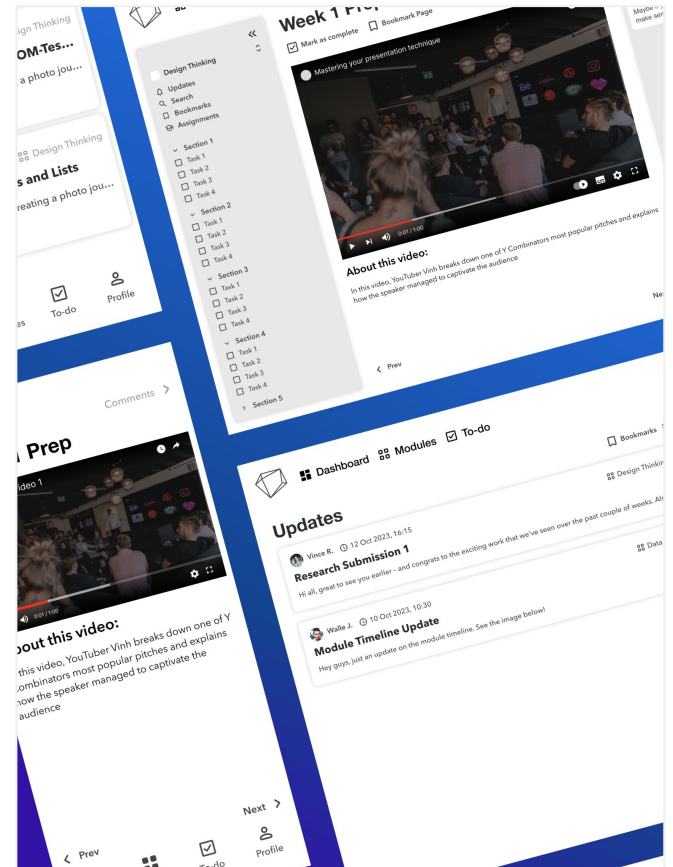# VLE Project

Vishal Mistry

# Project overview



**The product:**

Learning environment specifically for students studying at a particular unnamed startup university.

**Project duration:**

September 2023 – October 2023

Google

# Project overview

**The problem:**

Students were struggling to use the new virtual learning environment and did not enjoy the process of learning from it.

**The goal:**

Craft a simplified, intuitive, and engaging environment for students to work within.

Google

# Project overview

**My role:**

Lead UX designer / Researcher

**Responsibilities:**

User research / Wireframing / Prototyping

# Understanding the user

- User research
- Personas
- Problem statements
- User empathy maps

Google

# User research: summary

Before going into the research I assumed that students didn't enjoy using the new application because it had a poor design as the previous VLE provided an extremely simple and intuitive user experience.

Secondary research involving the analysis of product reviews of the previous VLE provider found that many users appreciated the simple UI as it made the experience incredibly easy for students to learn from.

My primary research found that many students didn't feel like the VLE provided a well-organised view of information. Moreover it didn't provide a clear sense of progress or outline of the work the students had to do.

# User research: pain points

**1**

## Sense of Progress

Students don't feel like they're progressing through their course.

**2**

## Organisation

Students feel lost on the app. They struggle to find the information they need to.

**3**

## Engagement

Student's have to force themselves to use the app. The app doesn't make them want to use it.

Google

# Persona: **Aaliyah**

**Problem statement:**

Aaliyah is a student who needs an organised view of all her uni work because they want to feel a sense of accomplishment when completing their uni work.

**AALIYAH**

**Age:** 21
**Occupation:** Student

**GOALS**
Wants to know exactly what work she needs to do.

"it feels like I've done nothing"

**FRUSTRATIONS**
Has to flick between pages to understand exactly how much work she has left and needs to do.

Aaliyah is a student at a startup university that needs requires a lot of organisation before starting their work.

Google

# Persona: **James**

**Problem statement:**

James is a student who needs a pleasurable environment to work in because they want to be in an environment (digital) that makes him want to work.

**JAMES**

**Age:** 24
**Occupation:** Student

**GOALS**
Want to *actually* enjoy completing university work.

*"the current app doesn't make you want to work"*

**FRUSTRATIONS**
The existing learning environment doesn't provide a pleasurable experience as he progresses.

James is a student at a startup university. He aims to find ways to *really* enjoy the work he has to complete at university.

Google

# User Empathy Maps

Empathy maps show:

- Students don't like look of the app.
- Don't feel attracted to the UX.
- Struggle to find the information they need.
- Feel no sense of progression through the app.
- Devise other ways to create a sense of progress.

**SAYS**

"it's very bland"

"doesn't make you want to work"

"it's very bland"
"looks like a cheap website"

**THINKS**

Likes the to-do list feature

The app looks much better

doesn't make you want to use it

**Empathy Maps**

**DOES**

struggles to use the platform

writes out tasks and ticks them off as they progress

struggles to know how much work they have left

**FEELS**

no sense of progress/ accomplishment

the current platform doesn't make you want to work

lost - not sure where things are

disorganised when using the app

Google

# Starting the design

- Paper wireframes
- Digital wireframes
- Low-fidelity prototype
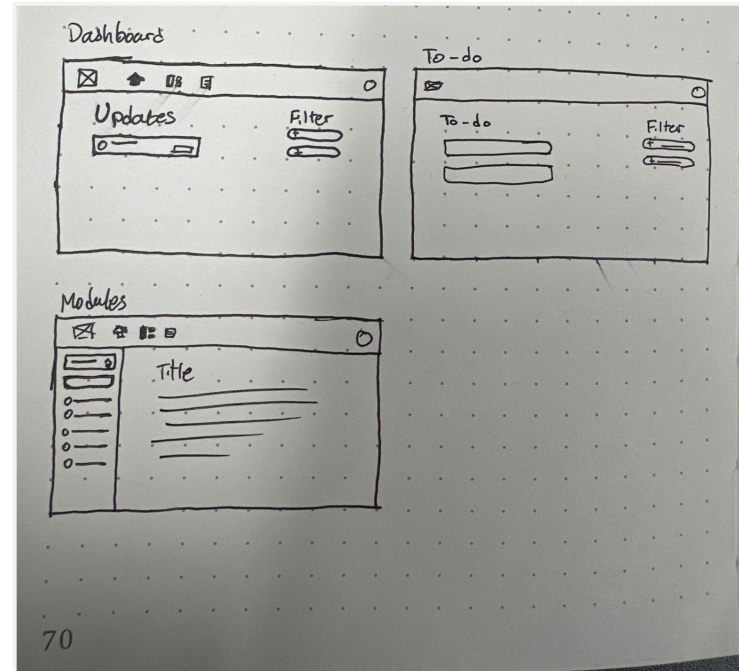- Usability studies

Google

# Paper wireframes

The aim of the wireframes from the get-go was to package a lot of the features into a small number of familiar-looking screens and functional components.
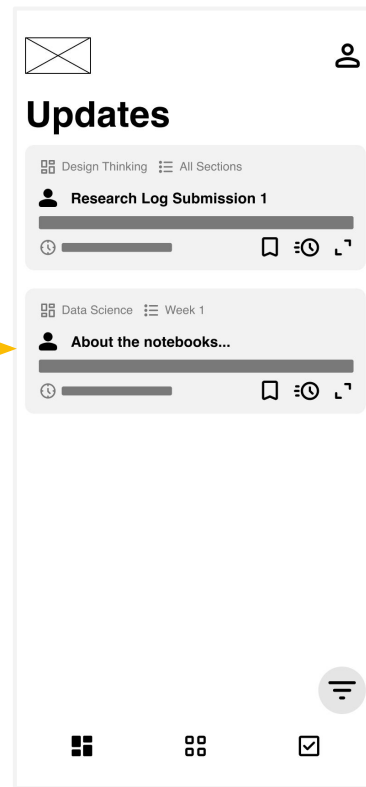
Sketch 1

Final Sketch





Google
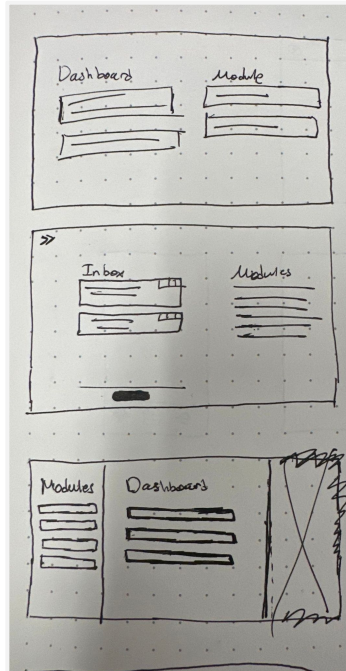
# Digital wireframes

The dashboard intended to remove the need for multiple announcement pages per module page. This centralised all announcements in the dashboard with filters to separate by module when needed.

Created simplified standardised views of each announcement in a clear concise manner.

Students can take action on each item straight from the dashboard view. These quick actions aim to reduce total number of taps to complete a task.

Used floating button to open up the filter menu. This was so it would be visually separate from the hamburger menu.

## Updates

Design Thinking    All Sections

Research Log Submission 1

Data Science    Week 1

About the notebooks...

Google

# Digital wireframes

**Desktop Module/Content View**

Creating something familiar was important to create a positive UX. I borrowed ideas from Notion (a popular app used by target users) to create familiar components in the design.
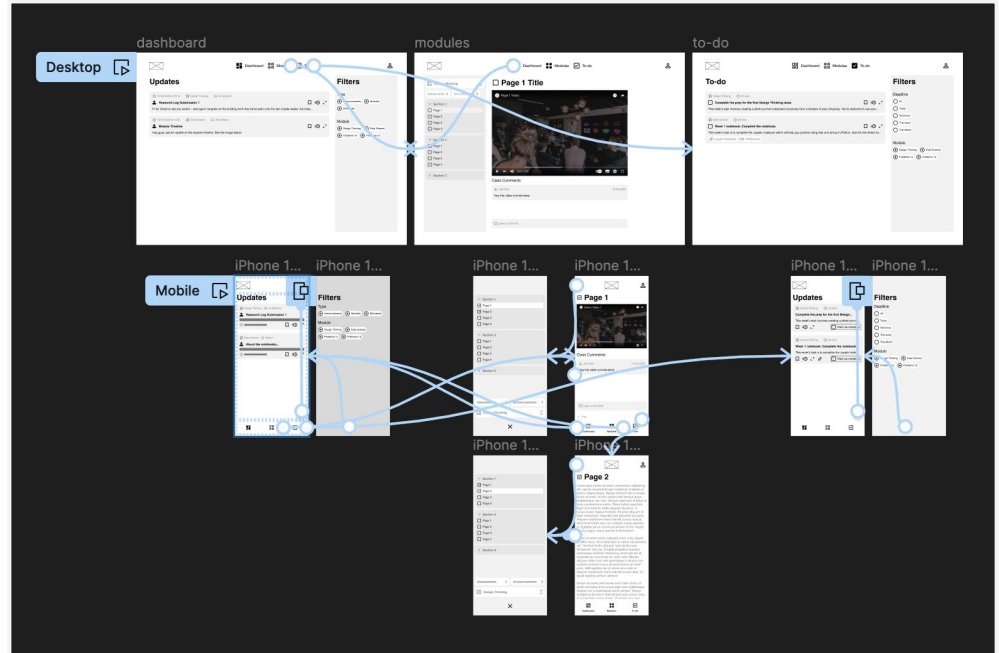
Module switcher that allows students to switch between module.
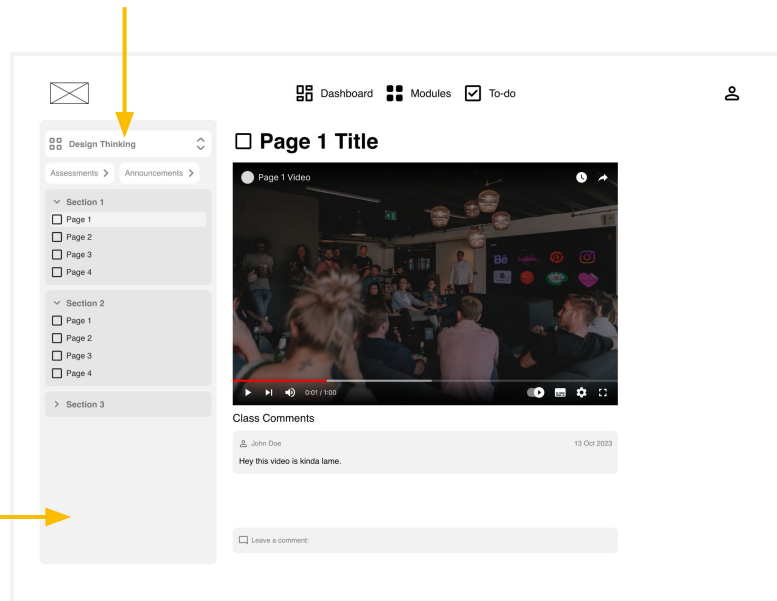


Students expressed multiple times how they missed the sidebar with checkboxes that were on the previous VLE app.

Google

# Low-fidelity prototype

**Link to Low-fidelity Prototype**

# Usability study: findings

**Round 1 findings**

1. Needed prev/next buttons to progress easier.

2. Need icon labels as dashboard and module icons are unfamiliar to users.

3. Wireframe was relatively easy to navigate.

**Round 2 findings**

1. Mockup was much more intuitive to navigate.

2. Icon labels further assisted in helping students navigate the pages.

3. Prev/Next buttons helped students understand how they'd progress.

Google

# Refining the design

- Mockups
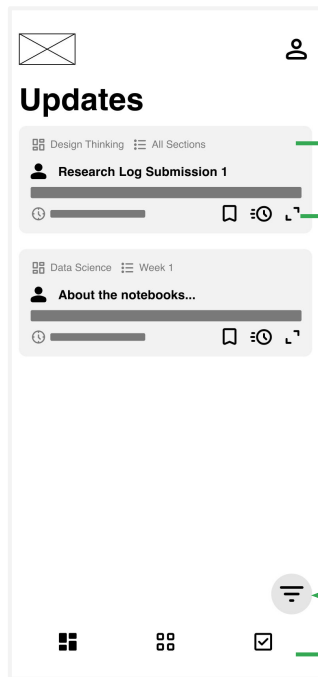- High-fidelity prototype
- Accessibility

Google

# Mockups

**Dashboard View**

This screen needed reduced information and simplified controls.
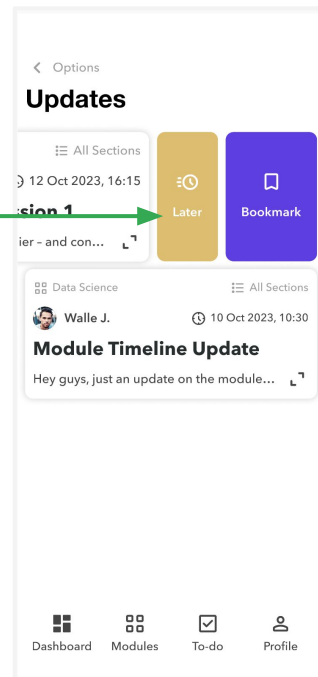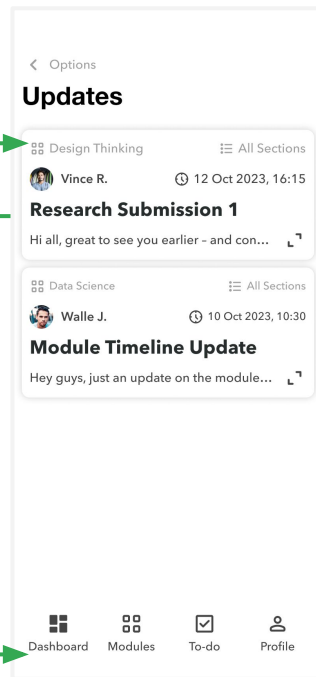
Swipe features were inspired by Apple's app designs.

Reduced information

Removed extra icons in favour of labeled swipe controls

Removed floating button.

Added labels to bottom navigation

**Updates**

Design Thinking | All Sections
Research Log Submission 1

Data Science | Week 1
About the notebooks...

< Options

**Updates**

Design Thinking | All Sections
Vince R. | 12 Oct 2023, 16:15
**Research Submission 1**
Hi all, great to see you earlier – and con...

Data Science | All Sections
Walle J. | 10 Oct 2023, 10:30
**Module Timeline Update**
Hey guys, just an update on the module...

Dashboard | Modules | To-do | Profile

< Options

**Updates**

All Sections
12 Oct 2023, 16:15
sion 1
ier – and con...
Later | Bookmark

Data Science | All Sections
Walle J. | 10 Oct 2023, 10:30
**Module Timeline Update**
Hey guys, just an update on the module...

Dashboard | Modules | To-do | Profile

Google

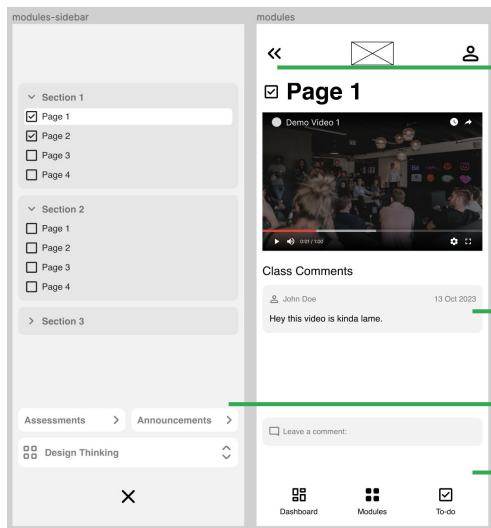# Mockups

This screen needed to be highly involved and engaging. Focusing user attention on the content always and removing unnecessary information.

**Before usability study**
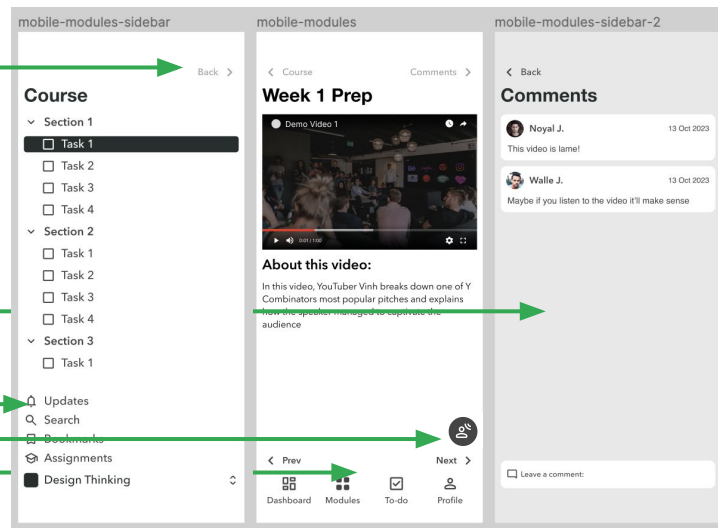
**After usability study**



Changed navigational controls

Moved comments to sidebar

Changed style of buttons

Accessibility controls

Added prev/next buttons for progression

Google

# Mockups

## Dashboard View

### Options
**Filters**

Type
- ☐ General
- ☐ Modules

Modules
- ⊕ Add module

**Sort**
- ◉ None
- ○ Recent
- ○ This week
- ○ This month
- 🔖 Bookmarks

---

‹ Options        Back ›

### Updates

Design Thinking        ≡ All Sections
👤 Vince R.        🕐 12 Oct 2023, 16:15
**Research Submission 1**
Hi all, great to see you earlier – and con...

Data Science        ≡ All Sections
👤 Walle J.        🕐 10 Oct 2023, 10:30
**Module Timeline Update**
Hey guys, just an update on the module...

Dashboard  Modules  To-do  Profile

## Module/Course View

‹        Back ›

### Course
▾ Section 1
- ☐ Task 1
- ☐ Task 2
- ☐ Task 3
- ☐ Task 4

▾ Section 2
- ☐ Task 1
- ☐ Task 2
- ☐ Task 3
- ☐ Task 4

▾ Section 3
- ☐ Task 1

🔔 Updates
🔍 Search
🔖 Bookmarks
⊗ Assignments
▪ Design Thinking

---

‹ Course        Comments ›

### Week 1 Prep

● Demo Video 1
► 0:01 / 1:00

**About this video:**
In this video, YouTuber Vinh breaks down one of Y Combinators most popular pitches and explains how the speaker managed to captivate the audience

‹ Prev        Next ›

Dashboard  Modules  To-do  Profile

---

‹ Back

### Comments

👤 Noyal J.        13 Oct 2023
This video is lame!

👤 Walle J.        13 Oct 2023
Maybe if you listen to the video it'll make sense

💬 Leave a comment:

## To-do View

### Options
**Filters**

Deadline
- ○ Today
- ○ Tomorrow
- ○ This week

Modules
- ⊕ Add module

**Sort**
- ◉ None
- ○ Recent
- ○ This week
- ○ This month

---

‹ Options        Back ›

### To-dos

🕐 19 Oct 2023, 22:00        Design Thinking
**Photo Journal – Space on a page!**
This week's task involves creating a photo jou...
📄 Assessment Brief

🕐 14 Oct 2023, 22:00        Design Thinking
**Prep: Read extract from MOM-Tes...**
This week's task involves creating a photo jou...
📄 mom-test-extract.pdf

🕐 16 Oct 2023, 22:00        Design Thinking
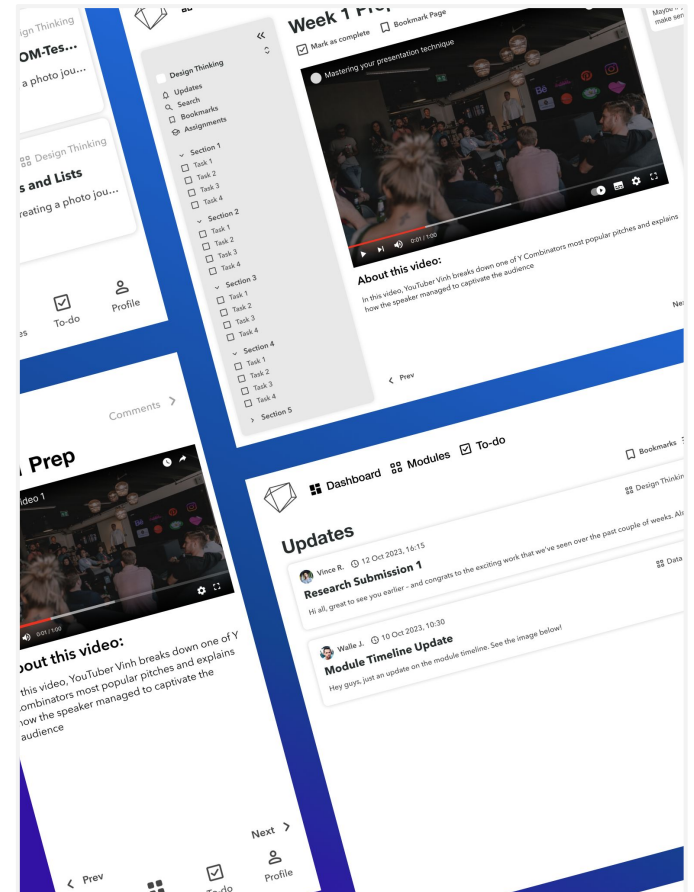**Understanding Arrays and Lists**
This week's task involves creating a photo jou...
🔗 jupyterhub.com

Dashboard  Modules  To-do  Profile

Google

# High-fidelity prototype

**Link to high-fidelity prototype**

# Accessibility considerations

**1**

Implemented buttons for an screen reader so students can have the content read to them.

This button also has a contrast ratio of 9.58 between the icon colour and background.

**2**

Ensured majority of the most common buttons (without alternative swipe controls) are placed towards the bottom of the screen so that they're accessible during one-handed operation of mobile device.

**3**

The sidebars can be toggled and untoggled using swipe controls but also buttons so users can easily navigate the app with limited knowledge of swipe functionality.

Google

# Going forward

- Takeaways
- Next steps

Google

# Takeaways

**Impact:**

The design was largely praised on the simplicity.

"I how easy-to-use this is, it's amazing how [existing VLE] can be transformed to something very easy-to-use if you remove its complexity"

**What I learned:**

It's very easy when designing to assume user's will immediately understand your designs. When designing for a general audience it's important to question whether your own knowledge is widely known.

It's very helpful to lean into design decisions of popular apps so you can tap into what users already know.

Google

# Next steps

**1**

Redesign the app to become more colourful.

It can be helpful when each section is signified with a particular colour so students are aware which section they're using.

**2**

Run another usability test with students having incorporated actual content sourced from the VLE to see how they would use the mobile and desktop app.

**3**

Consider designing a dark mode for students who often tend to study at night to prevent eye-strain.