

# ENIN 140: Design Thinking

## Assignment #2: Ideate, Prototype, Test

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*A quick recap...*

In A1, we decided to build a solution with our model user, **Jennifer** in mind.

Her problem to solve for:

- Getting **organised**
- Sticking to her **schedule** and
- **Structuring** her day easily in a way that does not demand too much **effort** on her part

JENNIFER

- University student
- attends remote school (possibly hybrid learning now)
- fluent/comfortable using technology
- busy

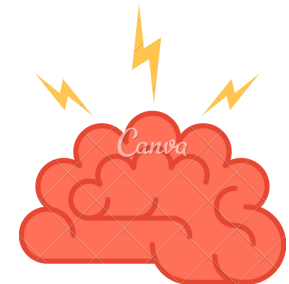
## Brainstorming Solutions

*Process:*

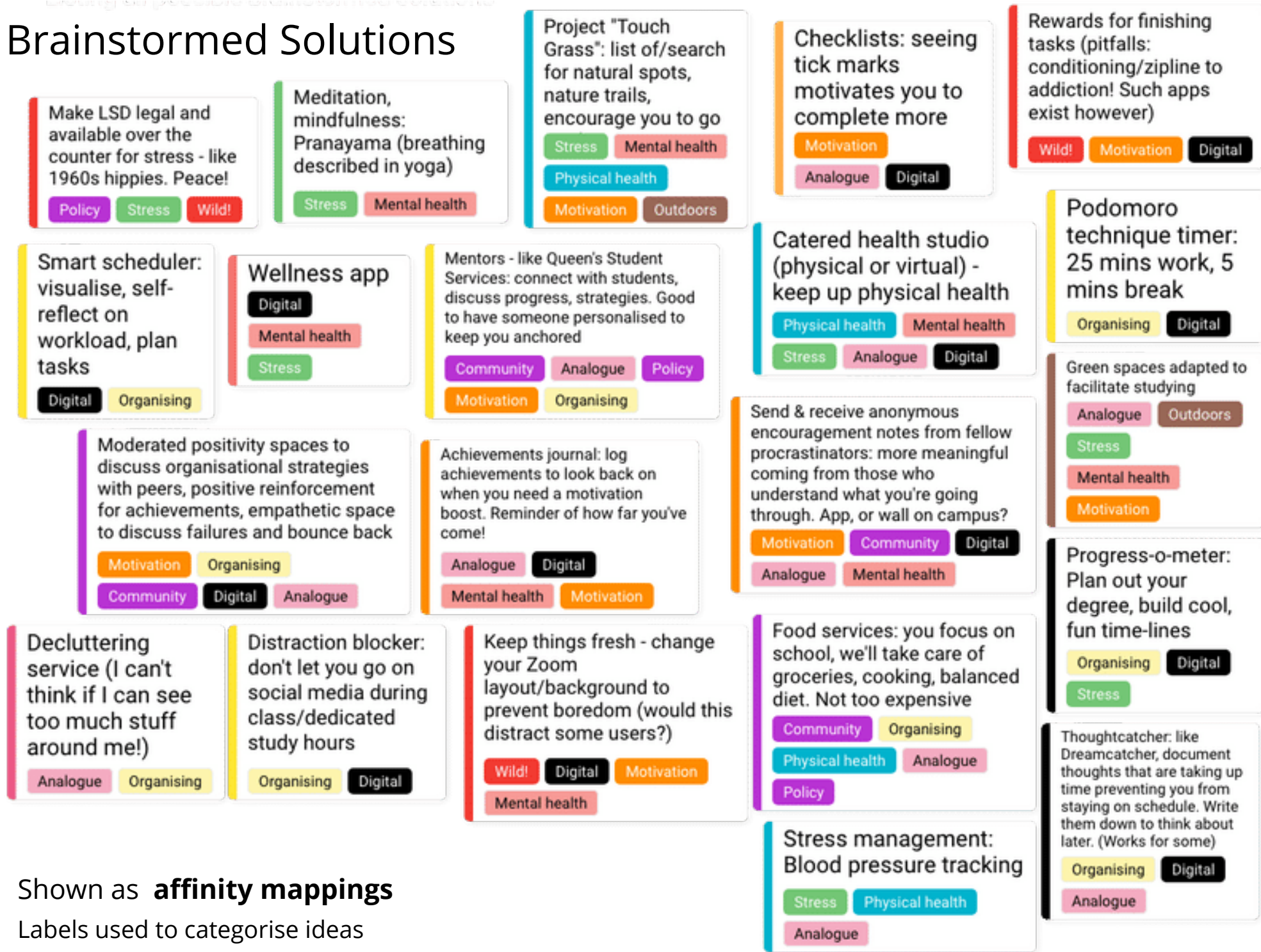
- Came up with solutions in a week - **time-bound brainstorming** [cc1]
- Many short brainstorming *sprints* in different places - to inspire different and **diverse ideas** - on walks outdoors, at home, in offices
  - *Observations*: some ideas inspired from existing products, workarounds & techniques

Tackling the problem of organisation and sticking to schedule from 3 broad angles:

- **stress**
- **motivation**
- **organisation/management** skills

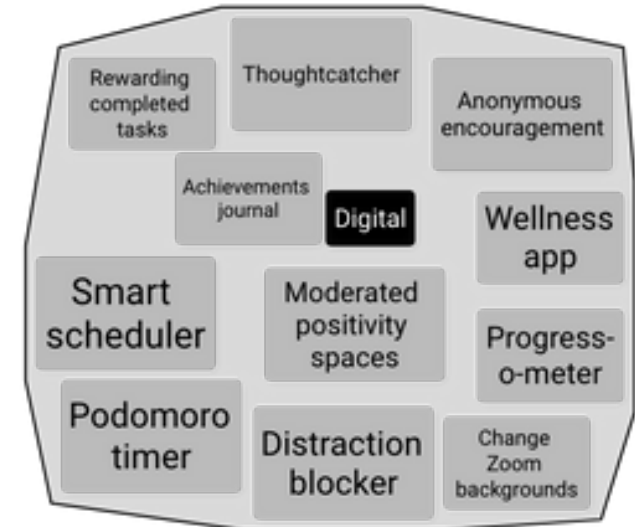
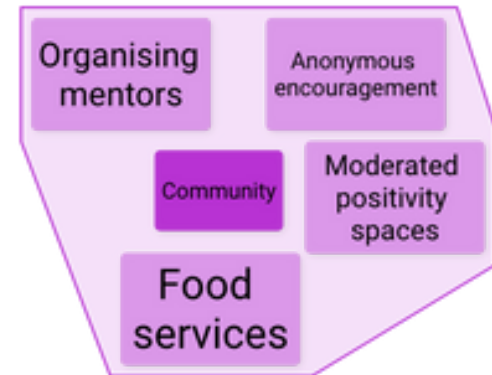
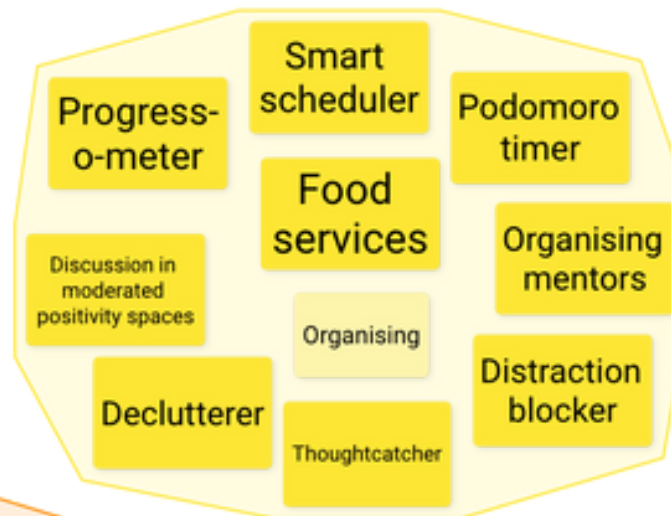
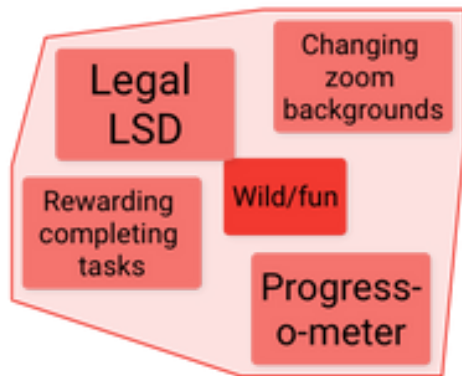


# Brainstormed Solutions



Shown as **affinity mappings**  
Labels used to categorise ideas

# Some of the labels and categories of ideas



## Picking the top 3 solutions

To pick the best 3 solutions:

- **Built on other ideas:** final selected ideas are more elaborate than initial idea. Conceived by putting together bits from other ideas [cc2]
- **Convergence:** consolidating ideas from fields of psychology, physiology, technology, to find the best solution. [cc3]



## Top 3 Solutions (in order of priority)

1. **Smart Scheduler:** Calendar to help **plan**, **visualise** schedule, list and complete **tasks**, keep online class links across platforms (Teams, Zoom, etc.) in one place in an **organised** manner.
2. Distraction blocker: Timer-based software to **limit access to specified websites** during hours indicated as lectures or time intended for studying
3. Organisational **mentors**: to discuss strategies for better time management, organisation, staying motivated, avoiding distractions, etc.

**Solution I worked on: Smart Scheduler.**



**Why?** This solution helps the user:

- **visualise** and **organise** their day into manageable units
- allows them to **track progress** and **workload** - ensure they are **not overburdened** so they can realistically stick to their plans
- **checklist** - remain *motivated* and achieve goals
- avoid *stress* - entire schedule is available without worry of **forgetting** tasks, **progress is visible** to user
- **simple features** + interface - learning curve for user not very high. **Doesn't take much time/effort** on their part



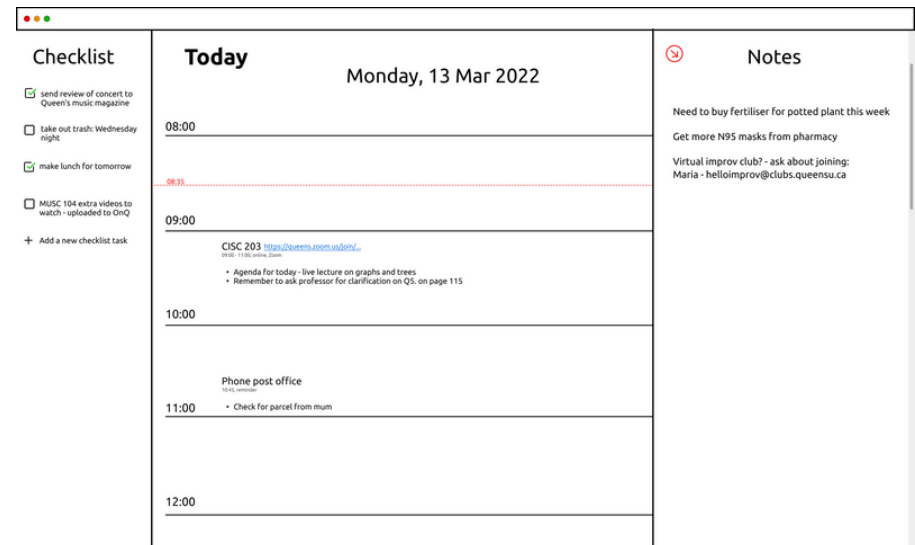
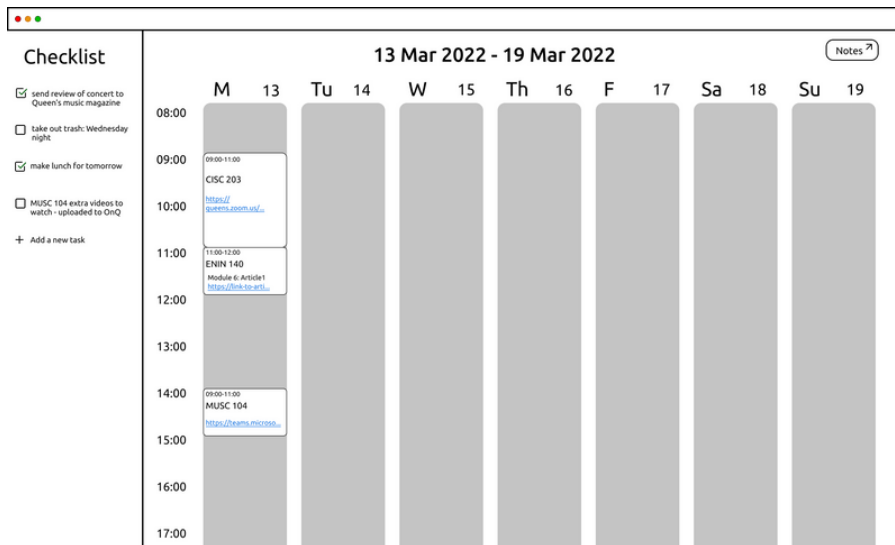
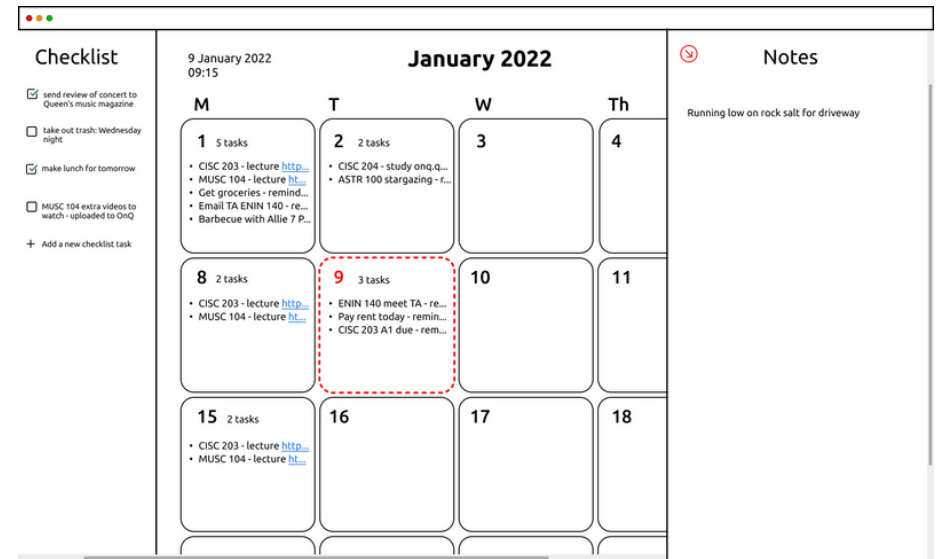


# Prototype

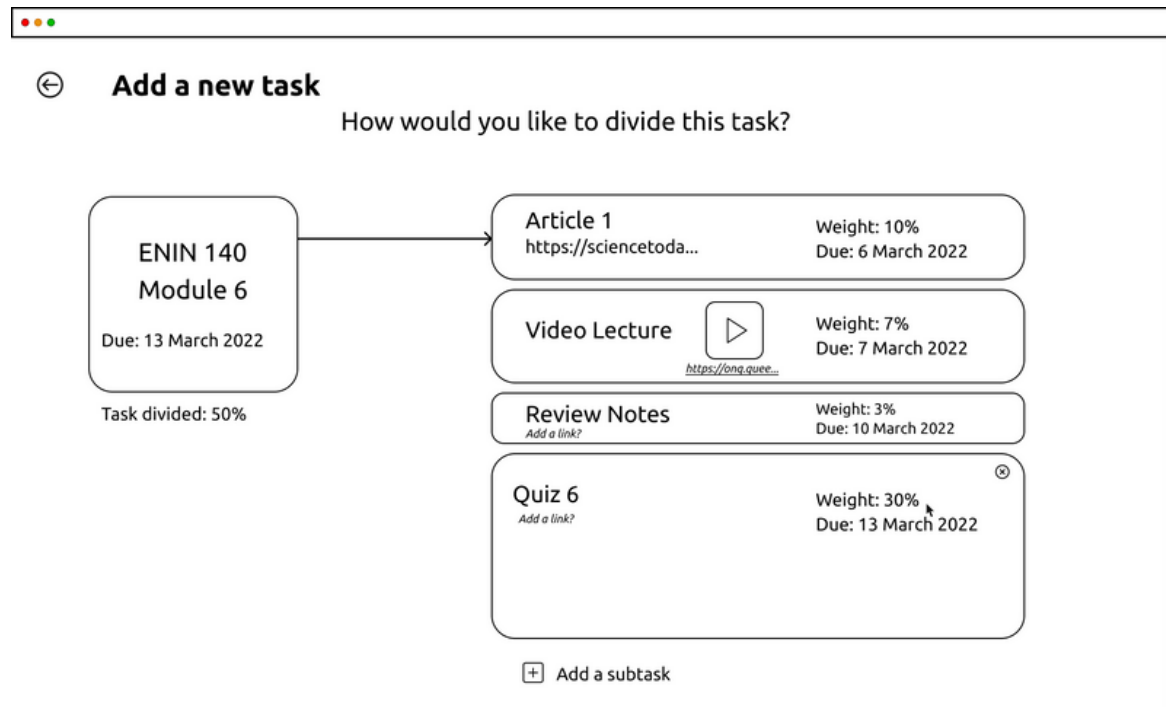
## Method

- First drew a **hand-drawn concept sketch** with some explaining text - like a *pitch/advertisement or storyboard - building to learn* [cc4]
- With that as a guide, made lo-fi desktop wireframe **mockups** - no "moving parts" [cc5]

- Day, Week and Month **views** of the calendar - to **plan events** in advance
- Keeps links from different video conferencing platforms **in one place**
- Checklist** and **Notes** are also visible if the user wishes



- Users can add **courses, events, tasks**
- Helps plan **manageable course load**
- **Visualises** course load to help decide how much *time* to spend on each course
- Helps break up challenging, big tasks into **manageable units**



← Add new event to calendar

Title: ASTR 100

Type: Course

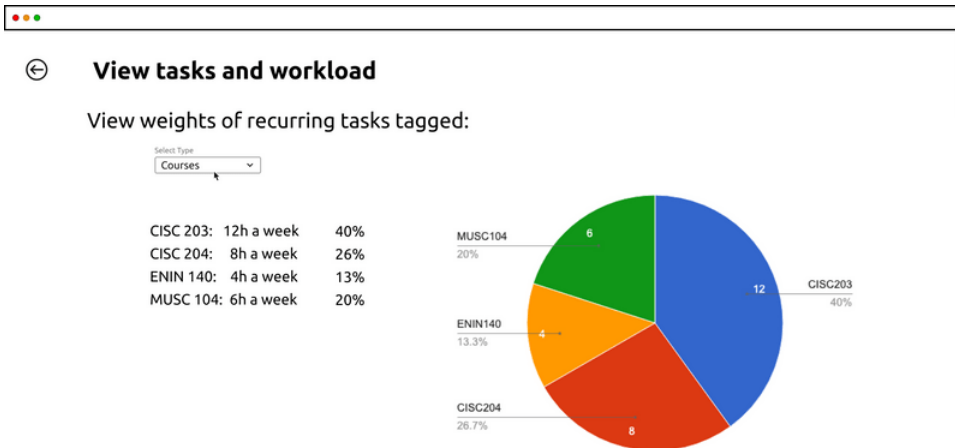
Starts: 5 January 2022 Ends: 8

Time: Mondays, 19:00 - 20:00

Event type: Virtual

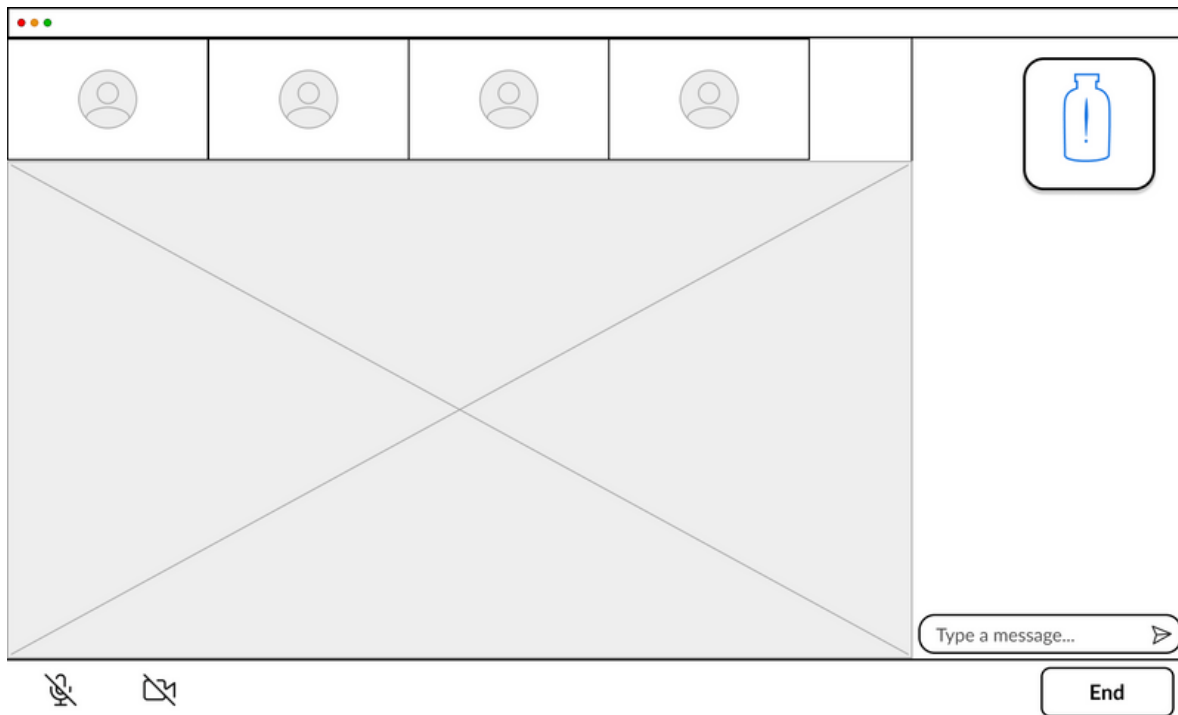
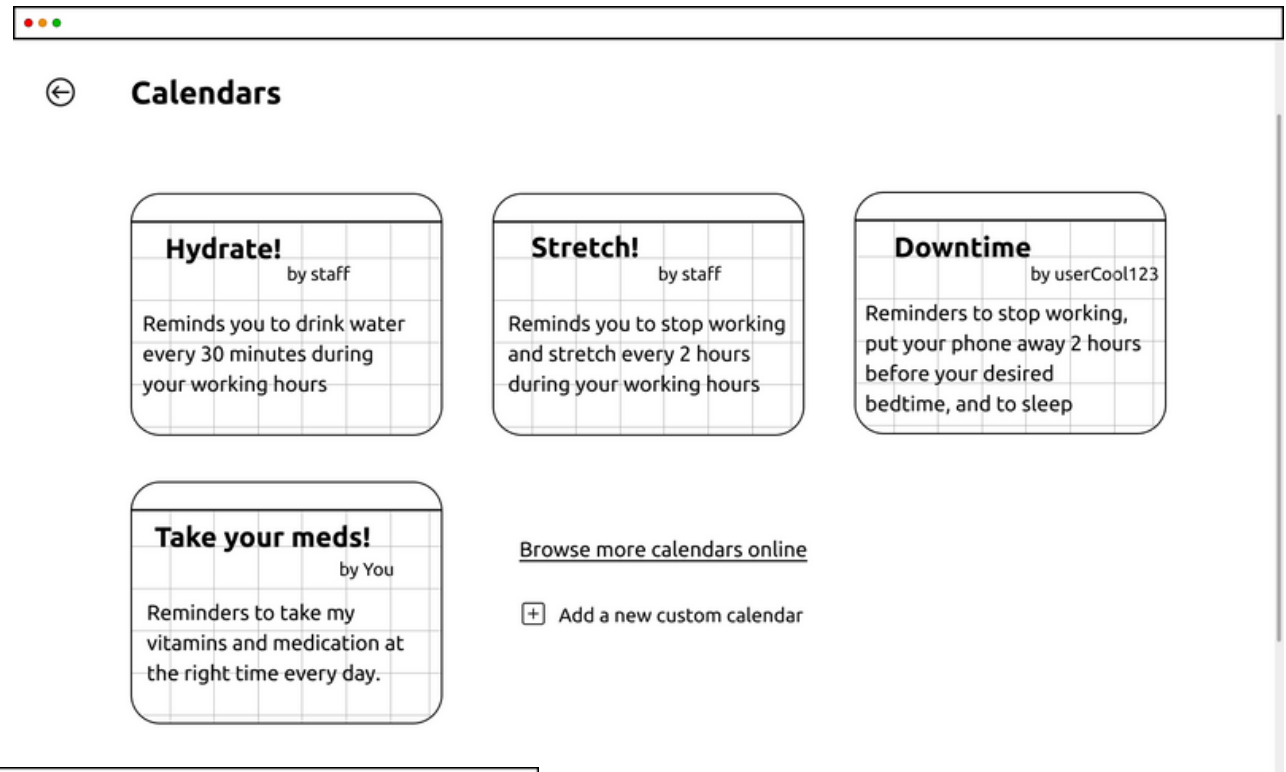
Meeting link: https://teams.microsoft.com/

You have a live event "PHYS 151 lab" on Mondays, 17:00 - 18:30 with 30 minutes of travel time. Is this too close?



Users can subscribe to **wellness calendars**, or create their own

**Why?** - you can't perform your best when you're not healthy



A wellness reminder to drink water, in action

(Custom icons rather than text to avoid distracting user during classes)



# Assumptions and Testing

## Assumptions:

1. People will actually want to **download/install** extra software on their devices
2. The **learning curve** will not be too steep
3. The product will not **irritate** users after a while with constant reminders
4. The product, with constant reminder of deadlines visible, will not cause more **stress** and **anxiety** for some users

**Riskiest assumption:** Product will not add more stress and anxiety for users, demotivate them, or associate negative feelings with the product/solution, by constantly reminding them of deadlines.

**Why?** If the product invokes negative emotions, or adds more stress to users, it *defeats the purpose* of the solution: *to reduce stress of organising!* They will not want to use this product then.

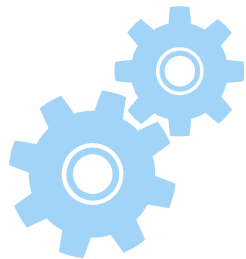


## How can we test this?

**Desirability testing:** To track the *emotional impact* of product on user [cc6]

### Flow of the test:

1. First impressions: **Rapid word/phrase test.** Get users' **initial emotional response** to the product
2. Then, allow them to **use the product in daily life** for a week
  - I shadow them and ***fake the interactions***: manually send text notification reminders
  - give them static calendar prototype with manually drawn **schedule + clickable meeting links**
3. Get **user feedback** on interactions and reminders
  - ask them to make note of *any and* **ALL emotions the product evoked** when seeing **schedule and deadlines**



# Citations and course connections

## Course Connections [cc]

1. 'Rapid ideation, time-bound brainstorming' - *Divergent Thinking, Module 4: Ideate & Define*
2. Build on ideas: "take a small idea, expand it, develop and iterate to make it bigger, stronger" - *Divergent Thinking, Module 4: Ideate & Define*
3. Convergence: "Synthesising findings from across fields of research, refine, combine to get the best solution" - *Convergence, Module 4: Ideate & Define*
4. Build-to-think, a bias towards action - David Kelley, IDEO - *Module 5: Build & Test*
5. A quick, cheap, static mockup with no moving parts can be insightful and more intuitive for users, and makes them more comfortable giving feedback - *Paper or Pixels?/Fidelity, Module 5: Build & Test*
6. Desirability testing: "Feel-good factor" is important to users, design thinkers need to understand people's emotional response, attitude to the product - *Desirability Testing, Module 5: Build & Test*