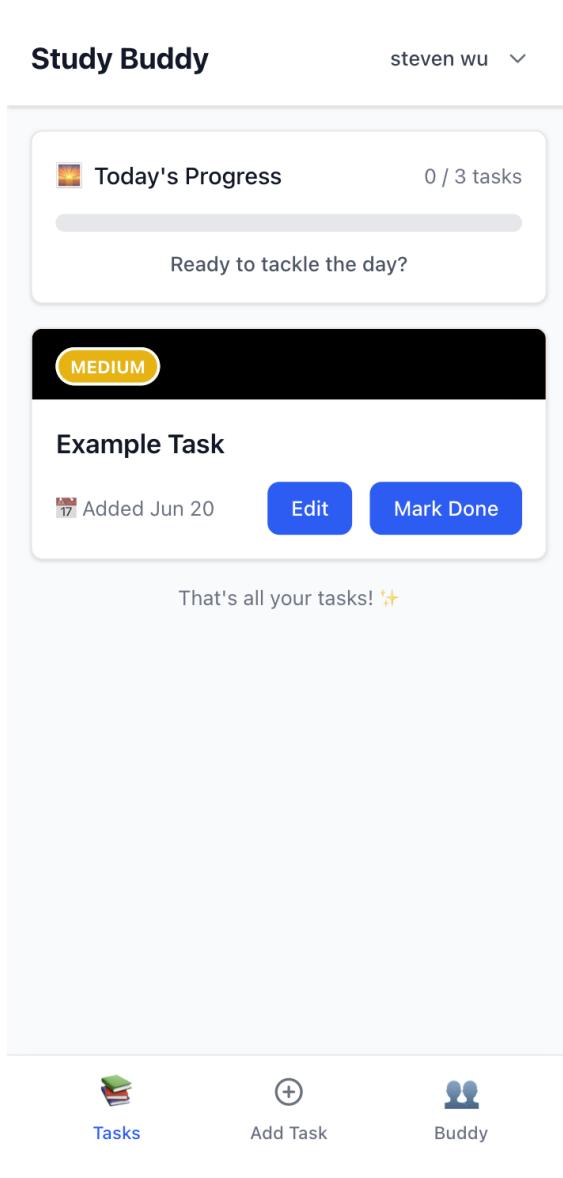


Figure 6: Task list page

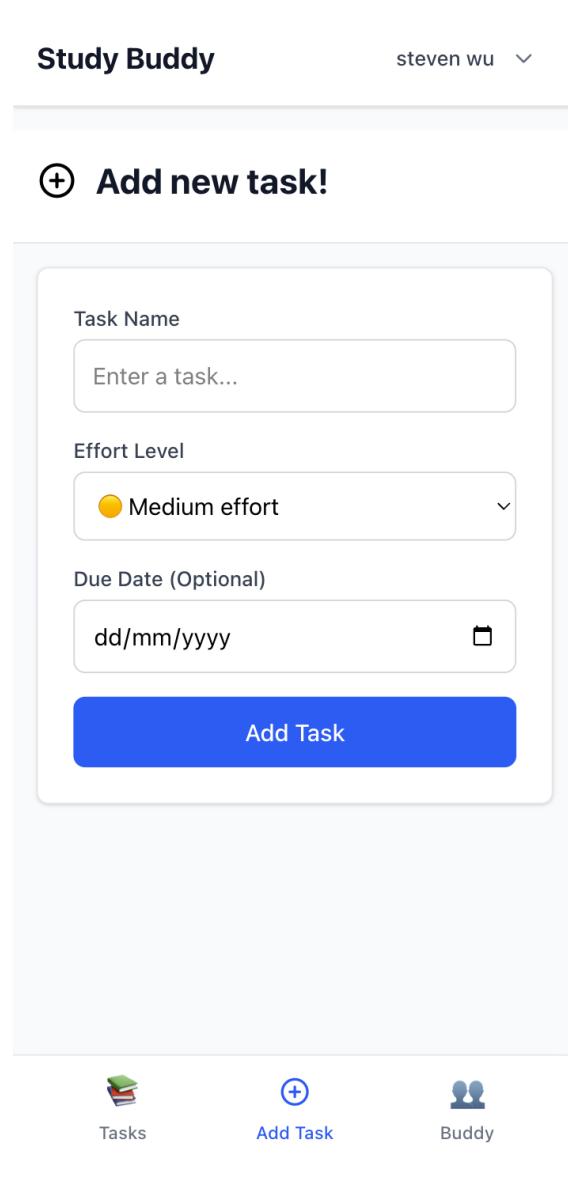


Figure 7: Add task page

Iteration 2 - Buddy System

What we built: Users could pair with a buddy who could see their tasks. They could now have solo and buddy study sessions.

Feedback insight: Motivation increased with visibility. Users felt more pressure to start when someone else could see their tasks.

Quote: "This does help but just the idea of knowing that my friend can see my progress still relies on self discipline."

Progress tracking: The number of tasks marked done per user averages 2.4 per day during this stage.

Takeaway: Social presence had a positive impact, but did not guarantee follow-up. We need to make the system stricter without feeling intrusive.

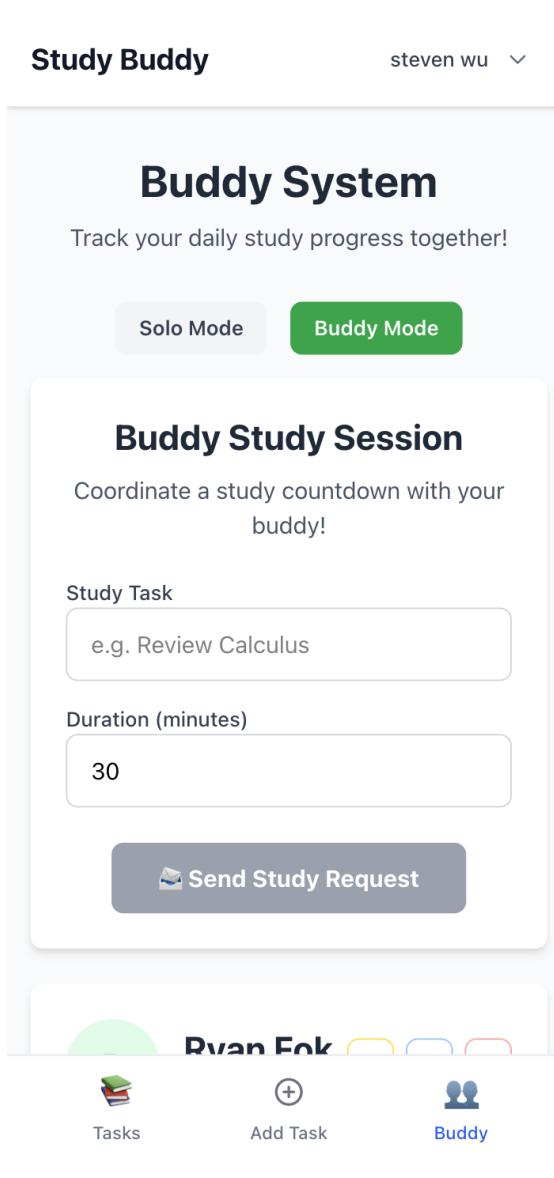


Figure 8: Buddy study session

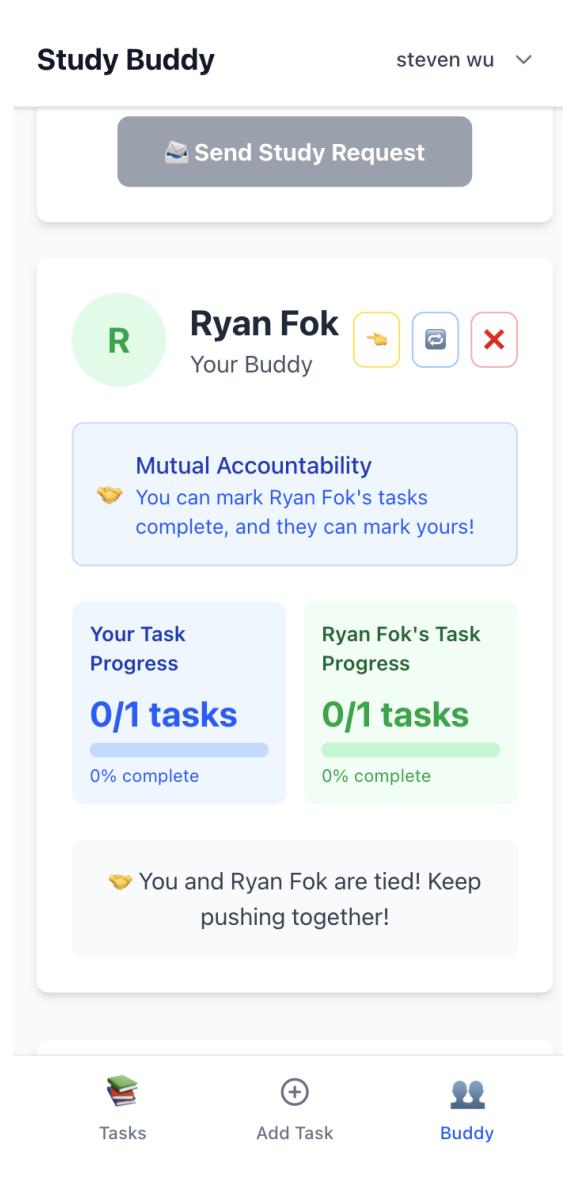


Figure 9: Buddy task progress

Iteration 3 – Shared Accountability

What we built: Only your buddy could mark your task as complete. A “poking” feature was added to nudge your buddy.

Feedback insight: Users responded well to having to “prove” task completion to their buddy.

Quote: “I actually do the task now, because I know they’re waiting to mark it off.”

Progress tracking: The number of tasks marked done per user averages 2.3 per day at the start of this update and increased to 2.5 per day within 5 days time.

Takeaway: Social accountability needed to be active, not passive — the change increased task completion rates and introduced a stronger sense of responsibility.

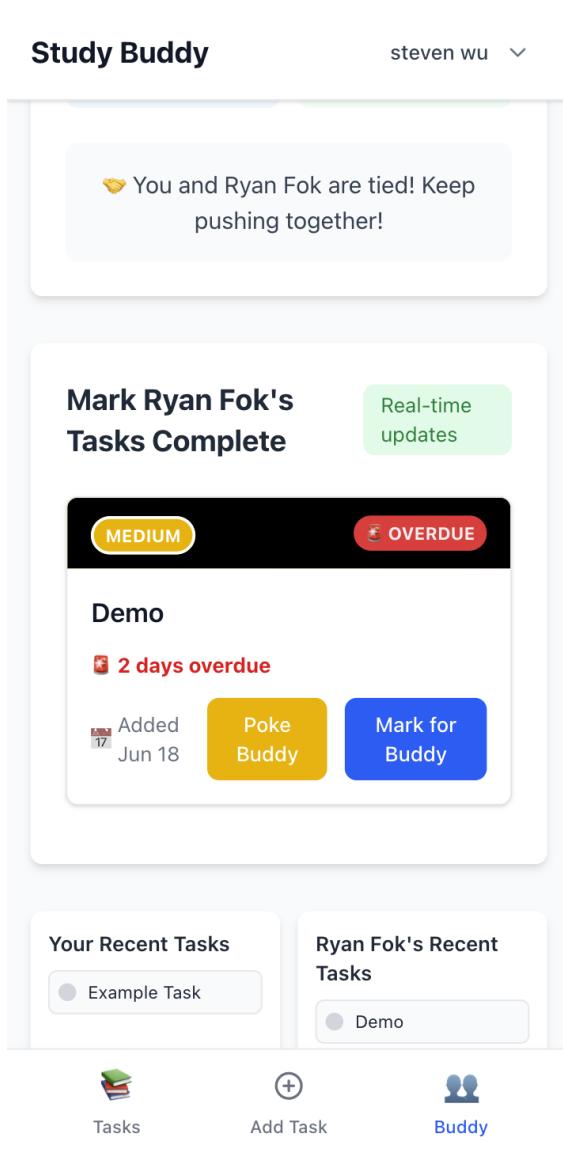


Figure 10: Buddy's task

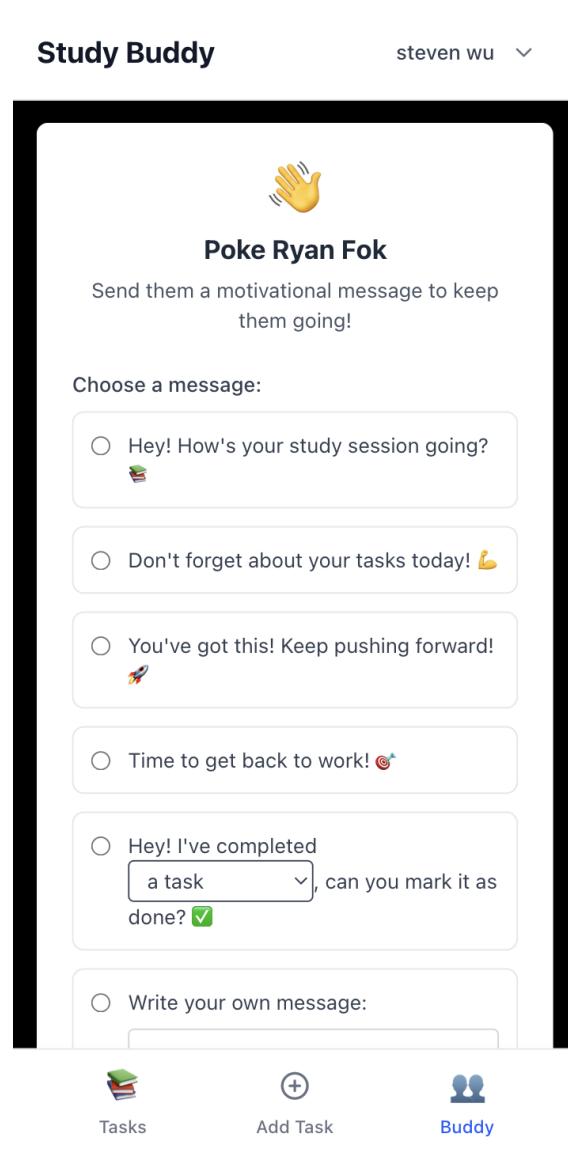


Figure 11: Poking system

Future State Journey Map

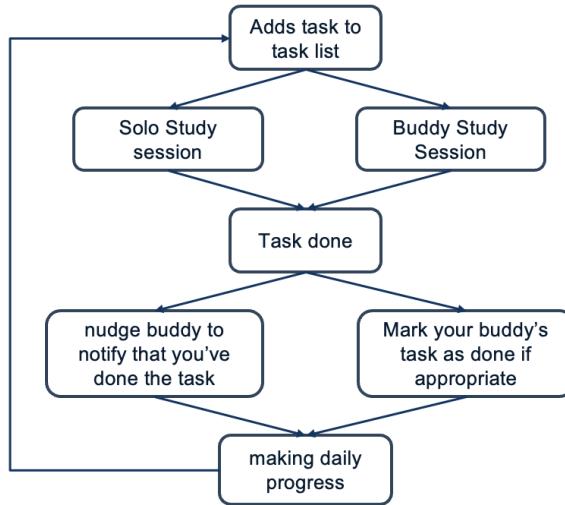


Figure 12: Future State Flowchart

Step	User Action	Thoughts	Feelings	Improvements
1	Adds task to task list	"I can now visualize my workload."	Clear-headed	Task is captured in a system, not just in their mind
2	Chooses solo or buddy session	"Should I do this alone or with my buddy today?"	Empowered, Supported	User has flexible accountability structure
3	Completes task	"That wasn't so bad."	Productive	Smaller, consistent task completion reduces stress
4	Notifies buddy or marks their task as done	"I've got their back too."	Encouraged	Reciprocity builds engagement and trust
5	Builds momentum over days	"I'm actually staying on track!"	Motivated, Confident	No burnout; daily micro-successes build sustainable progress

Table 4: Future State Table

Project Impact Asset(s)

Impact on Target Audience (University Students)

- Before using the app, students reported feeling overwhelmed, often procrastinating until deadlines.
- After using the buddy system and accountability features:
 - **Improved motivation** — described the buddy relationship as adding “real pressure” that mimicked deadlines, but with less anxiety.
 - **Momentum building** - users developed consistent daily routines and reduced the risk of binge-working.
 - **Lower burnout** — consistent daily action avoided end-of-deadline cramming.
 - **Mutual Support** — users felt “less alone” and “more seen,” especially when receiving pokes or encouragement from buddies during study sessions.

Projected Benefits for Potential Stakeholders

- Student Societies
 - Can run peer productivity challenges using the buddy system
 - Encourages bonding while promoting academic discipline
- Tutors/Mentors
 - Non-intrusive — puts responsibility in students’ hands, while tutors observe trends
 - Anonymised usage trends may help identify struggling students early
- Campus Well-being Teams
 - Identify stress periods through usage spikes (e.g. pokes, missed tasks)
 - Supports preventive mental health initiatives through structured, social productivity

References

- [1][2] Stock photos from freepik.com
- [3] The Nature of Procrastination: A Meta-Analytic and Theoretical Review of Quintessential Self Regulatory Failure, Steel, 2007
- [4] mytimemanagement.com. (n.d.). Procrastination Statistics Show that Procrastination is Increasing. [online]
- [5] Associations Between Procrastination and Subsequent Health Outcomes Among University Students in Sweden, Johansson et al, 2023