



Academic Year	Module	Assessment Number	Assessment Type
2025	5CS020/HJ1: Human - Computer Interaction	2	Design

Interface Design And Prototyping

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ID: 2431342

Group: 26

Module Leader: Dipesh Shrestha

Tutor: Ms. Nerisha Shrestha

NOTE: The application was directly implemented via code.

Link To Prototype:

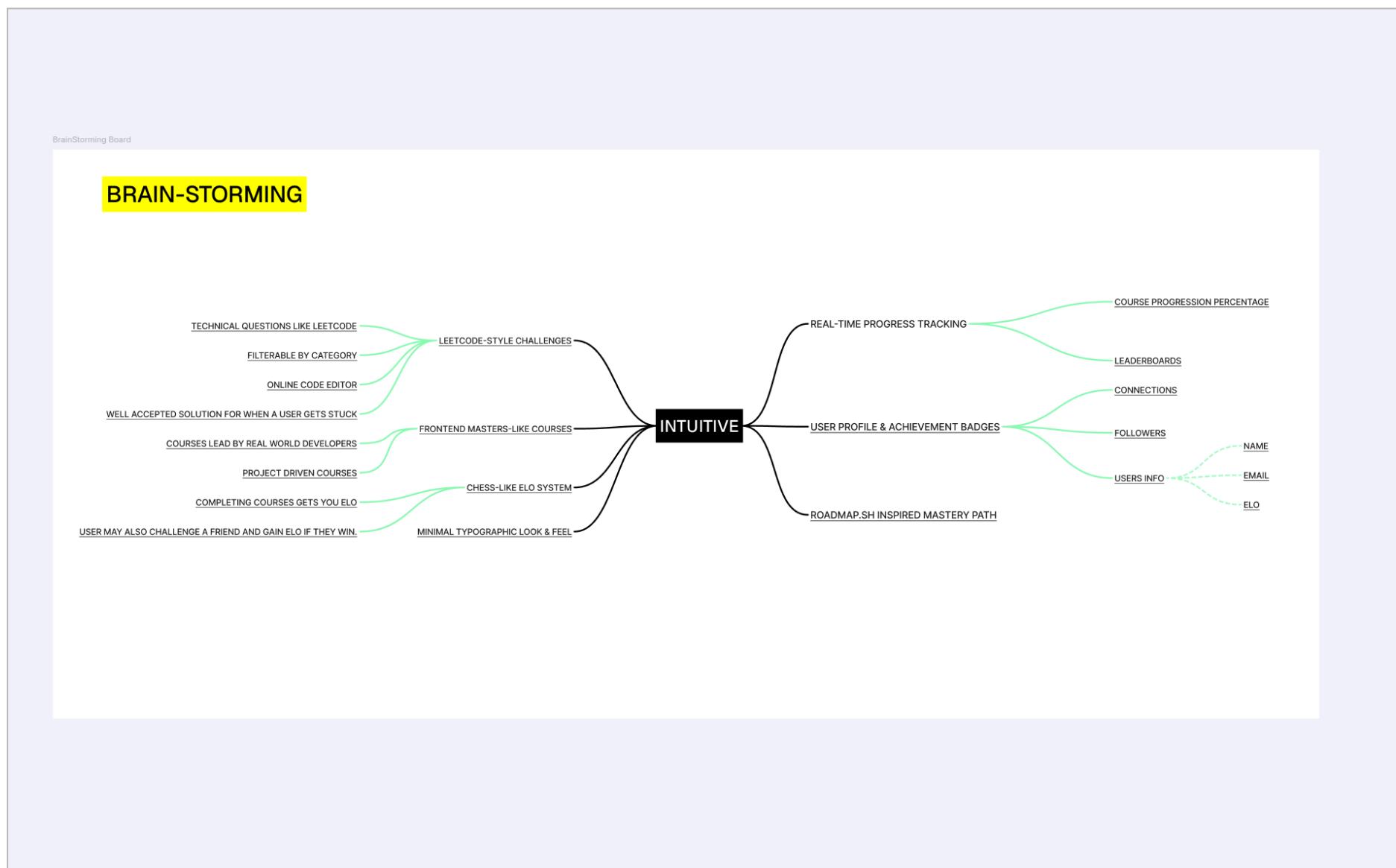
[Link To Github!](#)

[Link To Figma!](#)

Link To The Design Process:

Brainstorming:

[Link To Brainstorming Page](#)



Screenshot Of The Brainstorming Page

User Personas:

[Link To User Personas Page](#)

Intro

WHO ARE WE DESIGNING FOR?

We're designing for aspiring and early-career developers and students who already know how to code, but want structured guidance, deeper understanding, and real-world insight to grow into confident, high-performing engineers.

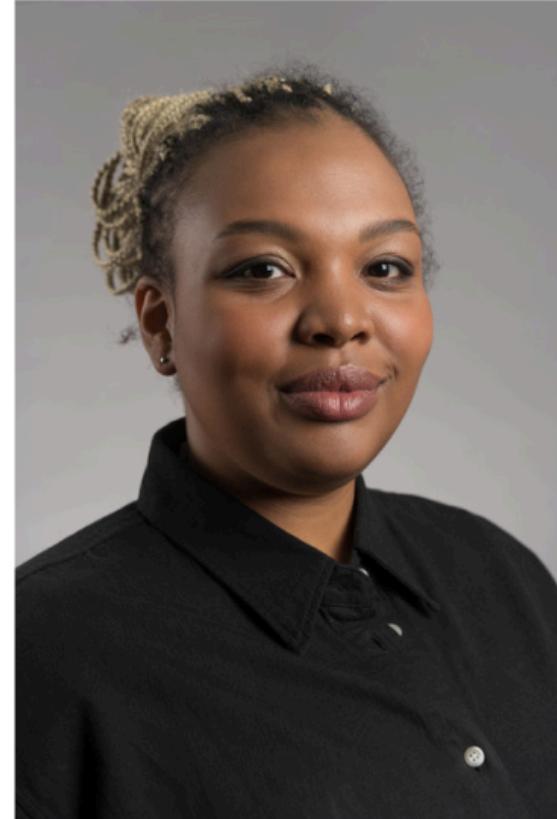
Screenshot Of The Introduction

User Persona 1 - Jane Jones

ABOUT

Jane Jones Is A 22-Year-Old Computer Science Student In Her Final Year. She's Preparing For Technical Interviews And Struggles With Staying Motivated And Knowing What To Study Next.

She Learns Best Through Structured Guidance And Real Explanations From People Who've Actually Worked In The Field. She's Tired Of Jumping Between YouTube Tutorials, LeetCode, And Scattered Resources—And Wants A Single Platform That Helps Her Learn, Practice, And Stay On Track Without Feeling Overwhelmed.



GOALS

- Master Core Technical Concepts For Interviews.
- Build Confidence In Solving Algorithmic Problems.
- Learn From Real World Developers.
- Stay Consistent Without Burning Out Or Getting Lost In Too Many Resources.

CHALLENGES

- Gets Overwhelmed Jumping Between LeetCode, YouTube, And Blogs.
- Lacks A Clear, Structured Learning Path.
- Struggles To Stay Motivated Without Guidance Or Feedback.
- Finds Most Tutorials Out Of Touch With Real Dev Workflows.

OPPORTUNITIES

- Provide A Unified Platform That Combines Video, Code Practice, And Structure.
- Offer Guidance From Devs Who've Been Through The Same Journey.
- Use Gamified Elements (Rankings, Progress) To Keep Her Engaged.
- Help Her Track Progress And Know What To Focus On Next.

22.
JANE JONES.

Screenshot of the first user persona

User Persona 2 - Ryan Olivera

ABOUT

Ryan Malik Is A 29-Year-Old Junior Backend Developer Working At A Mid-Sized Tech Company. He's Solid With Code But Knows He's Lacking In CS Fundamentals .

Being A Student And An Intern, He Doesn't Have Time For Messy, Unstructured Learning. He Wants Something Efficient—Content That's Straight To The Point, Ideally Taught By Experienced Devs. He's Competitive By Nature, So A Little Gamified Edge Keeps Him Engaged.

GOALS

- Level Up Problem-Solving And Systems Thinking For Senior Roles.
- Fill Gaps In CS Fundamentals (DSA, Algorithms).
- Stay Competitive In The Dev Market.
- Prep For FAANG-Level Interviews Without Quitting His Job.

CHALLENGES

- Doesn't Have Time To Sift Through Random YouTube Videos.
- Finds Traditional CS Resources Dry Or Outdated.
- Gets Bored With Platforms That Don't Relate Learning To Real-World Coding.
- Needs Motivation To Keep Practicing Regularly.

OPPORTUNITIES

- Offer Focused Tutorials Tied Directly To Coding Problems.
- Deliver Content That Respects His Time And Existing Knowledge.
- Deliver Curated Content To Learn Logic, Not Syntax.
- Motivate With Subtle Competitive Mechanics Like Rankings Or Challenges.



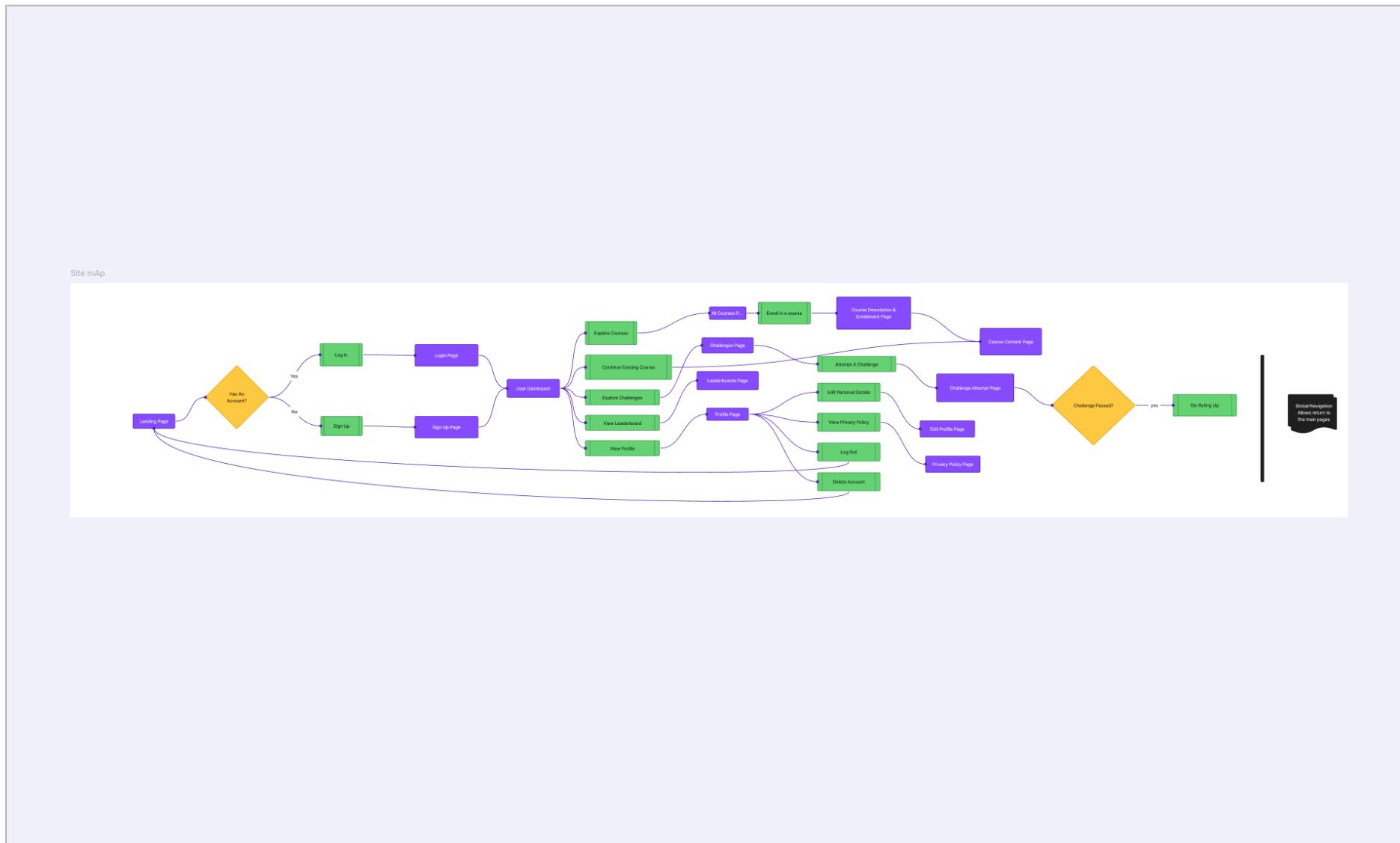
19.
RYAN OLIVERA.

Screenshot Of The Second User Persona

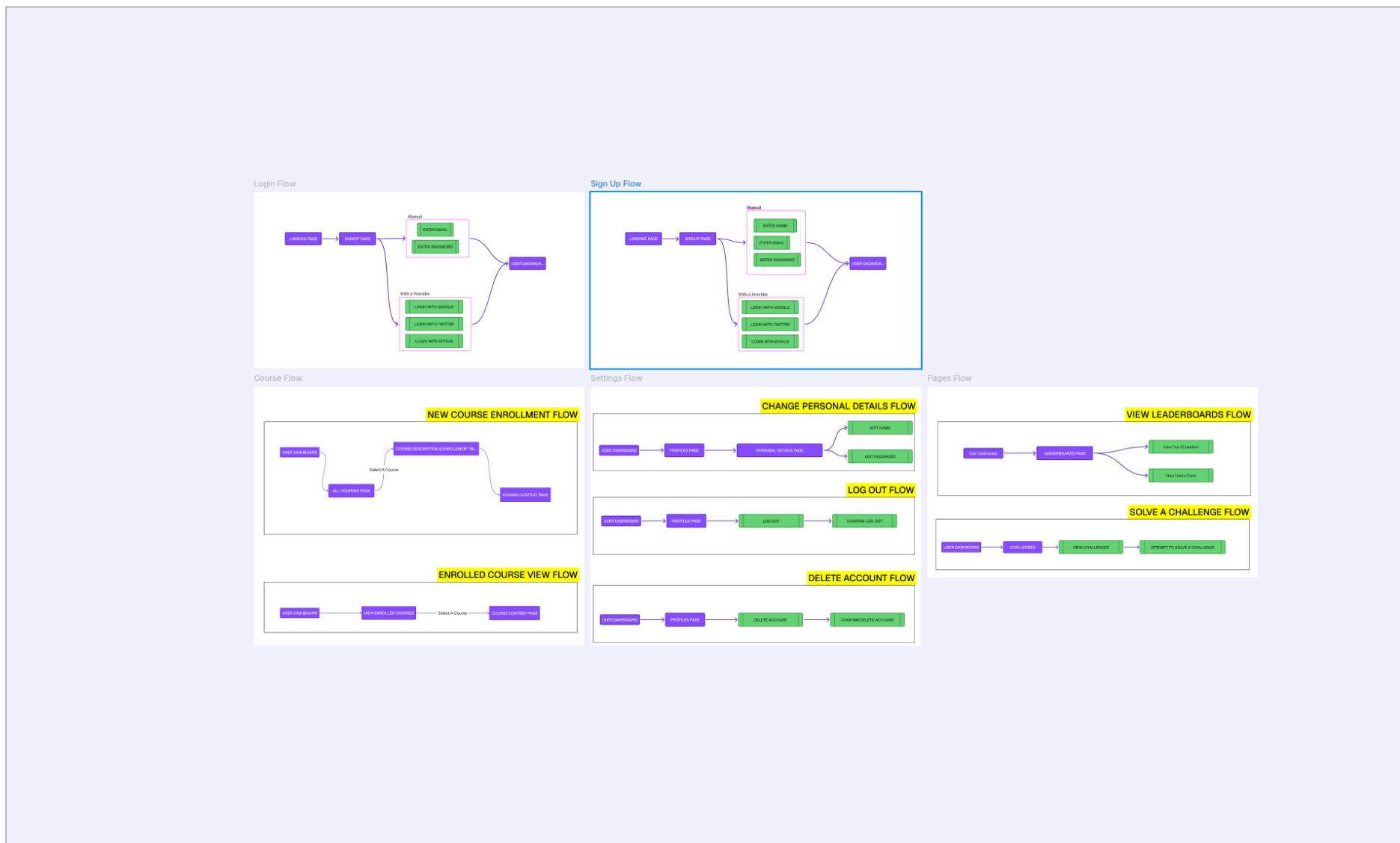
User Flow / Task Flow

[Link To The User Flow](#)

[Link To The Task Flow](#)

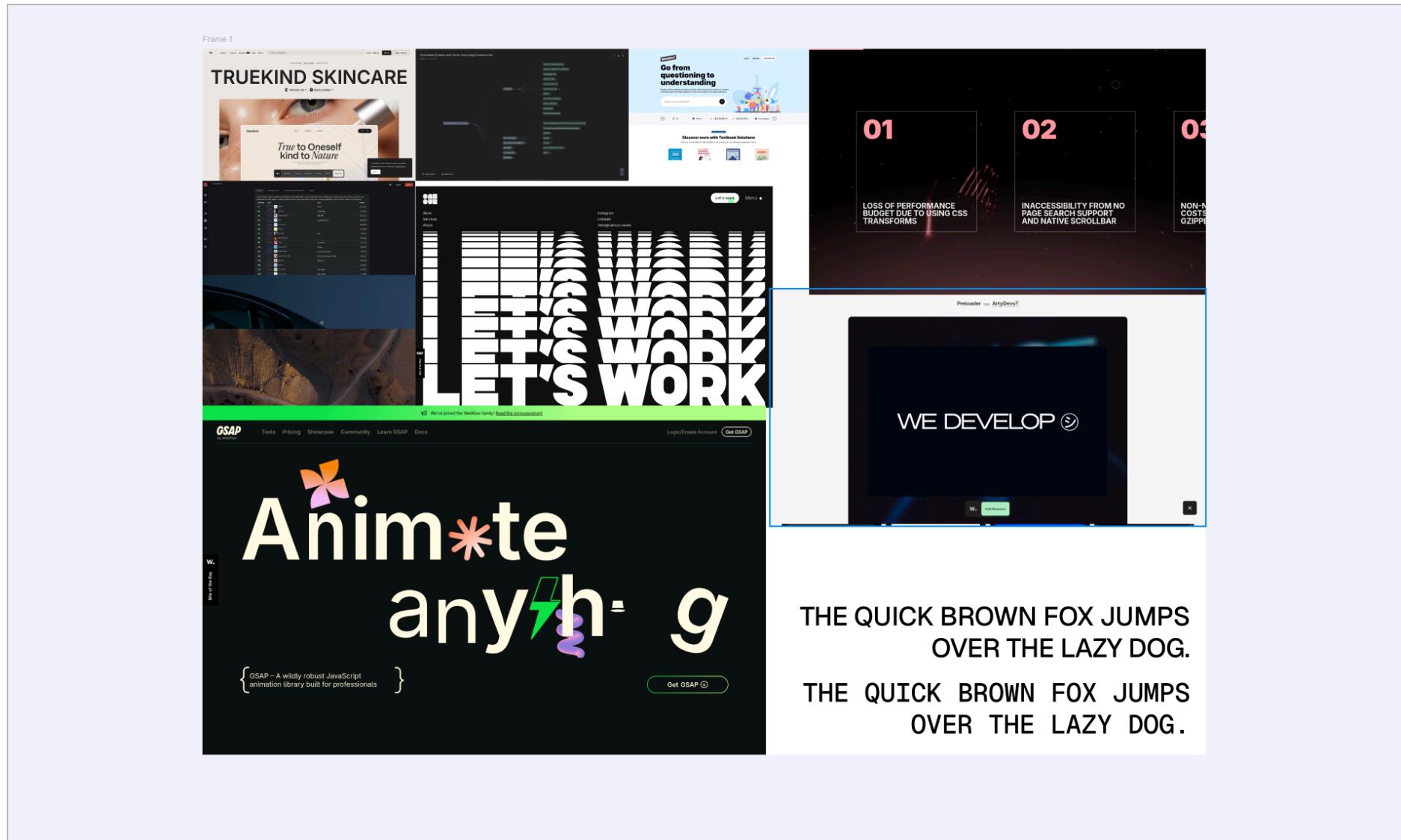


Screenshot Of The User Flow



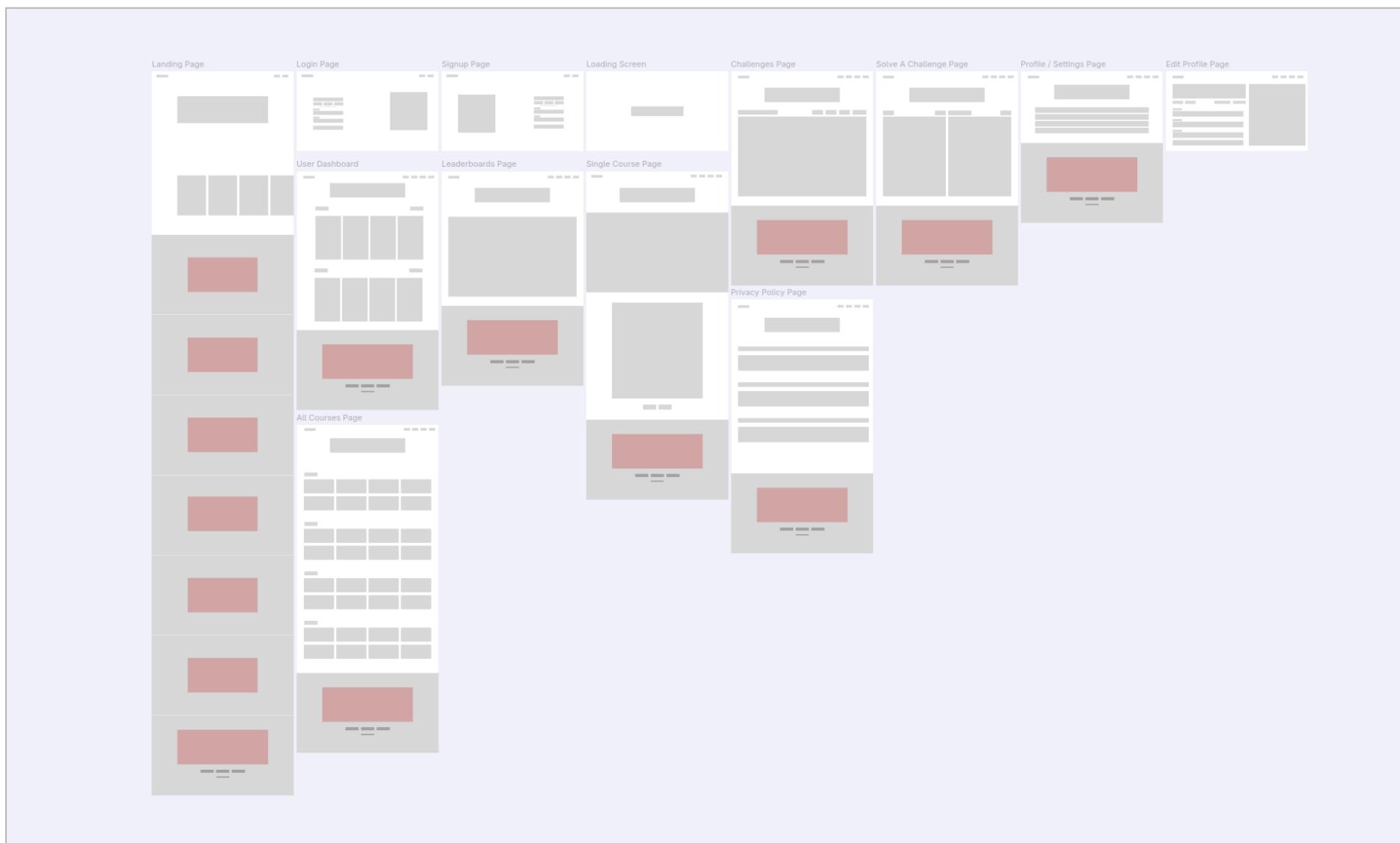
[Link To The Task Flow](#)

Mood Board:

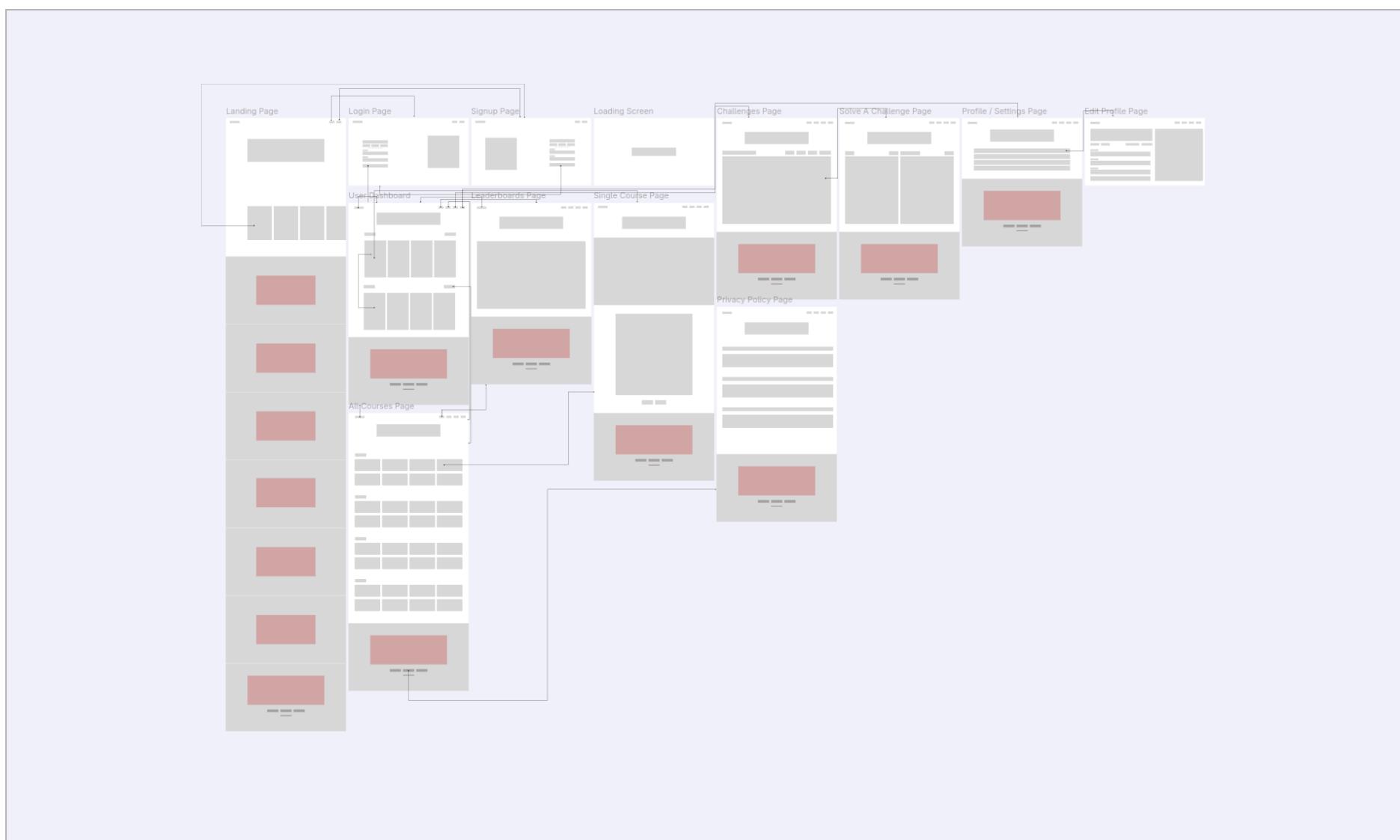
[Link To The Mood Board!](#)

Screenshot Of The Mood Board

Wireframe / Wireflow

[Link to the Wireframe!](#)[Link to the Wireflow!](#)

Screenshot Of The Wireframes



Screenshot Of The Wireflow

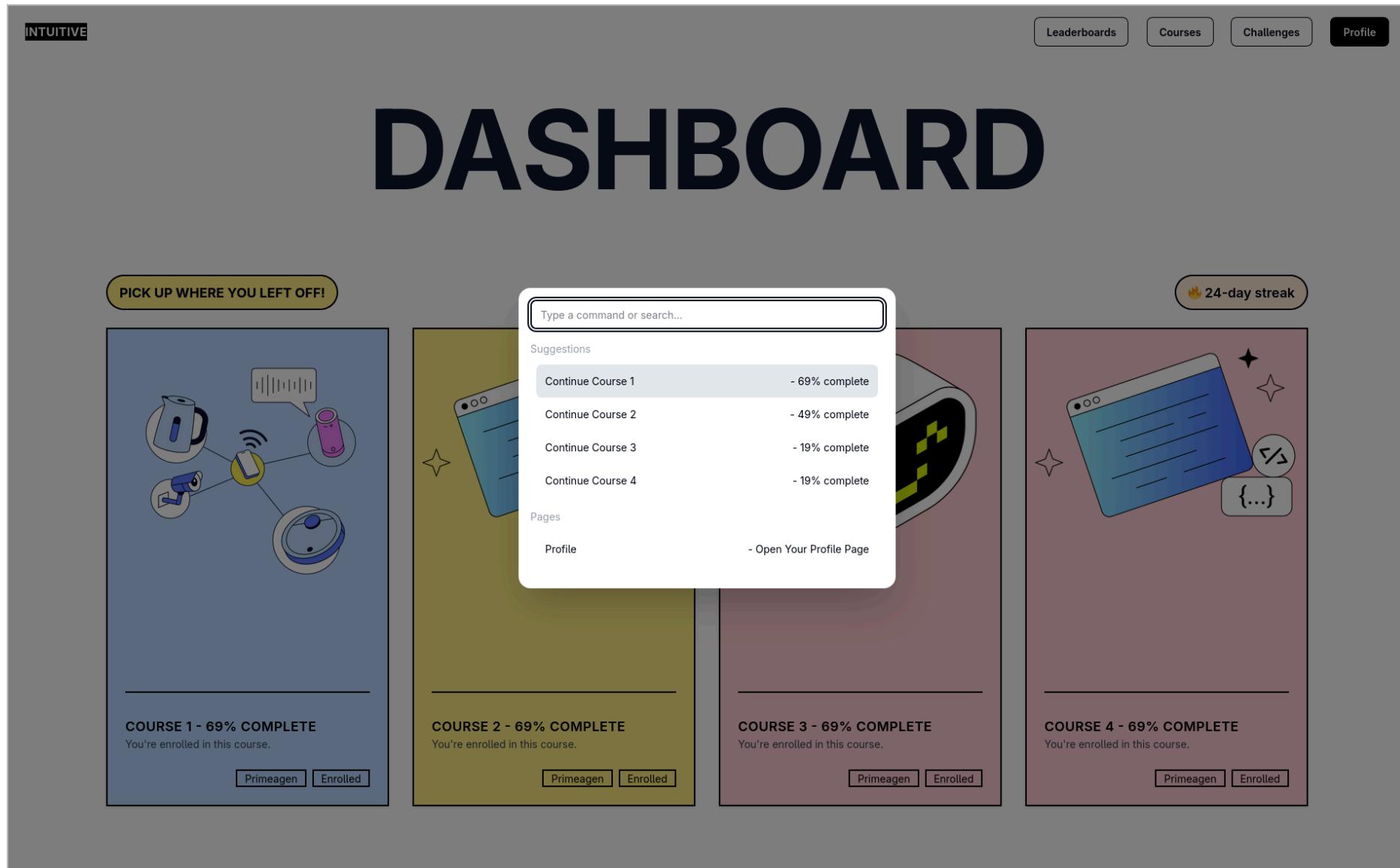
Link To The Accessibility:

Since this web-app was fully implemented in code, the accessibility exists within the code itself rather than a figma file:

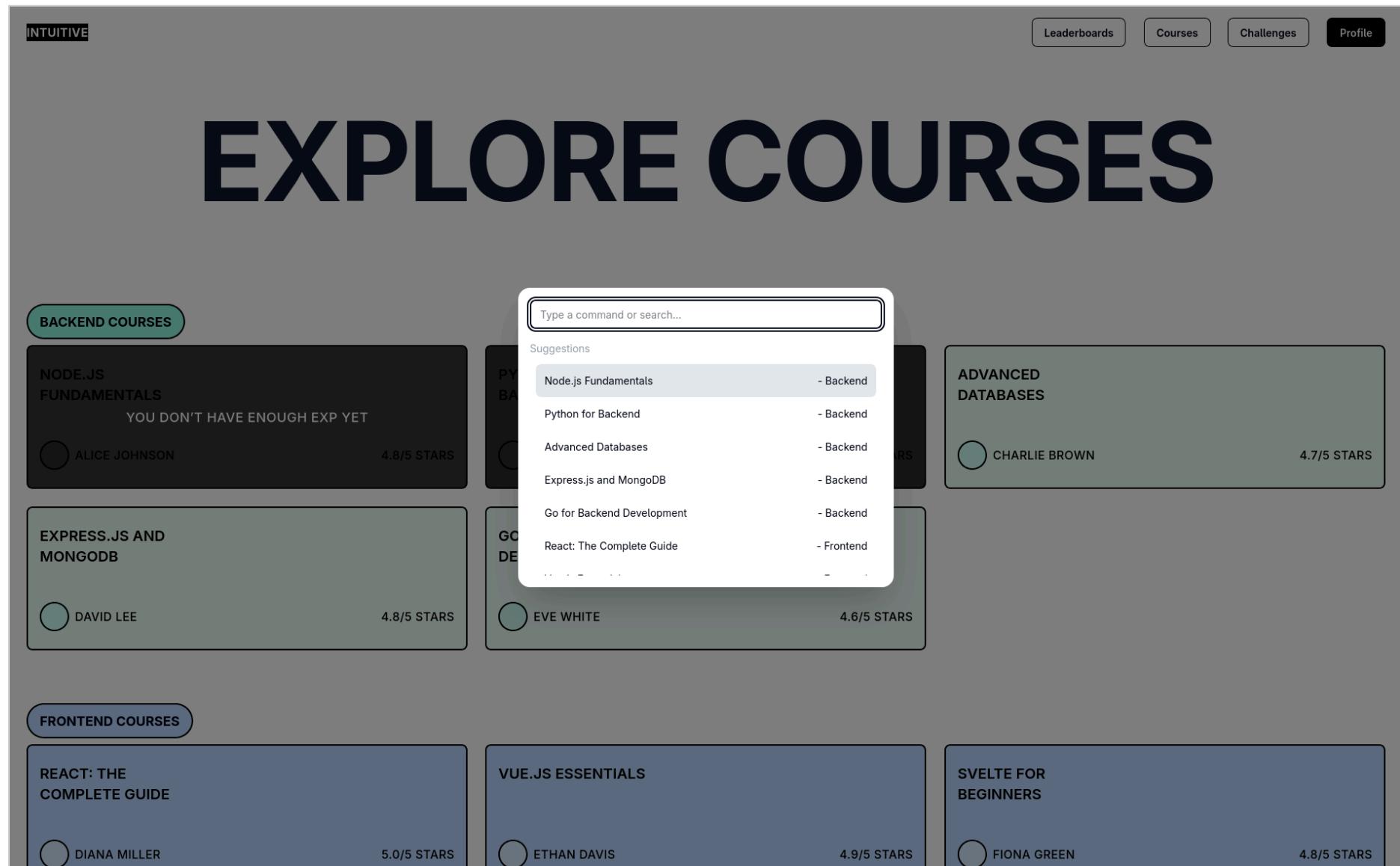
Accessibility I: (Dynamic Keyboard Navigation Menu)

Pressing CTRL + K on any page within the website brings up a dynamic menu. The menu's content dynamically changes based on the page the user is in currently. For example:

Example Of The Menu In User Dashboard

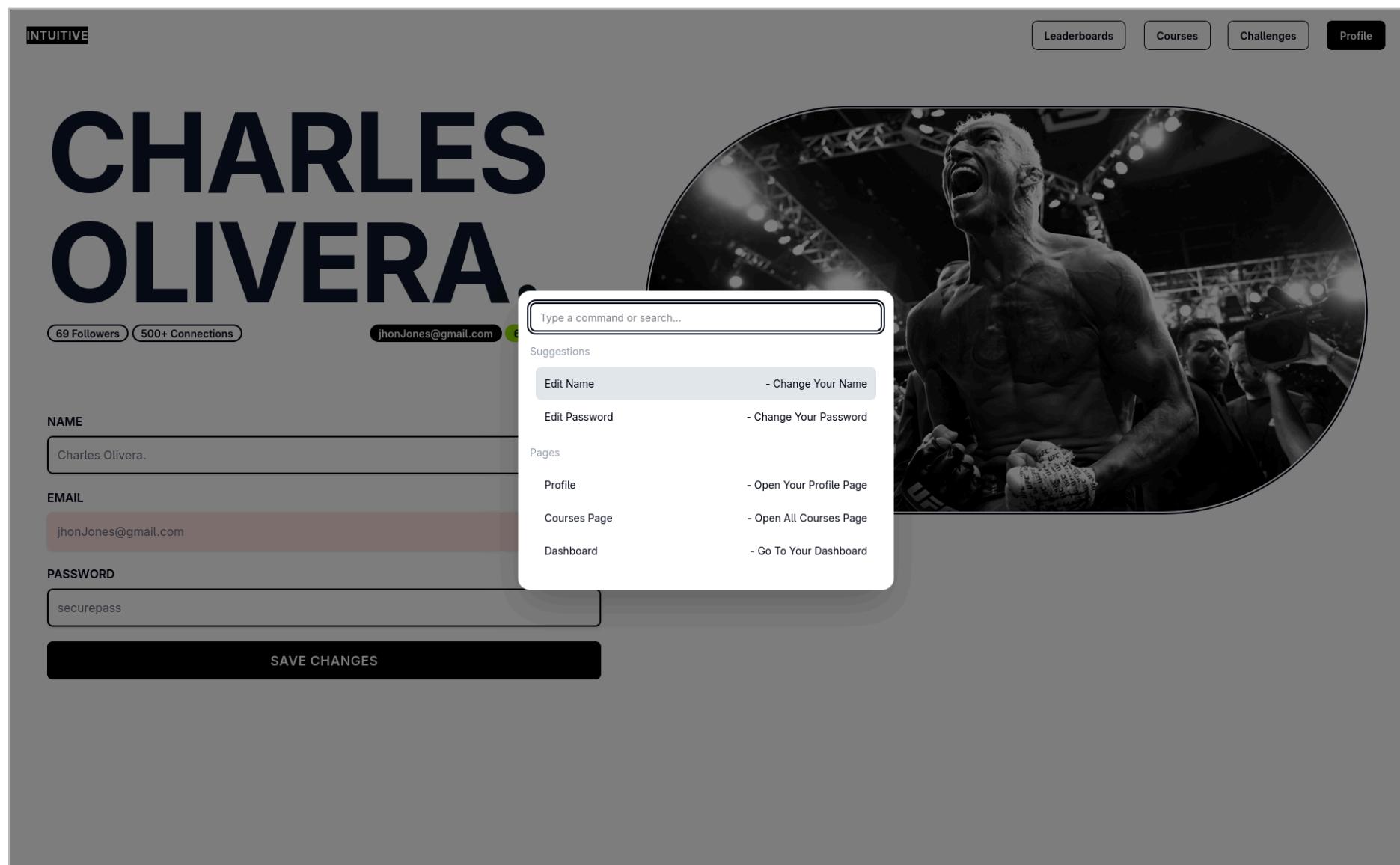


Example Of The Menu In The Explore Courses Page



The screenshot shows the 'EXPLORE COURSES' page. At the top right are navigation links: Leaderboards, Courses, Challenges, and Profile. Below the title is a search bar with the placeholder 'Type a command or search...'. A dropdown menu titled 'Suggestions' lists course titles and descriptions, such as 'Node.js Fundamentals - Backend' and 'Python for Backend - Backend'. The main content area displays course cards for 'NODE.JS FUNDAMENTALS' (Alice Johnson, 4.8/5 stars), 'EXPRESS.JS AND MONGODB' (David Lee, 4.8/5 stars), and 'ADVANCED DATABASES' (Charlie Brown, 4.7/5 stars). Below these are three more course cards: 'REACT: THE COMPLETE GUIDE' (Diana Miller, 5.0/5 stars), 'VUE.JS ESSENTIALS' (Ethan Davis, 4.9/5 stars), and 'SVELTE FOR BEGINNERS' (Fiona Green, 4.8/5 stars).

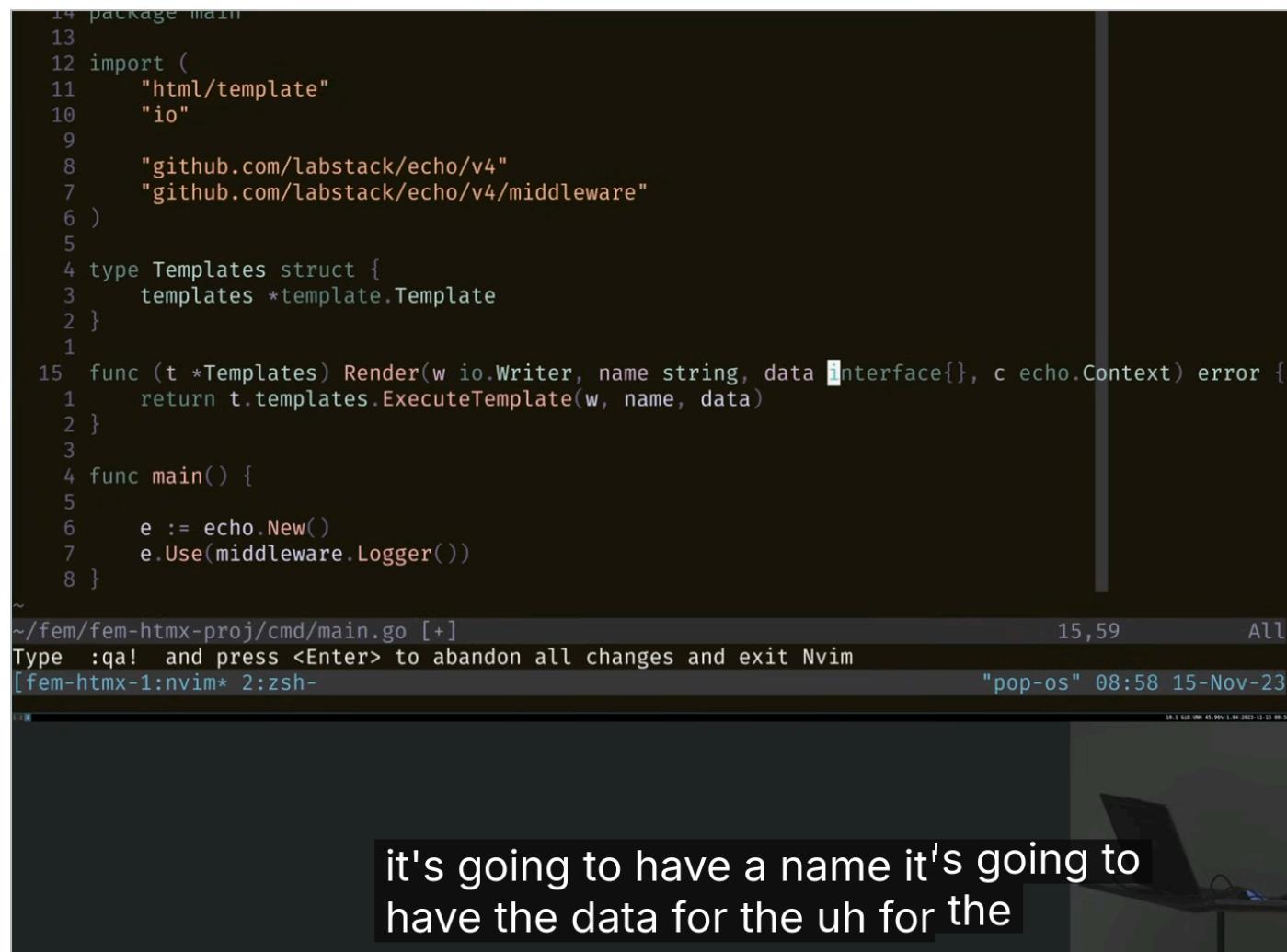
Example Of The Menu In The Profile Page:



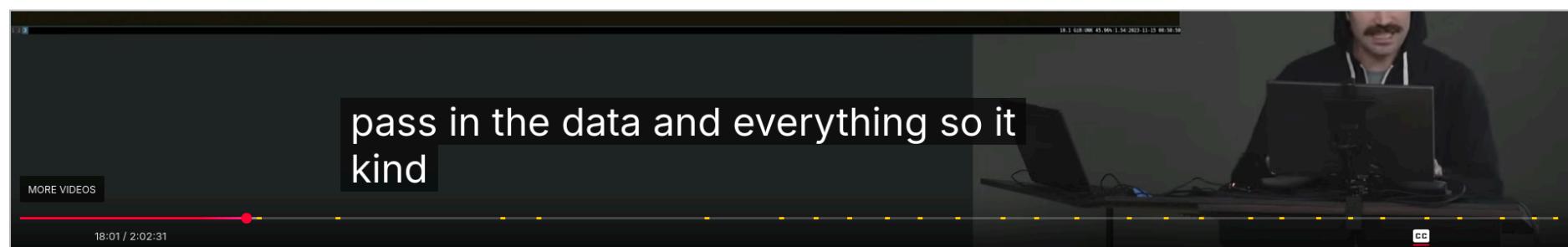
The screenshot shows the 'CHARLES OLIVERA.' profile page. At the top right are navigation links: Leaderboards, Courses, Challenges, and Profile. The main content includes a large profile picture of a shirtless man, follower statistics (69 Followers, 500+ Connections), and email information (jhonJones@gmail.com). On the left, there are input fields for NAME (Charles Olivera), EMAIL (jhonJones@gmail.com), and PASSWORD (securepass). Below these is a 'SAVE CHANGES' button. A search menu is open in the center, featuring a search bar with 'Type a command or search...' and a 'Suggestions' section. The suggestions include 'Edit Name - Change Your Name', 'Edit Password - Change Your Password', 'Profile - Open Your Profile Page', 'Courses Page - Open All Courses Page', and 'Dashboard - Go To Your Dashboard'.

Apart from changing context based on the current page, the menu also provides full navigation to each and every page of the website, allowing a user to navigate the website entirely through just the keyboard.

Accessibility II: (Video Playback)



Screenshot showcasing live captions for videos



INTRODUCTION TO HTMX

The hype around HTMX has been growing in the dev community recently. Some folks love it for its simplicity, while others criticize it for straying too far from the SPA approach.

Funny story: I was once called an "HTMX propagandist" for pushing the framework in my team. I guess it's controversial, but it gets the job done!

The principles behind HTMX are not exactly new. They go back to research from the mid-90s, where people were already experimenting with hypermedia-driven applications.

Incorporating memes into the dev world isn't just for fun—HTMX has a strong meme-based marketing strategy that's caught the attention of developers worldwide.

Example Code: Simple Button for Action

```
<button hx-get="/increment" hx-target="#counter">Increment</button>
```

Screenshot showcasing the full text alternative of the video content, for users who prefer or need to read instead of watch.

Link To Responsive Design:

Again, since this web-app was fully implemented in code, the responsiveness exists within the code itself rather than a figma file:

Desktop Versions:

Landing Page:



Login Page:

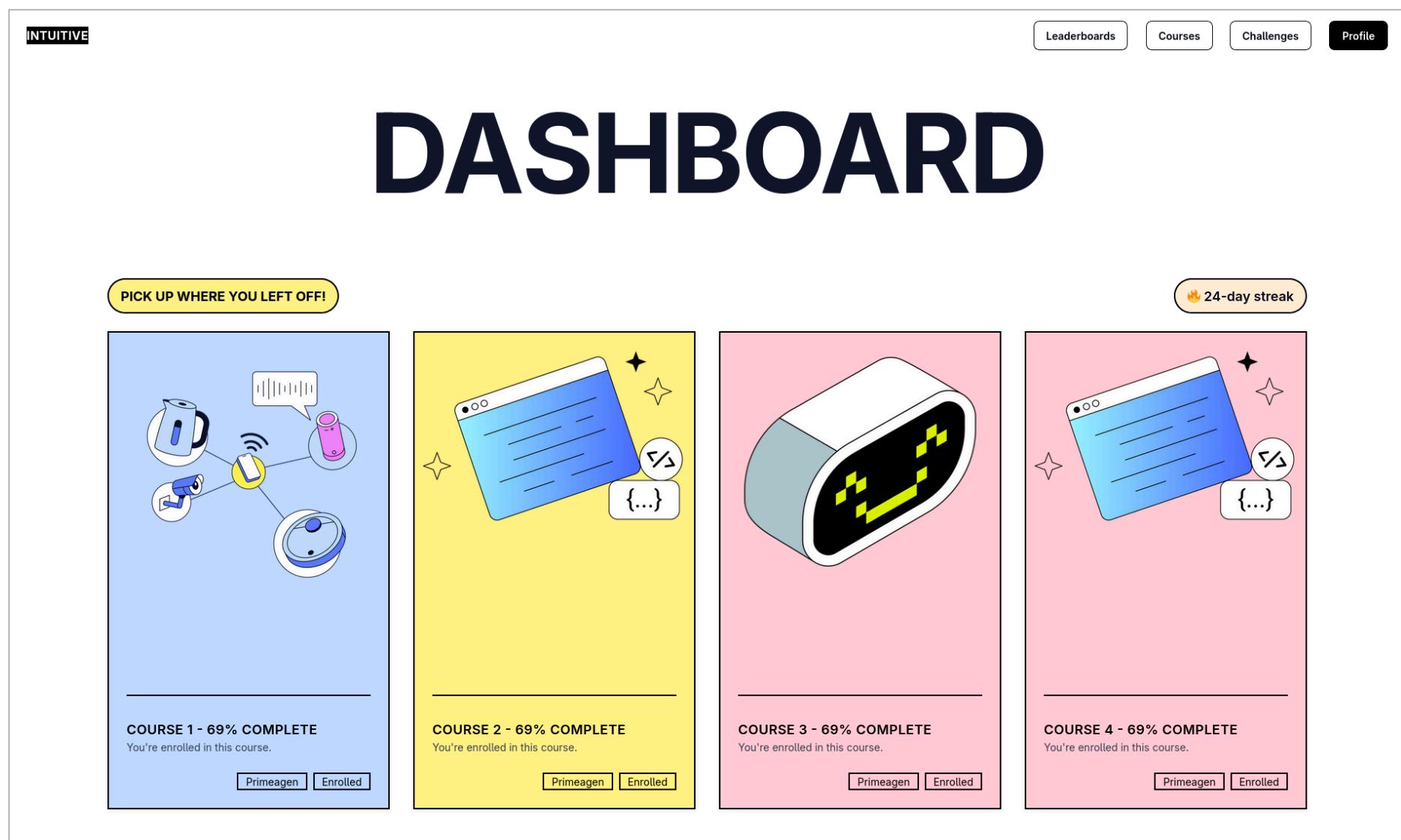


Signup Page:



The screenshot shows the sign-up page for the University of Wolverhampton. At the top left is a large, tilted rectangular button with the text "LETS GET STARTED!" in bold, black, sans-serif font. At the top right are "Login" and "Sign Up" buttons. Below these are social media sign-in buttons for Google, Twitter, and Facebook. The main area contains fields for "Email" and "Password", and a "Create account" button.

User Dashboard:



The screenshot shows the user dashboard. At the top center is a large, bold "DASHBOARD" heading. Above it, a yellow button says "PICK UP WHERE YOU LEFT OFF!". To the right, a badge indicates a "24-day streak". The dashboard features four colored cards (blue, yellow, pink, pink) representing different courses, each showing 69% completion. Each card includes a course icon, the course name, a progress bar, and two buttons: "Primeagen" and "Enrolled". At the top right of the dashboard are navigation links: "Leaderboards", "Courses", "Challenges", and "Profile".

Challenges Page:

INTUITIVE
Leaderboards
Courses
Challenges
Profile

CHALLENGES

All Difficulties ▾
all ▾
Clear Filters
Challenge A Friend

#	TITLE	DIFFICULTY	CATEGORY	ACTIONS
1	TWO SUM	EASY	ARRAY	<button>SOLVE</button> <button>Learn</button>
2	PALINDROME-CHECK	EASY	STRING	<button>SOLVE</button> <button>Learn</button>
3	BINARY TREE LEVEL ORDER	MEDIUM	TREE	<button>SOLVE</button> <button>Learn</button>
4	LRU CACHE	HARD	DESIGN	<button>SOLVE</button> <button>Learn</button>
5	MERGE-K-SORTED-LISTS	HARD	LINKED LIST	<button>SOLVE</button> <button>Learn</button>
6	VALID-PARENTHESSES	EASY	STACK	<button>SOLVE</button> <button>Learn</button>
7	LONGEST-SUBSTRING WITHOUT REPEAT	MEDIUM	SLIDING WINDOW	<button>SOLVE</button> <button>Learn</button>
8	CLONE-GRAF	MEDIUM	GRAPH	<button>SOLVE</button> <button>Learn</button>
9	WORD LADDER	HARD	GRAPH	<button>SOLVE</button> <button>Learn</button>
10	COURSE-SCHEDULE	MEDIUM	GRAPH	<button>SOLVE</button> <button>Learn</button>
11	TWO SUM	EASY	ARRAY	<button>SOLVE</button> <button>Learn</button>
12	PALINDROME-CHECK	EASY	STRING	<button>SOLVE</button> <button>Learn</button>

User Profile:

INTUITIVE
Leaderboards
Courses
Challenges
Profile

CHARLES OLIVERA.

69 Followers 500+ Connections

jhonJones@gmail.com 6900 Elo Rating

NAME
Charles Olivera.

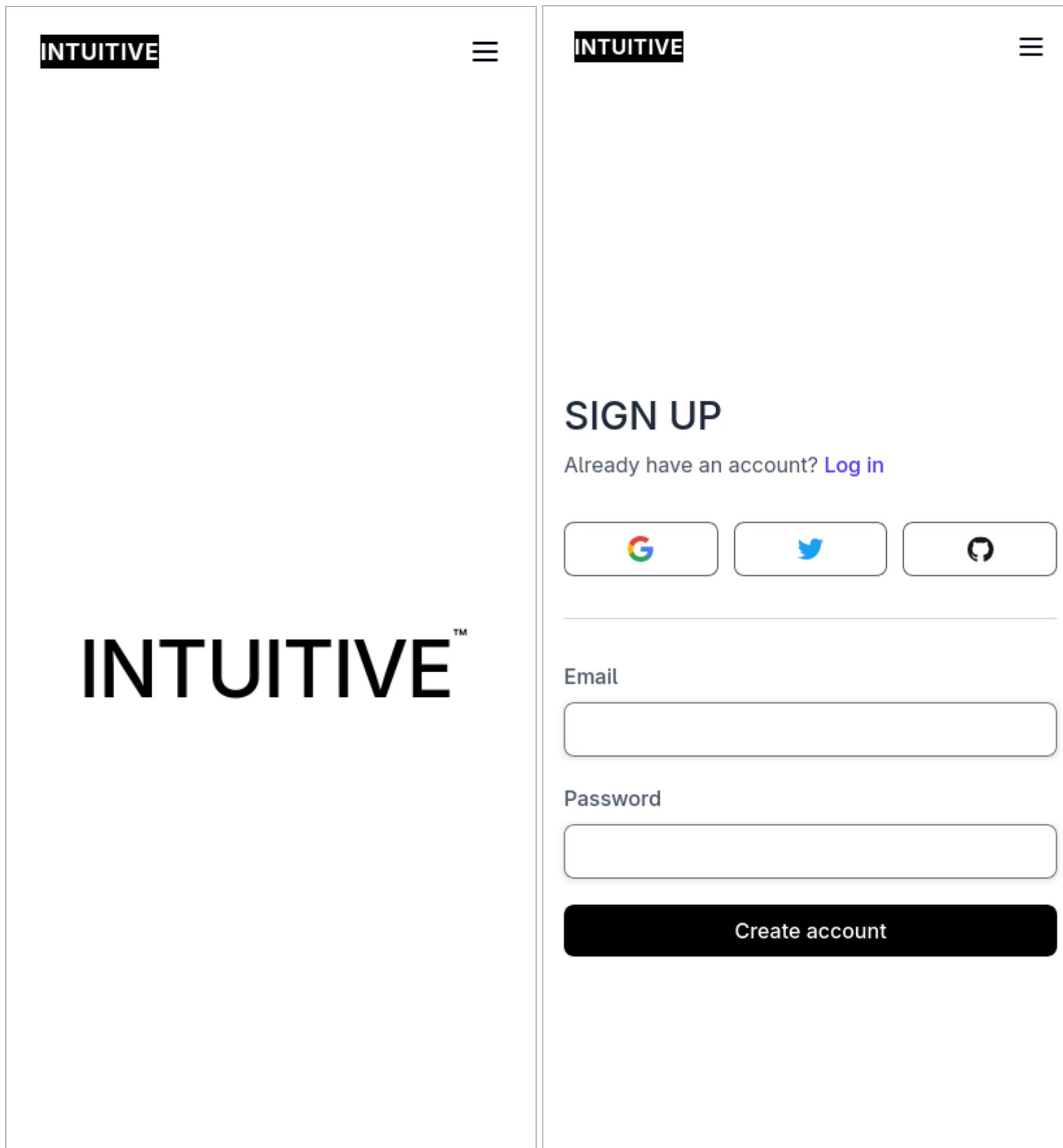
EMAIL
jhonJones@gmail.com

PASSWORD
securepass



SAVE CHANGES

Mobile Versions:



The image displays two side-by-side mobile screen prototypes. Both screens feature a header with the word "INTUITIVE" in a bold, black, sans-serif font, positioned above a horizontal menu icon consisting of three vertical bars. The left screen shows a large, bold "INTUITIVE™" logo centered on the page. The right screen shows a "SIGN UP" heading followed by a link to "Log in". Below these are three social media sign-in buttons: Google (with a red "G"), Twitter (with a blue bird icon), and Facebook (with a white "f" inside a blue circle). There are also fields for "Email" and "Password", each with a corresponding input box. A prominent black button at the bottom contains the text "Create account" in white.

INTUITIVE ≡

CHALLENGES

All Difficulties ▼

all ▼

Clear Filters

Challenge A Friend

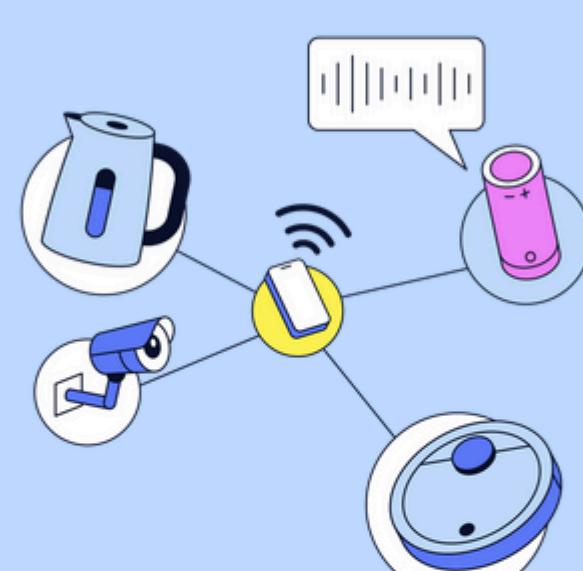
#	TITLE	DIFFICULTY	CATEGORY
1	TWO SUM	EASY	ARRAY
2	PALINDROME CHECK	EASY	STRING
3	BINARY TREE LEVEL ORDER	MEDIUM	TREE
4	LRU CACHE	HARD	DESIGN
5	MERGE-K SORTED LISTS	HARD	LINKED LIST
6	VALID PARENTHESSES	EASY	STACK
7	LONGEST SUBSTRING WITHOUT REPEAT	MEDIUM	SLIDING WINDOW

INTUITIVE ≡

DASHBOARD

PICK UP WHERE YOU LEFT OFF!

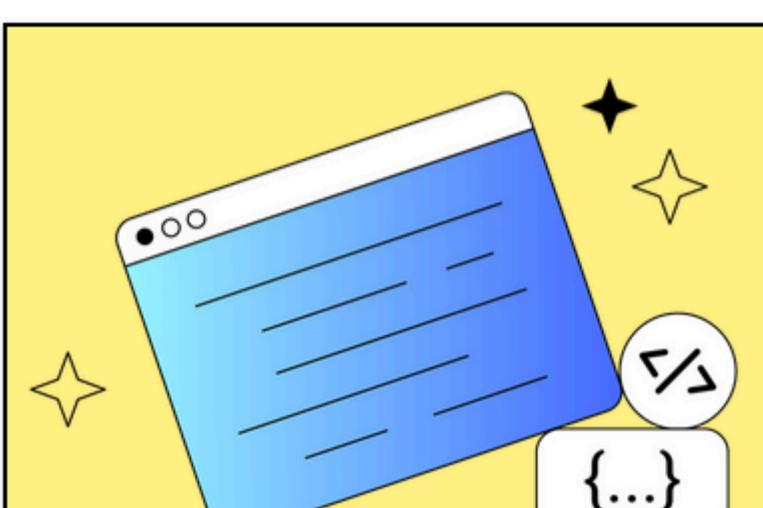
🔥 **24-day streak**



COURSE 1 - 69% COMPLETE

You're enrolled in this course.

Primeagen
Enrolled



INTUITIVE ≡

LOG IN

Don't have an account? [Sign up](#)

Or continue with

Email

Password

Log in

INTUITIVE ≡

CHARLES OLIVERA.

69 Followers 500+ Connections

jhonJones@gmail.com 6900 Elo Rating

NAME

EMAIL

PASSWORD

SAVE CHANGES

