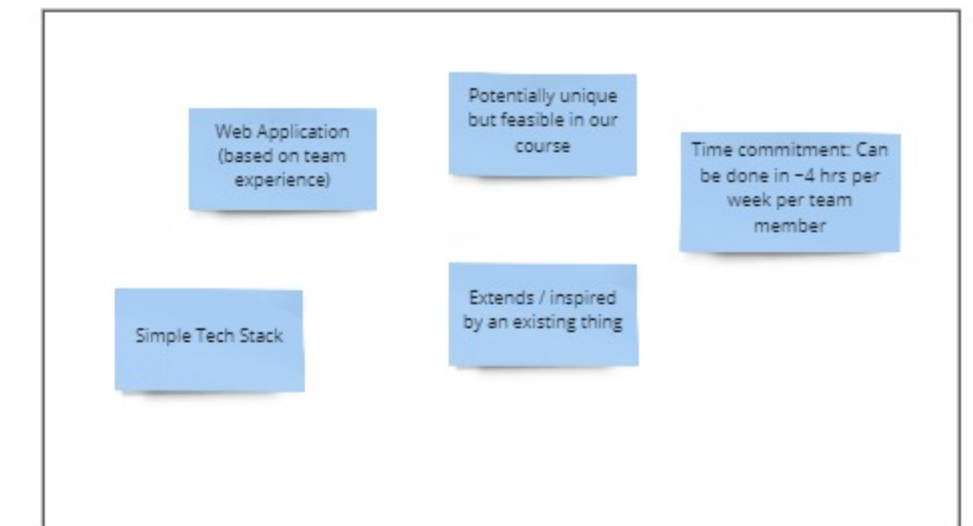


Brainstorming Session 09.11.2020

Constraints



Initial Brainstorm



Downselected Ideas

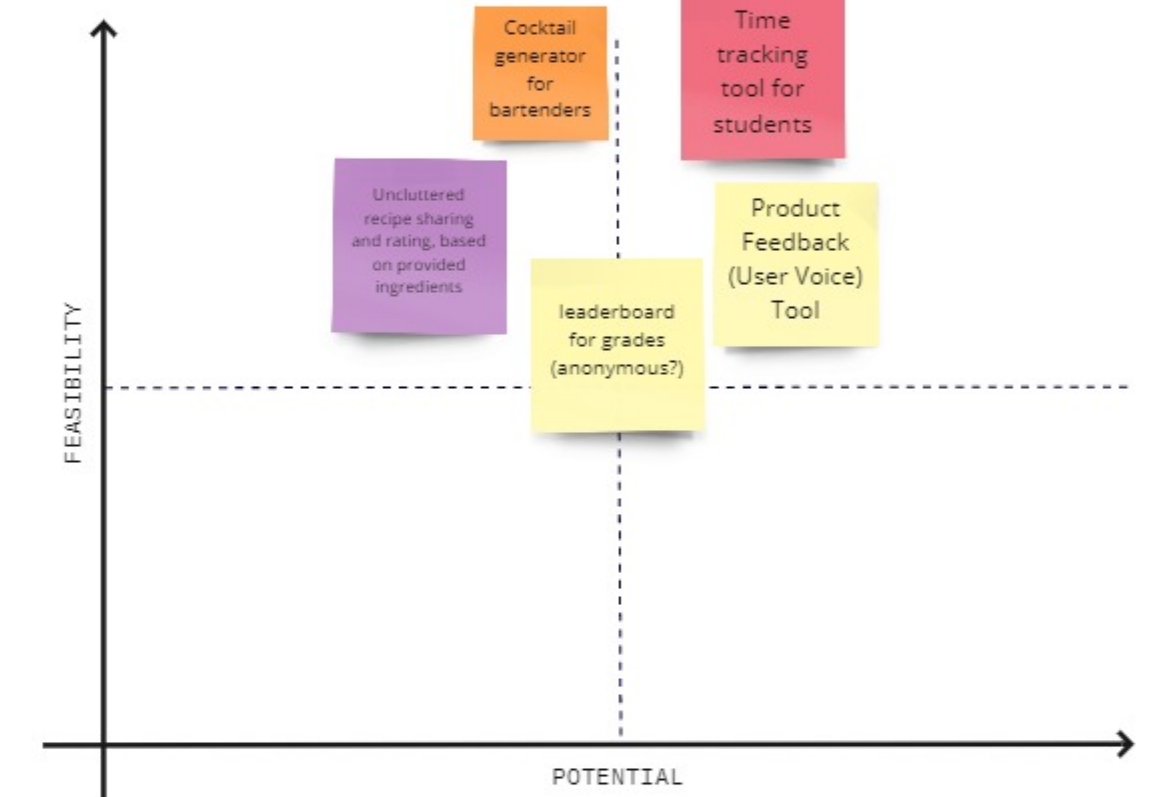


Dot Voting



Dot Voting

Informs



Research Scope

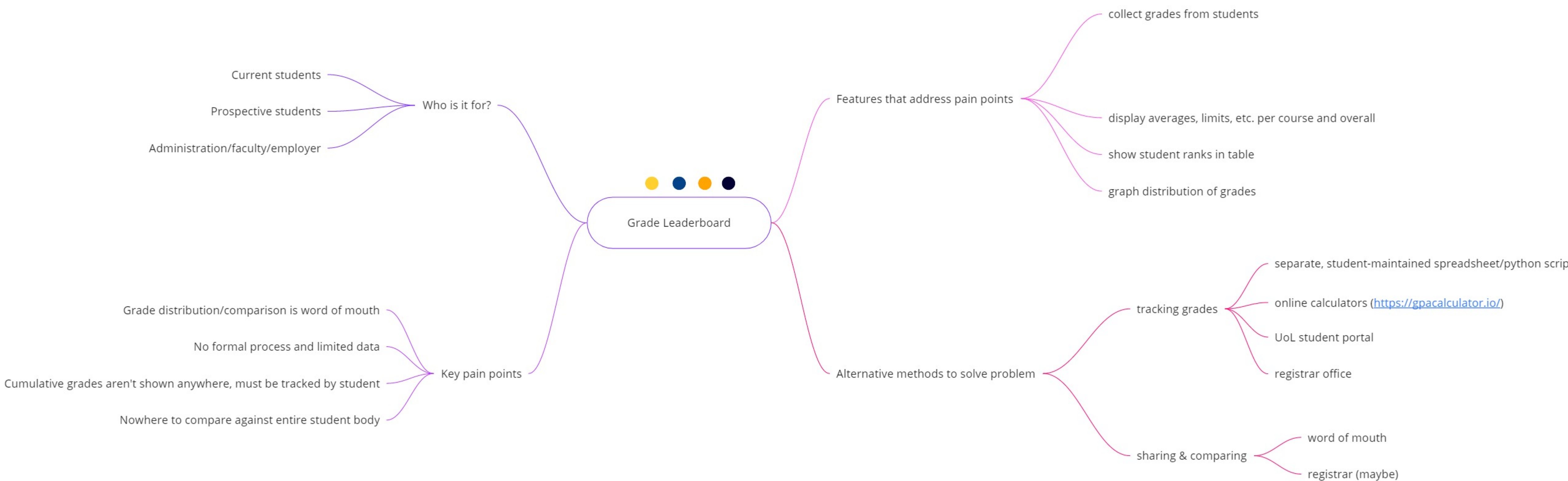
What are other methods of accomplishing this task?

Who is the customer?

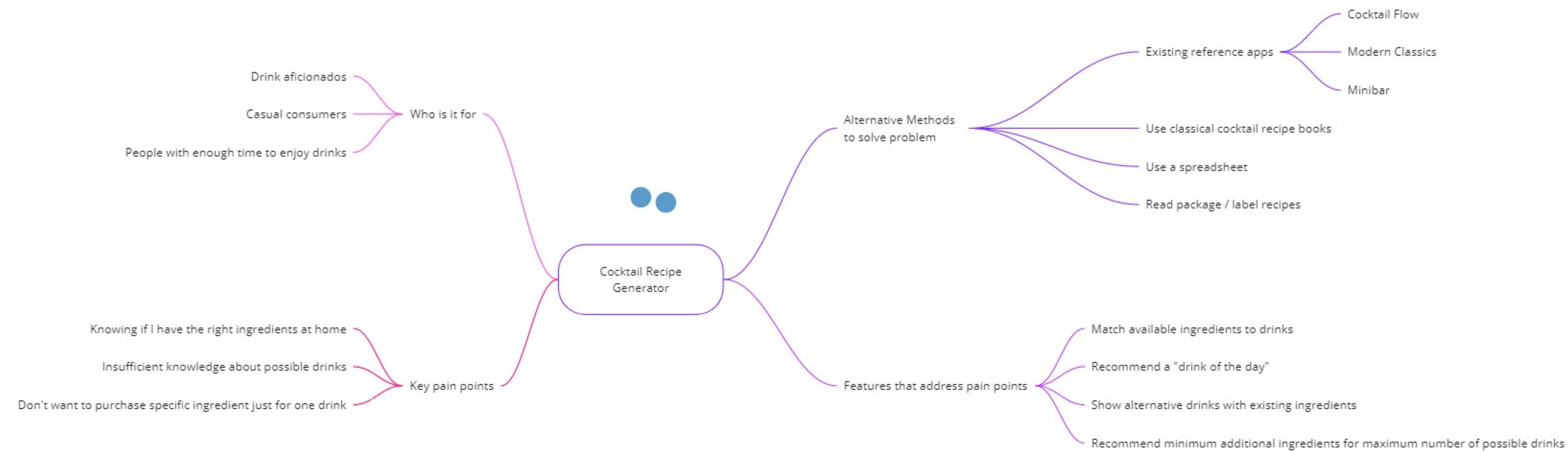
What are the main pain points today?

What is a potential set of features that would address these pain points?

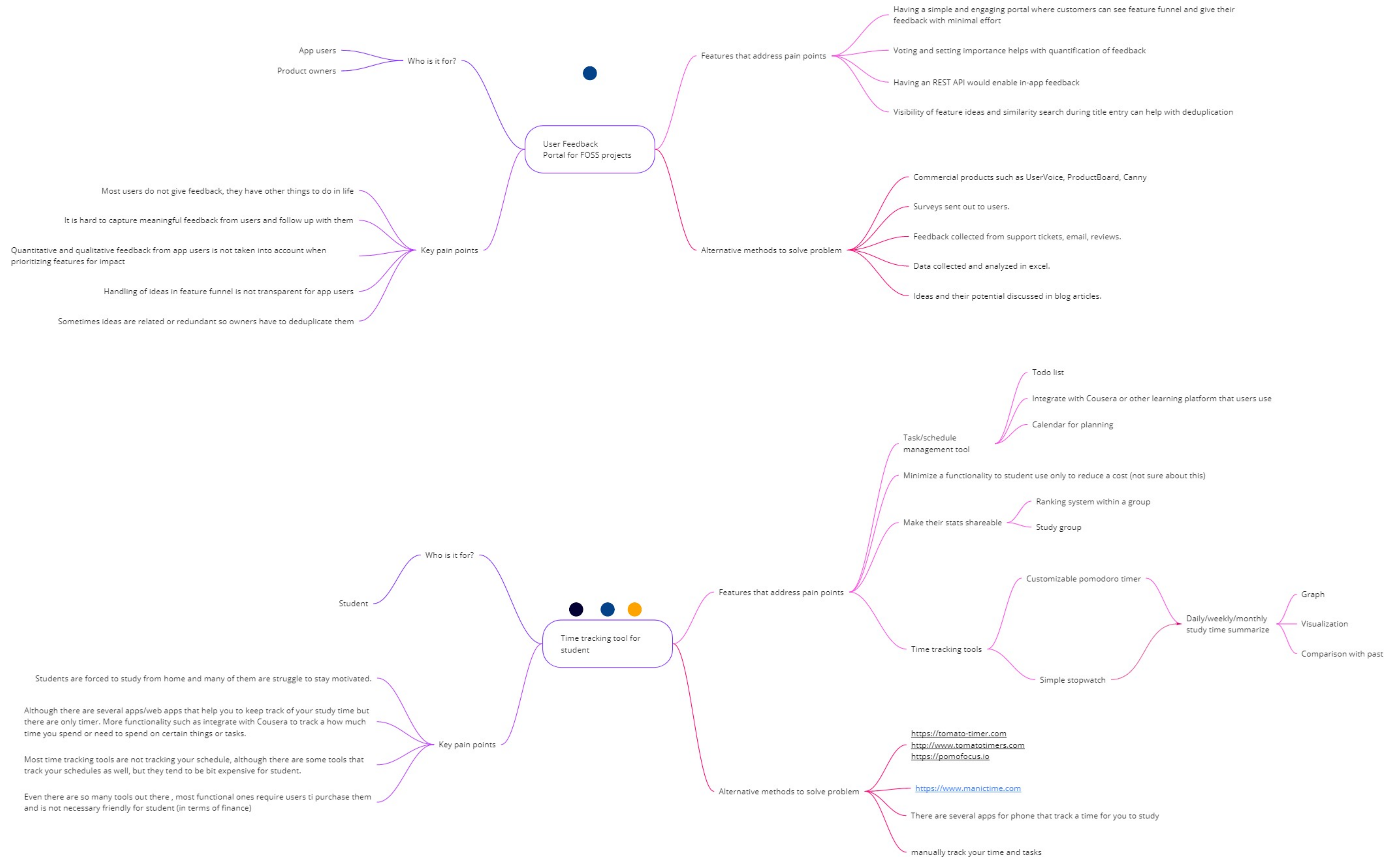
Project Selected 16.11.2020



Projects Reviewed and not selected 16.11.2020



Projects Reviewed and not selected 16.11.2020



Research Questions and Method Proposals 19.11.2020

How do students currently keep track of grades?

- compile list of known tools
- ask students in slack

How comfortable are people with sharing their grades?

- slack poll
- count participation rate in slack threads

Would students be more compelled to share grades if it's anonymous?

- slack poll
- Stanford paper: <https://pprg.stanford.edu/wp-content/uploads/Anonymity-JESP-FINAL-June-2012.pdf>. Suggests anonymity may lower accuracy of surveys overall, but this is because it increases likelihood of "griefing." Does not seem to cover scenarios like grade leaderboard (not a survey, stand to gain if grade is tied to name, etc.)
- stack exchange: <https://skeptics.stackexchange.com/questions/2910/are-people-more-likely-to-give-honest-responses-to-surveys-when-anonymous>

How honest will people be with reporting their grades, anonymously or not?

- find studies on anonymized reporting where they have nothing material to gain

Research Questions and Method Proposals 22.11.2020

1. Why would students want to share their grades with other students?
2. Why would students want to review the grades of other students?
 1. Reasons for 1 and 2 could be competitiveness, curiosity, self-motivation, personal goal setting. Would any of those affect our presentation or feature set?
3. Why is this different from just getting the (presumably anonymized) values from the University? Why is this better?
4. Would there be value in providing automated conversion of grades from the UK standard to standards from other countries?
5. Does anonymity encourage or hinder contribution to the leaderboards? Does it affect accuracy of reporting?
 1. There is probably material available on some of these topics already. The anonymity question may be one that has been researched.
 2. Asking questions of our peers through Slack/Discord/wherever our peers are congregating would be useful for most of these items. As we have a captive audience of students which we can safely assume has a low population of trolls / those that would purposefully pollute the study results.
 3. We could host Slack / Zoom based group or individual interviews with volunteers from our peer group.
 4. If we have family that are or were students we could involve them as well to expand the group beyond our peers at one specific institution.
 5. There are likely some other locations such as reddit where we could post questions for feedback from a wider community. However, this would introduce additional problems in ensuring that the respondents are answering honestly.
 6. There are a number of proposed conversion methods from UK standards to Canadian/US/other standards. Providing those as options and documenting the methodology used should be fairly trivial to accomplish.

SWOT 22.11.2020

Opportunities:

1. Develop this as with Slack integration so it can naturally link to the community of students that already exists, leveraging the University's policing of that population to being actual students
2. Add some flags for people to rank their grades. Perhaps they felt the grade was unjustified, or that it was boosted or dragged down by group participants or life events (ie, only receiving a 50% in a course while feeling stress from COVID)
3. Provide a field for students to provide short advice to others for each course they provide a grade for
4. Store the user's grades for visibility of all their courses at once, which if public could be summarized quickly for sharing to others
5. Provide an overall average per course, per semester, etc to help future students know what to expect and perhaps how much they need to prepare
6. Provide for grade conversions using various methodologies to non-UK standards

Threats:

1. Leak or theft of personally identifiable grade and contact information
2. People will poison the data with dishonest grade reporting
3. If the tool is completely opt-in / crowd-sourced ...
 - a. ... and we allow the removal of information then perhaps people would remove other people's data
 - b. ... people may impersonate other people along with reporting their real or falsified grades
4. Loss of integrations / changes to any APIs we're using
5. Data loss - backups

Strengths:

1. Knowing you have a relatively high grade could be motivating / encouraging / validating
2. Validation if your grade was low but many people report similar grades
3. Highlighting of potentially more challenging courses for future cohorts to allocate more focus and preparation on
4. Highlighting when many people consider their grades unjustifiably low which may help in organizing a more detailed, thoughtful request to the institution to review the grades or rubric
5. Motivation to maintain ones standing at or above a certain percentile

Weaknesses:

1. A small sample size of participants will limit usefulness of averages
2. Those with poor marks or marks they feel are unjustified will likely be less willing to share
3. Those who fail or drop out may be unable (depending on integration) or unwilling to participate, which will artificially inflate all grade averages
4. Without a representative sample of students, the averaged data, graphs, etc will be skewed and could lead to reduced acceptance or usage of the tool
5. If we report anonymously, do we also store anonymously? If so then do we provide for the ability to remove data on request?
6. If the tool is not completely opt-in / crowd-sourced then someone needs to moderate the data insertions and deletions.

Alternate Solutions Comparison Table 29.11.2020

Tracking

	Python Grade Calculator	Degree Planner	gpacalculator.io	UoL Portal
Track course grades				
Calculate cumulative grades				
Tracks credits				
Granular (coursework vs. exam)				
Converts to other scales				
Determines honors				
Persistent				
Shareable				

Sharing

	UoL Slack	glassdoor.com
Incentivized to submit data		
Can compare to others		
Easily to reference		
Aggregates data		
Includes profile on data source		

Doesn't Contain

Contains

Satisfies Human Need

Set an example for the kids :)

Keep myself motivated using intrinsic competitive drive

Recognize high achievers

Make it to the GOAT list with ranking that remains stable as things change

see honors level (first, second, etc.)

Judge myself against a larger group

See your academic position in border are than just your school

Personal use only: just want a place to keep grades for my own review

to see how student are performing in certain level

Planning: user could pre-enter grades to work out targets for those courses

Tracking grades for future informal sharing (ie to potential employers, etc)

Make sure grades are shared on my terms

Compare my academic achievement relative to my colleagues

see aggregate grade data (avg course grade)

see a grade of student who went to certain school?

Motivation to continue working to keep up with classmates / friends

Desire to share grades but only anonymously so as to avoid judgement

Be able to convert grades to other national standards

track grades per course

track cumulative grades

Alex

Brad

Hayato

Blair

Arjun

Accomplishes Task

The worst possible product



must have

The best possible product

Validate user

validate forms

maintain accurate list of courses

Validation that people are students when they submit

Grades match the programme structure perfectly

Capturing a grade is extremely quick

Device agnostic interface

Can submit anonymously

Form validation and suggested conversions to standardize data

No manual calculations

I can edit previously submitted grades

put grade input form front-and-center

More is better

Option of connecting or sharing

Multiple login methods to user's account

can create a "challenge" private group with your classmates and share grades

Stated position on what happens to user data (selling, available for research, etc)

User control over what is visible to the public

nice to have