

T3A2-A Full Stack App (Part A)

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Presentation Outline

- 1 – Proposed App
- 2 – App Purpose
- 3 – App Design

1. Proposed App

What is the app?

Background Context

- **Tumbling** is a physical activity wherein athletes perform various acrobatic movements – twists, cartwheels, flips etc.
- Most commonly seen in gymnastic floor routines, however it is also a prerequisite for cheerleading.
- Our client, **Elite Allstars**, specialising in tumbling instruction for a range of age groups.
- There are a variety of cheerleading and tumbling levels and skills, ranging from beginner friendly skills like a handstand in Level 1, all the way to a double full twisting layout in Level 6.
- Because of the physical & injury-prone nature of the sport, an athlete's progression must be meticulously tracked through term assessments.
- These assessments are designed to test tumbling athletes on a wide range of skills to accurately monitor individual skill & progression.

The Tumbling Skills Tracker

- A web application that allows coaches and educators to track a tumbling athletes individual skills progression when conducting term assessments.
- The staff at Elite Allstars will be able to logon to our website to view, edit, delete, or add any student information such as basic info, tumbling skills progression, and assessment scores.
- They will also be able to create new assessments each semester for specific individual students based off their personal skills progress.

2. App Purpose

Why is the app needed?

The Current Problem

- Elite Allstars current method of tracking an athlete's skill progression is manual and vastly inefficient:
 - The owner provides a list of all athletes in all classes to the head tumble coach.
 - The head coach will note the current skill level of each athlete (if previously known)
 - The head coach creates personalized assessments for each athlete, printing each individual assessment
 - The head coach/owner organizes the physical assessment rubric into class times to give to the class coach
 - The class coach then receives copies of assessments, hand records all results and returns assessments to the head coach/owner
 - The head coach manually inputs data into excel
 - Process repeats approx. every 10 weeks
- Initially, with smaller classes, this was not an issue, however the business has now grown to over 150 students.
- With multiple coaches tracking constant progression and improvements weekly, the current improvement tracking process must be improved.
- Not only is there a large amount of room for error, but there is no system in which data can be easily tracked, especially when conducting individual term assessments.

The Solution – The Tumbling Skills Tracker

- This website provides a solution by making the individual skills progression of all students easily accessible for coaches.
- Solving the problem by automating the record keeping process and transferring it online to our website by enabling a database to store information rather than a physical filing cabinet at Elite Allstars.
- This would allow for the precise tracking of any students tumbling skills progression - during term assessments or otherwise – which saves valuable time in class and allows coaches to easily review specific athletes progress over time.

3. App Design

How will it look and how will it work?

Functionality & Features

- **Log in required**
 - Ensure security of sensitive information such as student names by requiring authentication to access any database information
 - Ensure no misuse of power by enabling authorization on certain actions
- **Add coach users (Admin Only)**
 - Add new user to provide access for coaches
 - Update Admin property
 - Delete users to restrict access when needed
- **Store student details**
 - Student details such as name can be stored alongside assessment results to easily access a full history of assessments for each student
- **View all students**
 - See all students in database
- **Create student-specific assessments tracking skill level for multiple skills**
 - Assessments can be created and auto-populated with the appropriate level skills
 - Assessments record the student, date of assessment, and user that conducted the assessment
 - Store score for each skill in assessment
- **Search for student**
 - Search database of students by name
 - See single student record with associated assessment records
 - Update or delete student record (admin only)
- **See specific assessment record**
 - See single assessment record via associate student
 - Update or delete assessment record (admin only)
 - Delete users to restrict access when needed
- **View all skills**
 - See all skills within database and the associated level

Design Rationale

- Intuitive UI/UX Design

- Navigation elements can be found at the top of the page, easily visible and adheres to common web app standards
- Page content that is of equal importance are the same size and laid out next to each other or wrap underneath depending on viewport
- Key features and functionality are positioned appropriately on the page, such as search bar to find a specific student being readily accessible at the top of the list of students, so as to reduce user confusion and maintain app usability.

- Discussions with client informed model design

- Dynamically built assessments using the skills database to increase flexibility
- Assessments linked via reference to students for tracking individual progress
- Restricting certain functionalities to admin only to preserve important business information
- Log-in page as entry for security reasons due to the nature of the clients/sensitive info stored

Sitemap



Visual Sitemap



Desktop Wireframes

LOGIN

ELITE ALL-STARS LOGO

Username:
Username Input Field

Password:
Password Input Field

Login Button

Content Background

Background

HOME

Header

ELITE ALL-STARS LOGO

Home Students Skills NEW ASSESSMENT USERS (Admin view only)

HERO CONTENT
Image - Introduction

STUDENTS Skills NEW ASSESSMENT USERS (Admin view only)

Content Background

Footer

NEW ASSESSMENT

Header

ELITE ALL-STARS LOGO

Home Students Skills NEW ASSESSMENT USERS (Admin view only)

Student Name:
Type student name

Select Assessment:
Select a level of assessment from the drop down

SKILLS	R1	R2	R3	R4
Skill 1	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Skill 2	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Skill 3	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Skill 4	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Skill 5	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The skills table is populated once an assessment level is selected

SUBMIT

Content Background

Footer

SKILLS

Header

ELITE ALL-STARS LOGO

Home Students Skills NEW ASSESSMENT USERS (Admin view only)

Level 1 Level 2 Level 3 Level 4 Level 5 Level 6

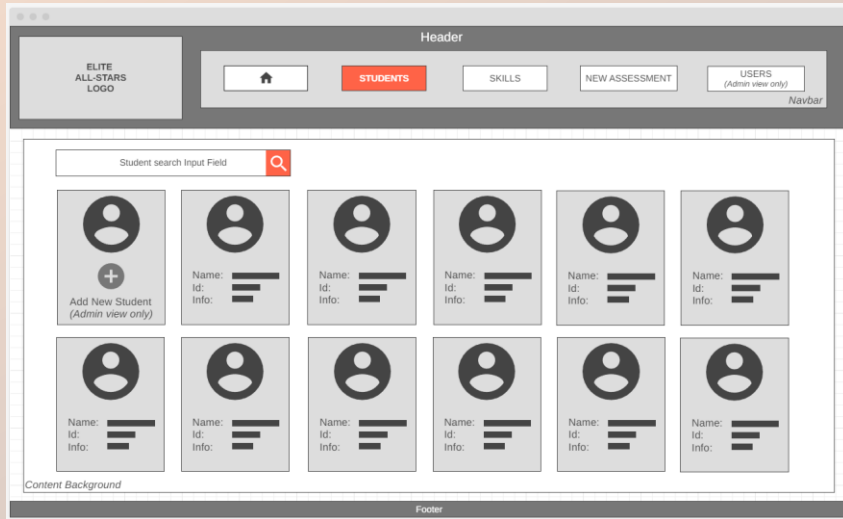
Skill name: Description

Content Background

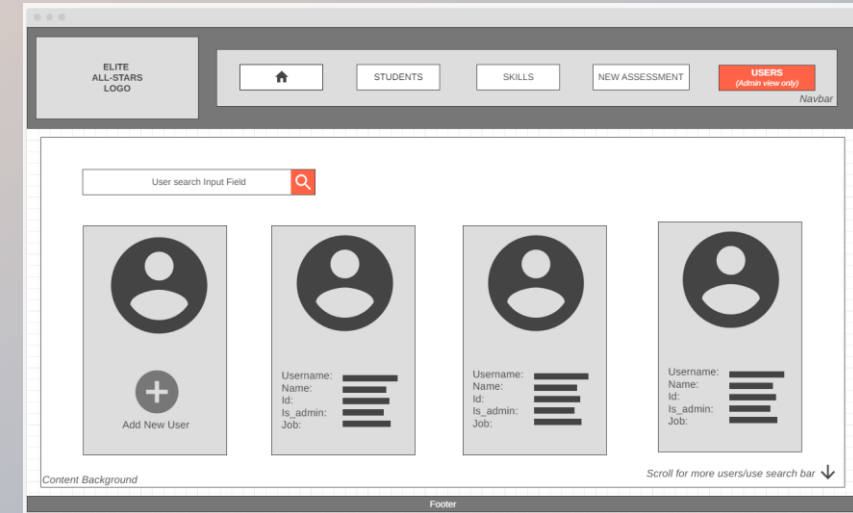
Footer

Desktop Wireframes

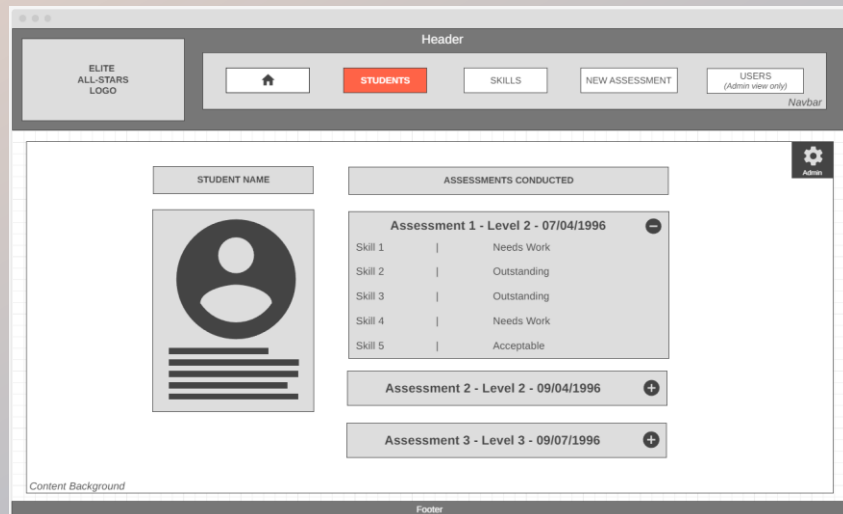
ALL STUDENTS



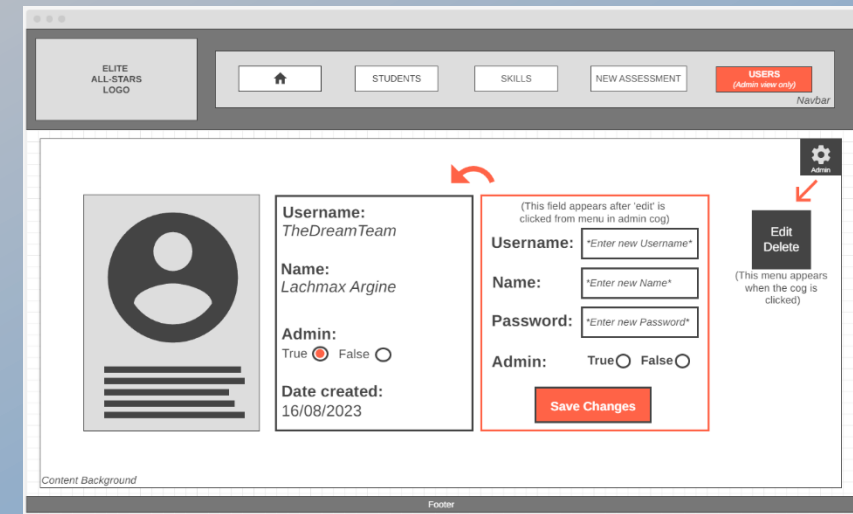
ALL USERS (admin only)



SPECIFIC STUDENT



SPECIFIC USER



Tablet Wireframes

LOGIN

The login wireframe is centered on a white content background, which is itself on a gray background. At the top is a gray header bar. Below it, the 'ELITE ALL-STARS LOGO' is in a gray box. This is followed by 'Username:' and a 'Username Input Field', then 'Password:' and a 'Password Input Field'. At the bottom is an oval 'Login Button'. The entire content area is labeled 'Content Background' at the bottom left, and the outermost gray area is labeled 'Background' at the bottom left.

HOME


The home wireframe features a dark gray header bar. On the left is the 'ELITE ALL-STARS LOGO'. To its right is a 'Header' section with a red home icon button, and buttons for 'STUDENTS', 'SKILLS', 'NEW ASSESSMENT', and 'USERS'. Below the header is a large gray box for 'HERO CONTENT Image - Introduction'. The main content area has two columns: 'STUDENTS' and 'SKILLS'. Each column has a gray header, an oval 'Image' placeholder, and five horizontal bars representing text. At the bottom right, a note says '*New assessment and Users content below*' with a downward arrow. The entire page is enclosed in a dark gray footer bar labeled 'Footer'.

Tablet Wireframes

NEW ASSESSMENT

ELITE
ALL-STARS
LOGO

Header

STUDENTS


SKILLS

NEW
ASSESSMENT

USERS


Student Name:

Type student name



Select Assessment:

Select a level of assessment



SKILLS	R1	R2	R3	R4
Skill 1	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Skill 2	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Skill 3	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Skill 4	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Skill 5	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*The skills table is populated once
an assessment level is selected*


SUBMIT

Footer

SKILLS

ELITE
ALL-STARS
LOGO

Header

STUDENTS

SKILLS

NEW
ASSESSMENT

USERS

Tumbling Skills

Level 1

Skill name:
Description

Skill name:
Description

Skill name:
Description

Skill name:
Description

Skill name:
Description

Level 2

Skill name:
Description

Skill name:
Description

Skill name:
Description

Skill name:
Description

Skill name:
Description

Level 3

Skill name:
Description


Skill name:
Description

Skill name:
Description

Skill name:
Description

Skill name:
Description

Level 4, 5 & 6 skills below



Footer

Tablet Wireframes

ALL STUDENTS

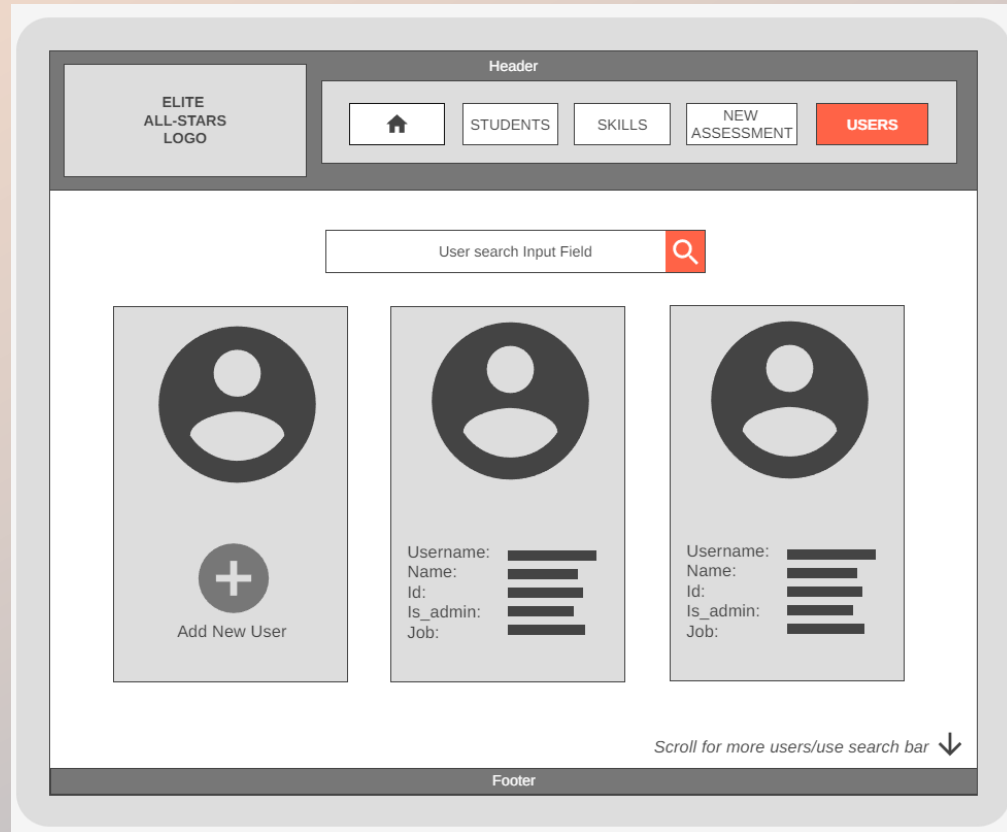


SPECIFIC STUDENT

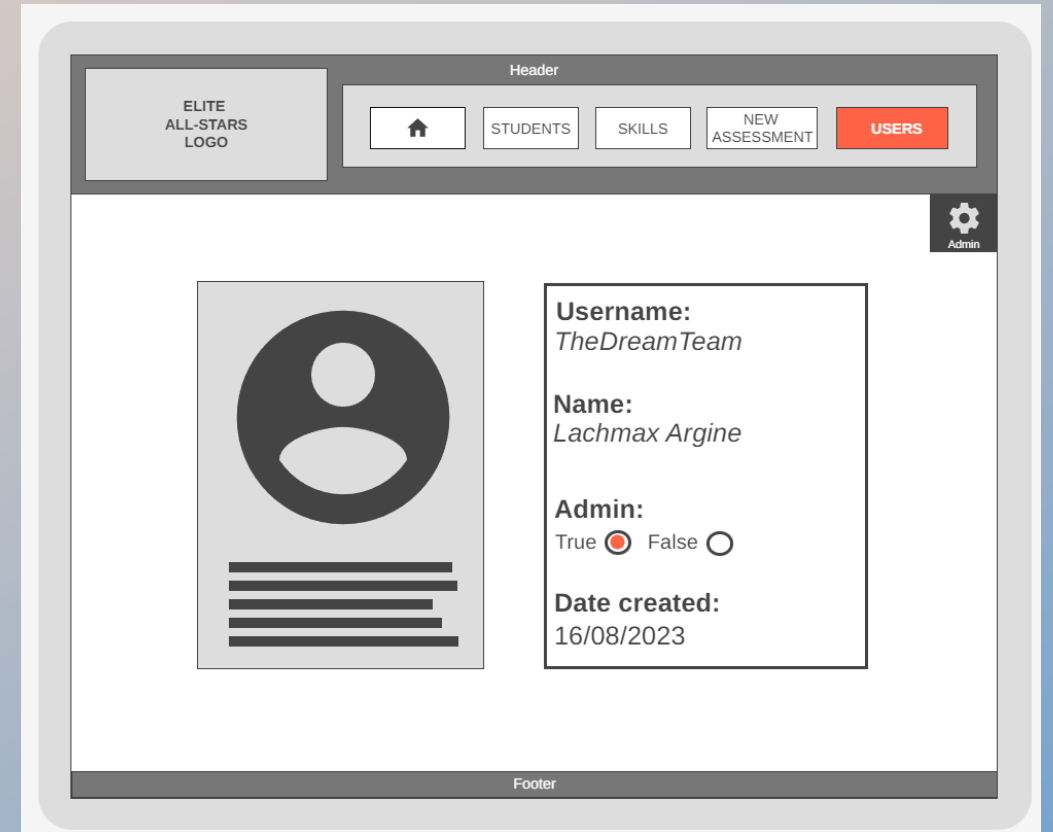


Tablet Wireframes

ALL USERS (admin only)



SPECIFIC USER (admin only)



Mobile Wireframes

LOGIN

The login screen features a light gray background. At the top, there is a large gray rectangle labeled "ELITE ALL-STARS LOGO". Below this, the text "Username:" is followed by a white input field labeled "Username Input Field". Underneath, the text "Password:" is followed by another white input field labeled "Password Input Field". At the bottom, there is an oval button labeled "Login Button". The text "Content Background" is written in the bottom left corner.

HOME

The home screen has a light gray background. The top section is a header with a gray bar labeled "Header" containing the text "ELITE ALL-STARS LOGO". Below the header is a navigation bar with a red home icon on the left and a hamburger menu icon on the right. The main content area starts with a large gray rectangle labeled "HERO CONTENT Image - Introduction". Below this is a section titled "STUDENTS" with a gray background, containing an oval labeled "Image" and five horizontal black bars. At the bottom, there is a footer with a gray bar labeled "Footer". Above the footer, the text "*Scroll for more content*" is followed by a downward arrow icon.

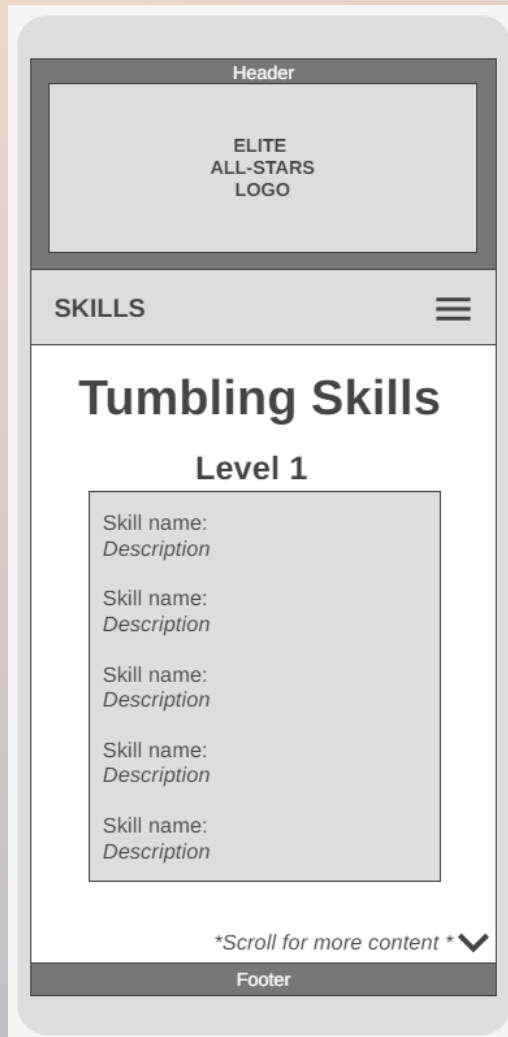
NEW ASSESSMENT

The new assessment screen has a light gray background. The top section is a header with a gray bar labeled "Header" containing the text "ELITE ALL-STARS LOGO". Below the header is a navigation bar with the text "NEW ASSESSMENT" on the left and a hamburger menu icon on the right. The main content area starts with the text "Student Name:" followed by a white input field labeled "*Type student name*" and a red user icon. Below this is the text "Select Assessment:" followed by a white dropdown menu labeled "*Select a level of assessment*" with a red downward arrow. The next section is a table with 5 rows and 5 columns. The columns are labeled "SKILLS", "R1", "R2", "R3", and "R4". The rows are labeled "Skill 1" through "Skill 5". Below the table is a red button labeled "SUBMIT". The bottom section is a footer with a gray bar labeled "Footer".

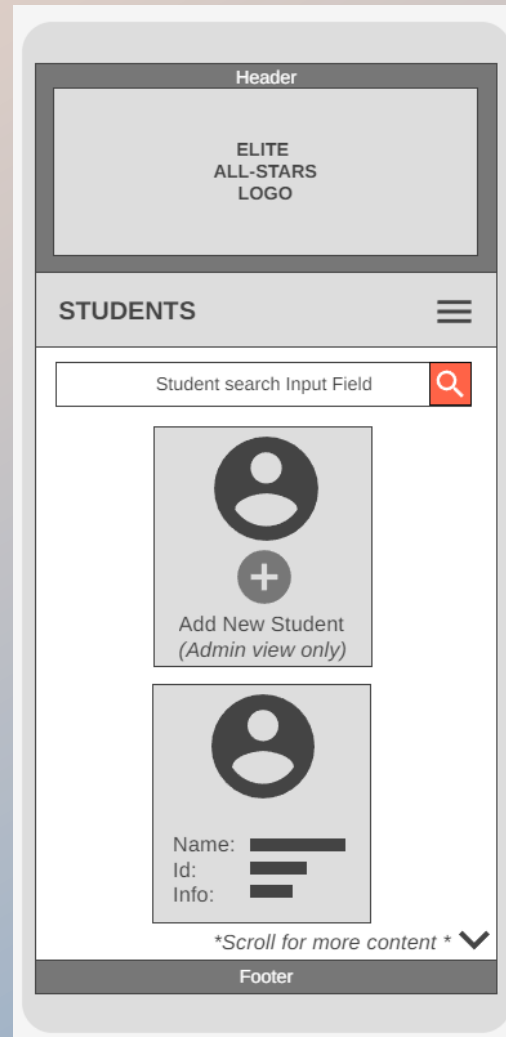
SKILLS	R1	R2	R3	R4
Skill 1	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Skill 2	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Skill 3	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Skill 4	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Skill 5	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Mobile Wireframes

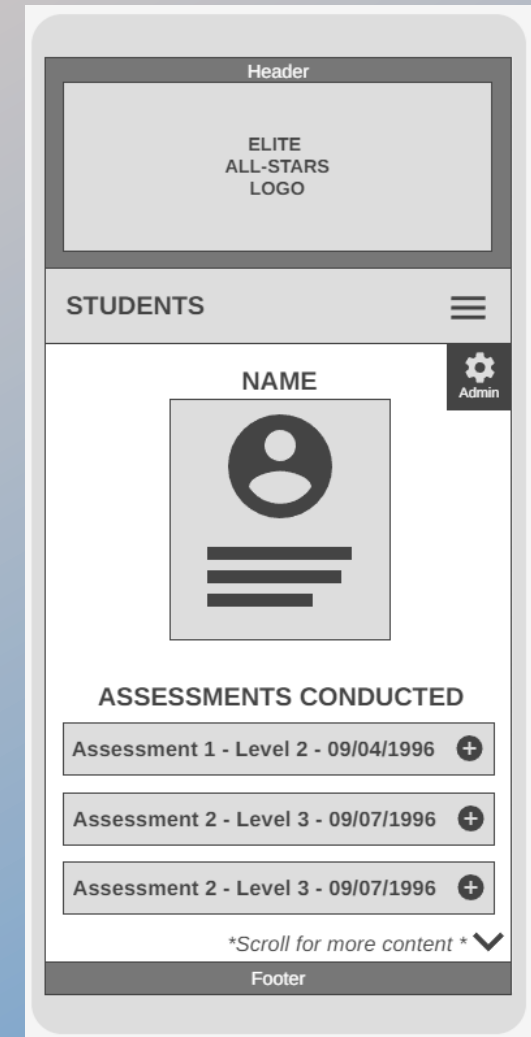
SKILLS



ALL STUDENTS

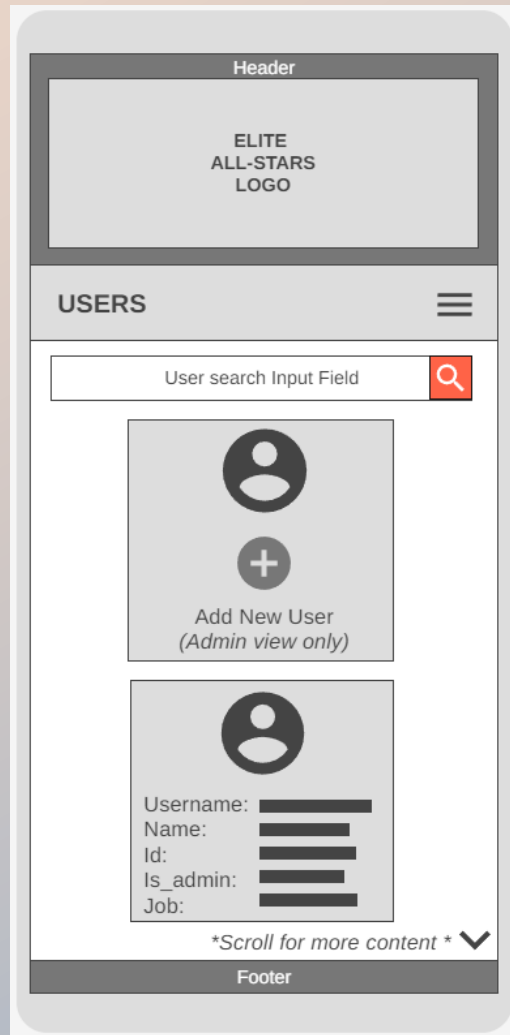


SPECIFIC STUDENT



Mobile Wireframes

ALL USERS (admin only)



SPECIFIC USER (admin only)



The End – Thank You!