

Design Document

DISCLAIMER!

During the fourth sprint of our semester, we have had quite a drastic change in focus imposed upon us by our stakeholders. Most of our work went towards a scenarios-based concept (for more information about what that means, please see the [project vision chapter in our project plan](#)). We had another concept as sort of backup, namely a metrics-based concept, which would allow teams to perform a gap analysis between themselves and their target audience. Based on the gap we could advise teams about potential biases they might have towards their target audience. This shift in focus does mean that a lot of the work we did (i.e. documenting, designing, diagramming etc.) won't be applicable towards the final implementation. Given the short amount of time left we will not be updating all documentation. Thank you for understanding.

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Enden, Luc L. van den	Provided feedback on contents of the document, did all interviews mentioned in this document, Mood Board chapter
Barbaro, Vid V.	Initial sketches, User flow chapter, Mood Board chapter, Scenario page, provided feedback on the designs and prototypes
Parić, Ines I.	Wrote all the chapters and worked on every chapter of the document

DISCLAIMER!	2
Summary.....	5
Introduction	7
1.1. Purpose.....	7
1.2. Scope.....	7
Initial Research and Requirements Gathering	7
2.1. Stakeholder Interviews	7
2.1.1. Overview	7
2.1.2. Key Stakeholder Feedback.....	8
2.1.3. Notable Quotes from Stakeholders	8
2.2. User Research	8
2.2.1. Research Methods	8
2.2.2. Key Findings.....	8
Scenario-Based Concept Development.....	9
3.1. Initial Wireframing.....	9
3.1.1. Overview	9
3.1.2. Tools Used.....	9
3.1.3. Persona	9
3.1.3. Initial Sketches	11
3.2. User Flow	12
3.2.1. Detailed User Flow	12
3.3. Mood Boards and Wireframes	13
3.3.1. Mood Boards	13
3.4.2. Wireframes	15
3.4. Prototype.....	16
3.3.1. Prototype Process	16
3.3.2. Prototype Screenshots	16
3.3.3. Prototype Pages	20
3.5. Initial Feedback and Iterations	30

3.5.1. Feedback from Stakeholders and Coaches	30
3.5.2. Feedback from Market Day	30
3.6. Influence of Feedback on Design.....	31
3.8. Design Details.....	33
Chapter 4: Metrics-Based Concept Development	34
4.1. Concept Overview	34
4.1.1. Tools Used.....	34
4.1.2. Persona	34
4.2. Initial Research and Feedback	35
4.3. User Flow	36
4.3.1. Detailed User Flow	36
4.4. Mood Boards and Wireframes	37
4.4.1. Mood Board	37
4.4.2. Wireframes	38
4.5. Prototype Development Process	39
4.5.1. Initial Development	39
4.5.2. Iteration and Testing.....	40
4.6. Feedback and Iterations	64
4.6. Influence of Feedback on Design.....	65
4.7. Key Features	65
4.8. Design Details.....	66
Conclusion.....	68

Summary

This document chronicles the design and development process of the OBBI web application, aimed at objectively mapping and visualizing unconscious biases within teams or target audiences. The document is structured to provide an in-depth look at each phase of the project, from initial concept to final design.

Introduction

The introduction outlines the document's purpose, which is to track the design development's progress throughout the semester. It highlights the project's goal to create a tool that identifies biases, incorporating feedback from users and stakeholders to refine the design.

Research and Initial Concepts

This chapter details the initial research phase, where the project team explored existing bias-mapping tools and engaged with HR experts and stakeholders. It discusses the evolution of the project from a scenario-based concept to a metrics-based approach, driven by feedback that emphasized the need for objective assessments over subjective scenarios.

Conceptual Design

The conceptual design phase is documented with initial wireframes, user flows, and mood boards. This chapter illustrates the process of translating rough sketches into detailed wireframes and prototypes using Figma. It includes sections on initial wireframes, detailed user flows, and mood boards, showing the progression from low fidelity to high-fidelity designs.

Feedback and Iterations

Feedback from stakeholders, coaches, target audience and design experts played an important role in refining the design. This chapter explains how specific feedback influenced changes in the design, such as clarifying the problem statement, enhancing visual design, ensuring neutral content, and improving user guidance and control.

Final Designs

The final designs of the OBBI web application are presented, showcasing the culmination of iterative design processes. Each design element is explained, from the landing page to the questionnaire page, highlighting how the final design meets user needs and adheres to the established design guidelines.

Design Details

This chapter provides a detailed style guide, ensuring consistency across all user interface elements. It covers color palettes, typography, imagery, icons, layout, spacing, and interactive elements. The brand voice is also defined, emphasizing a professional, inclusive, and supportive tone.

Conclusion

The conclusion summarizes the design journey, emphasizing the importance of user and stakeholder feedback in shaping the final product. It highlights the transition from scenario-based to metrics-based concepts and the iterative process that led to the final design.

Overall, this document provides an account of the design and development process of the OBBI web application, offering insights into the methods and decisions that shaped the final product.

Introduction

1.1. Purpose

This document is created to track and document the progress of our group's design development throughout this semester. It serves as a record of the various stages of design, from initial concepts to the finalized versions. This document will provide an in-depth look into the design process, detailing the decisions made, the feedback received and implemented, and the design guidelines adhered to, including fonts, sizing, color schemes, and margins. This document's main objective is to showcase the progress and development achieved in our design project over the semester.

1.2. Scope

This document will cover the process from initial wireframes, user flow, and concept designs to the first and second iterations of the design. It will provide explanations for changes based on user, expert, and stakeholder feedback. Additionally, it will include mood boards, along with specifics on fonts, sizing, and other design elements.

Initial Research and Requirements Gathering

2.1. Stakeholder Interviews

2.1.1. Overview

When the "HR Unconscious Bias Tool" project was assigned, it presented itself as a substantial research project. Our primary goal was to devise a method to objectively map biases within HR teams. To achieve this, we immediately examined existing tools for bias mapping, such as the one developed by Harvard University.

(<https://implicit.harvard.edu/implicit/takeatest.html>)

To enhance our project's effectiveness, we continuously collaborated with HR experts to ensure our approaches were sound, and we kept stakeholders informed with updates at the end of each sprint. Initially, we developed and presented multiple concepts to the stakeholders. The concept that received the most favorable response was a scenario-based web game, inspired by the Harvard Bias Test. While the Harvard test is informative, it lacks interactivity and suffers from poor design. Our goal was to create an engaging and educational experience that was both fun and interactive.

We explored various formats, including a Q&A style and a game like Kahoot! for decision-making. However, after discussions with stakeholders and HR experts, we determined that a scenario-based approach would be most effective. This format, validated by insights from the Harvard University bias test, promises high interactivity. In the chosen game concept, HR team members can create avatars to navigate through real-life scenarios. As they respond to questions, the game reveals their potential biases, making it an engaging tool for bias awareness and education.

2.1.2. Key Stakeholder Feedback

Despite enthusiasm towards the scenario-based concept, stakeholders later felt that concept could be too subjective. A new, metrics-based concept was proposed by one of the stakeholders. We visualized this new concept and tested both the scenario-based and metrics-based approaches with our HR target audience, teachers, and students.

While the scenario-based concept received more favorable feedback from users, students, and teachers, stakeholders remained keen on the metrics-based concept and suggested expanding the scope beyond HR to a more general audience. This significant feedback shift led to the development of a metric-based web application called OBBI. OBBI allows users to select their target audience, answer specific questions, and receive results indicating possible biases with explanations.

2.1.3. Notable Quotes from Stakeholders

"The scenario-based concept is engaging but feels too subjective."

"A metrics-based approach would provide more objective results and could appeal to a broader audience."

2.2. User Research

2.2.1. Research Methods

To gather user insights, we employed interviews as our primary research method. Before each interview, we prepared a user testing plan with pre-set questions. Each interview was recorded for accuracy and reference.

2.2.2. Key Findings

From our interviews with HR experts and psychology professional ([Interviews Document](#)) we gathered some important insights for the first version of the project that helped us

understand the importance of bias within the HR team specifically and some already existing tools used within HR or that were suggested as an inspiration(scenario-based):

- Understanding Bias: Bias is seen as a prejudgment or mental shortcut that influences behavior and decisions unconsciously.
- Importance of Measuring Bias: Measuring bias within teams can highlight potential cultural issues and improve overall organizational dynamics.
- Awareness of Bias: Making individuals aware of their biases can lead to positive changes in behavior, team dynamics, and customer service.
- Existing Tools: Tools like the Harvard IAT were mentioned, but there was a caution about cultural contextualization.

Scenario-Based Concept Development

3.1. Initial Wireframing

3.1.1. Overview

The initial phase of the design process involved creating low-fidelity wireframes to visualize the basic structure and layout of the web application. Our main objective was to map out the user flow and essential features of the application, ensuring that all key functionalities were represented.

3.1.2. Tools Used

Figma was our primary tool for wireframing and prototyping due to its collaborative features and ease of use.

3.1.3. Persona

Based on our findings from the HR interviews and user research, we developed a persona that represented our target audience for the scenario-based concept. The creation of this persona was informed by several key insights gathered during our interviews with HR experts and stakeholders:

- Demographic Information: Our interviews highlighted that our primary users would likely be HR professionals, who are typically in their 30s to 50s, with a gender balance that slightly leans towards female.
- Professional Background: Most of our interviewees had extensive experience in HR roles, often dealing with recruitment, employee relations, and diversity and inclusion initiatives. This background informed our persona's professional attributes.

- Challenges and Pain Points: A recurring theme from our interviews was the difficulty in identifying and mitigating unconscious biases within their teams. This challenge significantly influenced our persona's goals and motivations.
- Behavioral Traits: Many HR professionals expressed a preference for tools that are easy to use, provide actionable insights, and integrate smoothly into their existing workflows. These traits were incorporated into our persona to ensure relevance and usability.

Emily Johnson



Age: **35**
Work: **HR Manager**
Location: **City, State**

Goals

- Identify and mitigate biases within her HR team.
- Improve the inclusivity and diversity of her hiring process.
- Use objective tools to measure team dynamics.

Bio

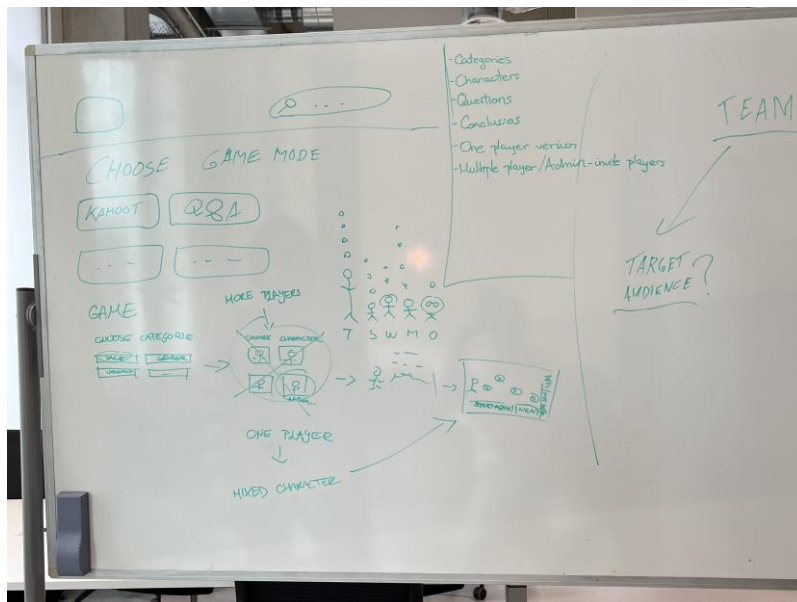
Emily has been working in HR for over 10 years and is responsible for hiring, team management, and employee development. She is interested in creating an inclusive work environment and is aware of the potential biases that can occur in hiring and team management.

3.1.3. Initial Sketches

We began with rough sketches on a whiteboard to brainstorm ideas and organize our thoughts. These sketches included basic navigation elements, game modes, and user flow.

The initial sketch outlined several key components:

- Game Mode Selection: Options included modes similar to Kahoot and Q&A, with placeholders for additional modes.
- Game Flow: Players would choose a category, create or select a character, and engage in scenarios that simulate real-life situations.
- Target Audience: Considerations for the intended users and how the scenarios would be relevant to them.



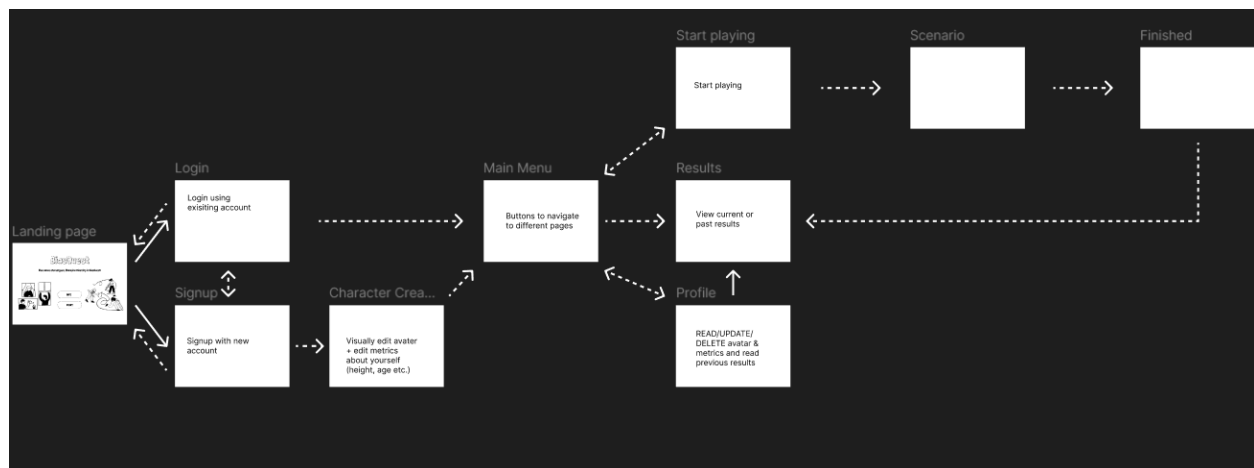
3.2. User Flow

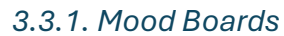
3.2.1. Detailed User Flow

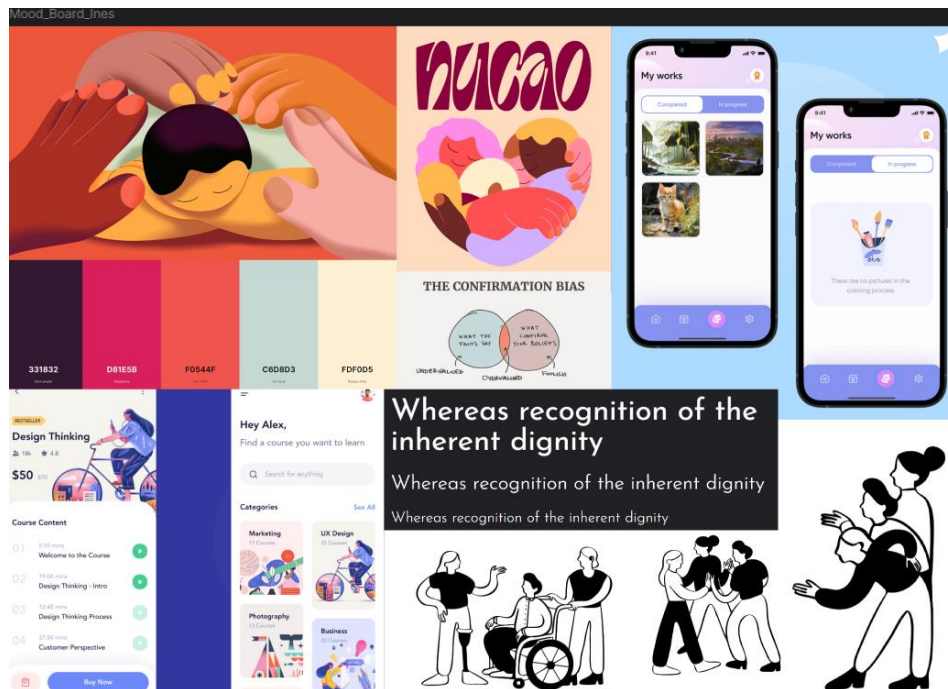
After deciding on the content of our scenario-based concept and user flow, we translated our sketches into a detailed user flow diagram to visualize the user's journey through the application. This helped us identify and refine the steps a user would take from landing on the homepage to completing various tasks.

The user flow included:

- Landing Page: Entry point where users can log in or sign up.
- Character Creation: Users create avatars that represent themselves in the game.
- Main Menu: Central hub where users can navigate to different game modes or settings.
- Gameplay Scenarios: Users participate in scenarios, answering questions to reveal potential biases.
- Results and Profile: Users view their results and can update their profile information.







As shown three mood boards were created by each group member and they showcased:

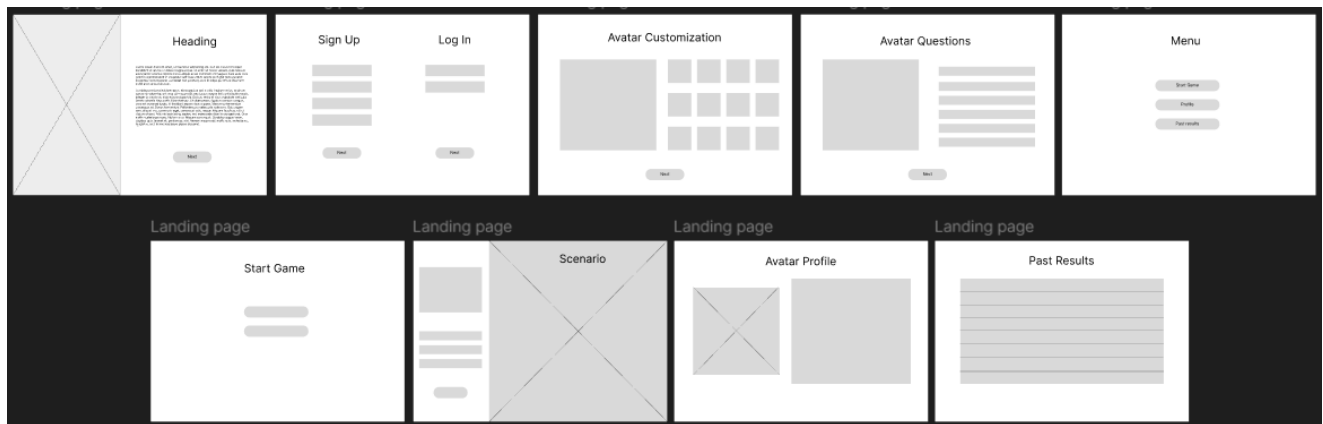
- **Color Palette:** A selection of colors that convey professionalism, inclusivity, and modernity.
- **Typography:** Fonts that are clean, readable, and align with the application's professional tone.
- **Imagery:** Illustrations and icons that are engaging and relevant to the content.
- **Design Inspirations:** Examples of existing applications and websites that would potentially influence our design choices.

3.4.2. Wireframes

The initial wireframes mapped out the basic structure and layout of the application. These low-fidelity wireframes helped visualize the flow of information and user interactions.

The wireframes included:

- Landing Page: Entry point for users, featuring options to log in or sign up.
- Sign In/Sign Up: Create a profile or sign in on your previous profile.
- Main Menu: Navigation hub for accessing different game modes and settings.
- Character Creation: Interface for users to create and customize their avatars.
- Gameplay Scenarios: Structured flow for users to engage in scenarios and answer questions.
- Results Page: Display of user results and insights into potential biases



3.4. Prototype

3.3.1. Prototype Process

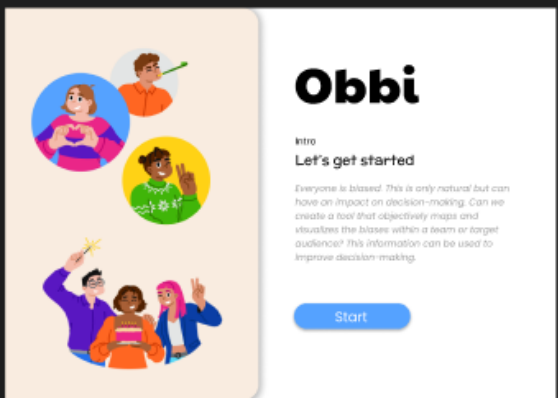
Starting the Process: The prototype development process began with translating our wireframes into high-fidelity designs. Our goal was to create a user interface that was both engaging and intuitive. Using Figma, we started with the landing page and progressively designed each screen, ensuring that each element was aligned with our design guidelines.

Iterative Development: Throughout the development process, we adopted an iterative approach. After designing each screen, we conducted internal reviews and usability testing sessions to gather feedback with our stakeholders, teachers, students, and HR target audience. This iterative process allowed us to make improvements and ensure the design met the needs of our target users.

3.3.2. Prototype Screenshots

Using Figma, we developed a prototype that visually represented the user interface and user experience. The prototype included screens for the landing page, sign-up/login, character creation, main menu, gameplay scenarios, and profile holding avatar information and past results.

Design iterations:



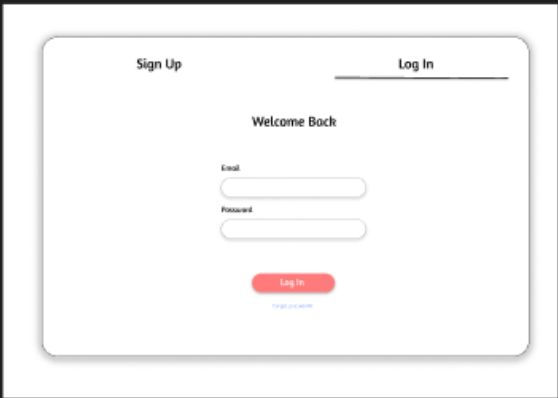
Obbi

Intro
Let's get started

Everyone is biased. This is only natural but can have an impact on decision-making. Can we create a tool that objectively maps and visualizes the biases within a team or target audience? This information can be used to improve decision-making.

Start

Landing page



Sign Up Log In

Welcome Back

Email

Password

Log In

[Forgot password](#)

Login/Signup



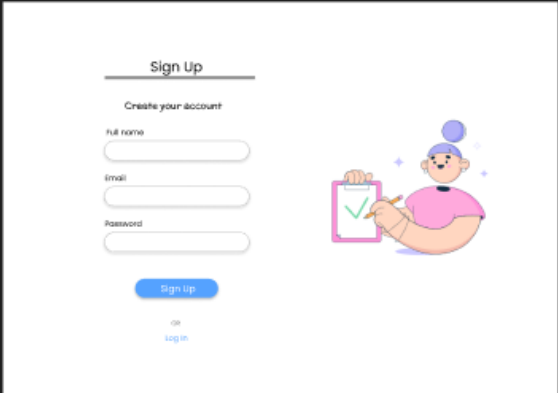
OBBI

Rise above stereotypes, Champion Diversity in BiasQuest!

INFO

START

Landing page



Sign Up

Create your account

Full name

Email

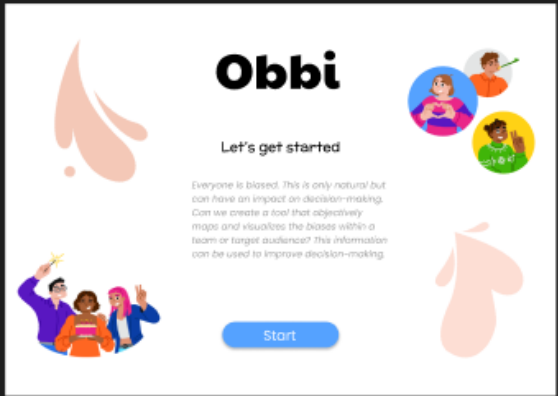
Password

Sign Up

or

Log In

Login/Signup

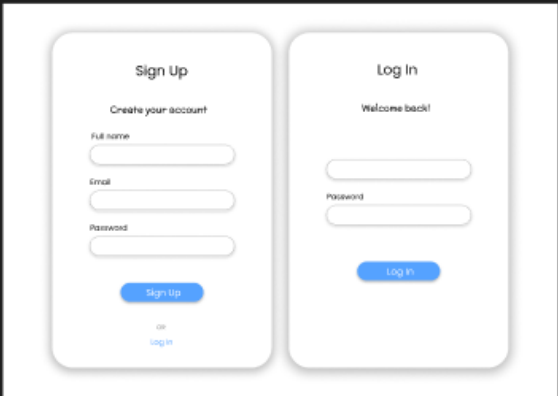


Obbi

Let's get started

Everyone is biased. This is only natural but can have an impact on decision-making. Can we create a tool that objectively maps and visualizes the biases within a team or target audience? This information can be used to improve decision-making.

Start



Sign Up Log In

Create your account

Full name

Email

Password

Sign Up

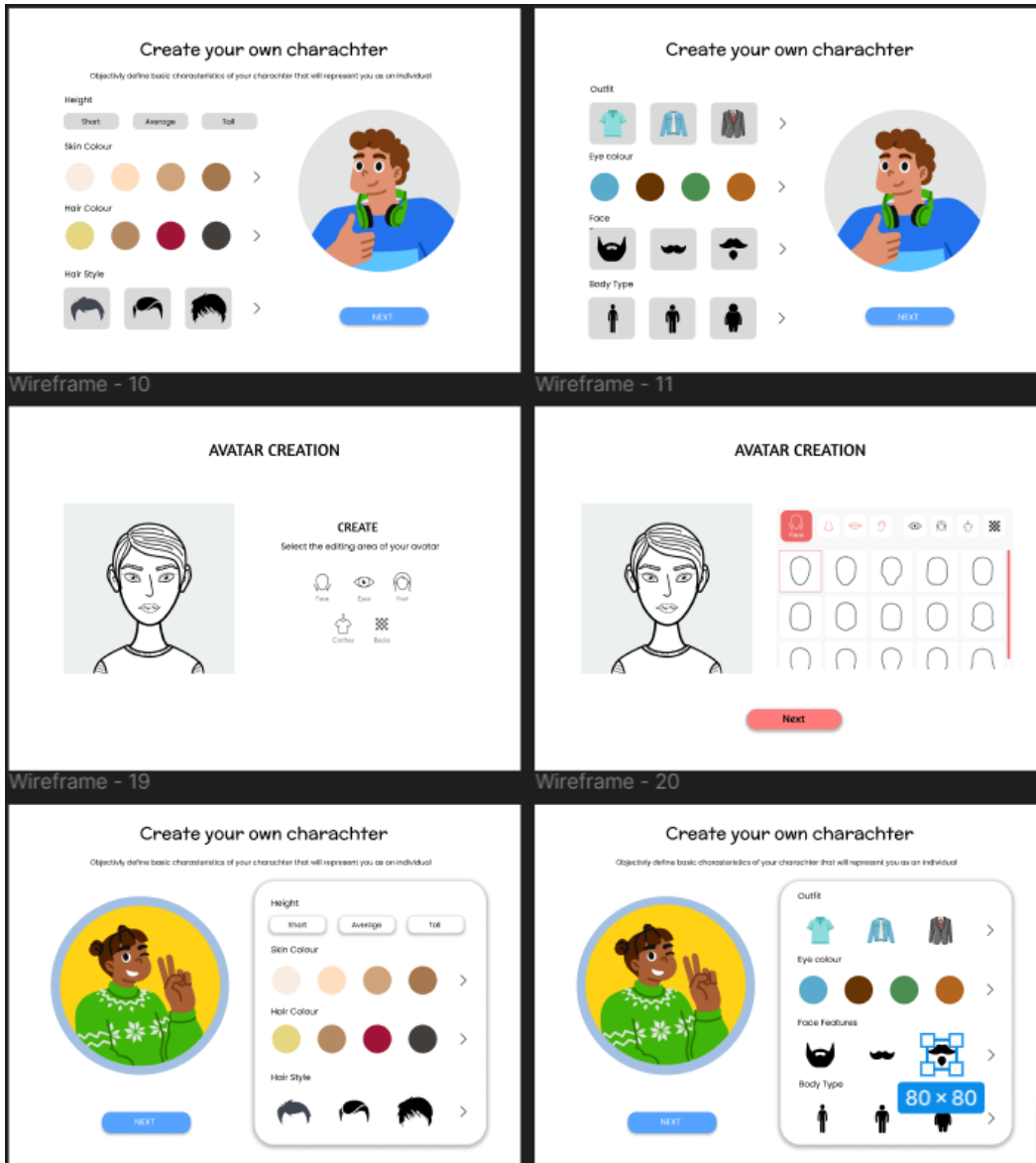
or

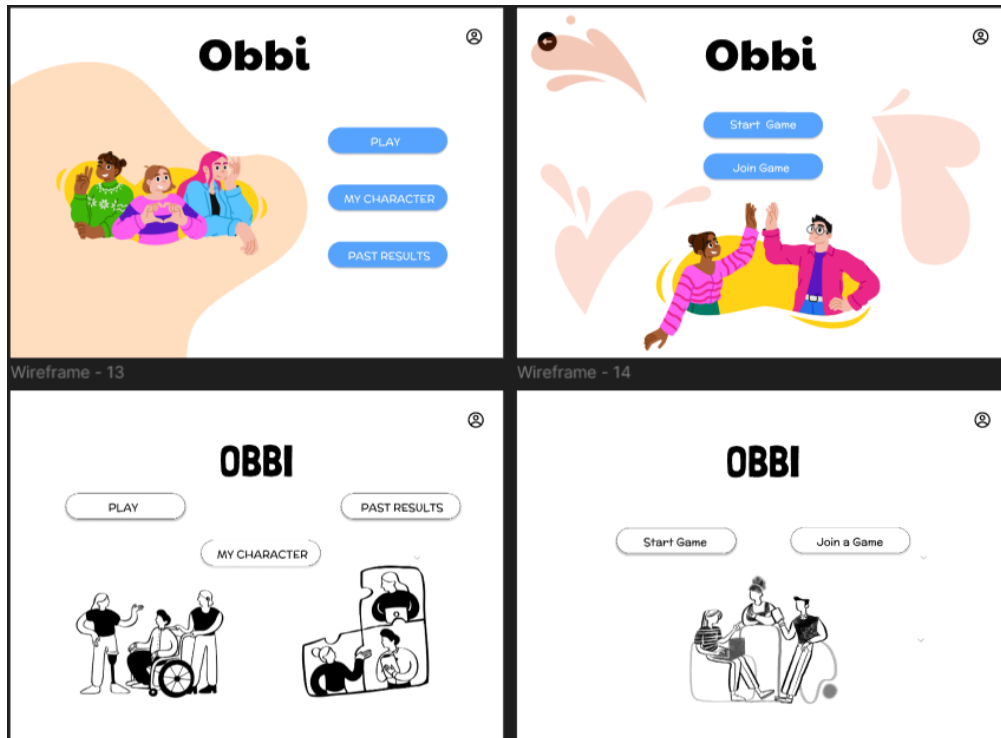
Log In

Welcome back!

Password

Log In





3.3.3. Prototype Pages

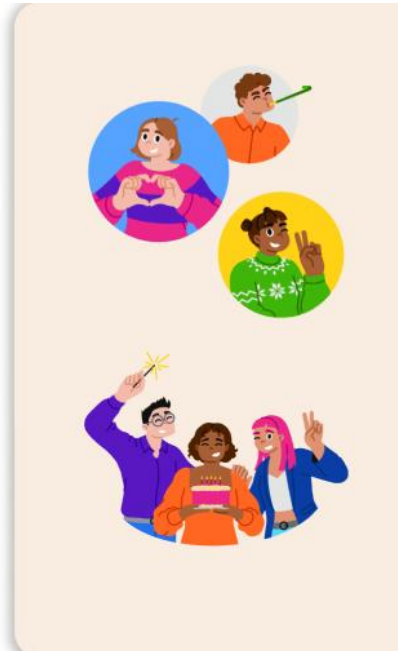
1.Intro Page

Obbi

Let's get started

Everyone is biased. This is only natural but can have an impact on decision-making. Can we create a tool that objectively maps and visualizes the biases within a team or target audience? This information can be used to improve decision-making.

Start



Description

The landing page of the OBBI web application introduces users to the tool and provides a clear call-to-action button to start.

Purpose

- Introduce the Application: Briefly explains that OBBI helps map and visualize biases to improve decision-making.
- Encourage Engagement: The "Start" button invites users to begin their journey.

This page sets the tone for the application, ensuring it is welcoming and easy to navigate.

2. Sign In/Sign Up Page

The image shows a wireframe of a user authentication page, divided into two sections by a vertical line. The left section is for 'Sign Up' and the right section is for 'Log In'.

Sign Up Section (Left):

- At the top, there are two links: 'Sign Up' (underlined) and 'Log In'.
- Below the links is the heading 'Create your account'.
- There are three input fields labeled 'Full name', 'Email', and 'Password'.
- Below the input fields is a blue button labeled 'Sign Up'.
- To the right of the input fields is an illustration of a person with a blue headband, holding a clipboard with a green checkmark.

Log In Section (Right):

- At the top, there are two links: 'Sign Up' and 'Log In' (underlined).
- Below the links is the heading 'Welcome back!'.
- There are two input fields labeled 'Email' and 'Password'.
- Below the input fields is a blue button labeled 'Log In'.
- To the left of the input fields is an illustration of a person with a blue headband, holding a smartphone displaying a login screen.

Description

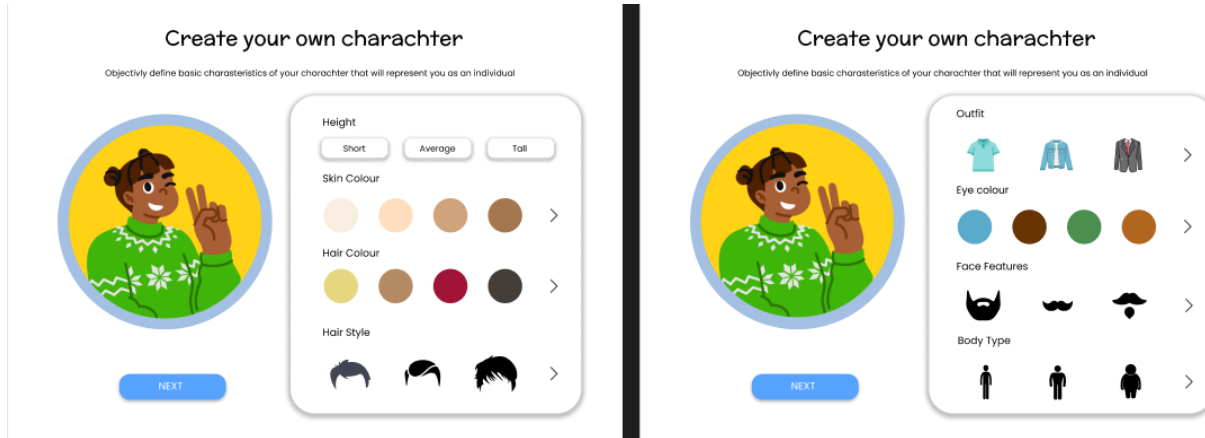
This page allows users to either create a new account or log into an existing one. The page is divided into two sections: "Sign Up" and "Log In."

Purpose

- Account Creation: Provides fields for new users to enter their full name, email, and password to create an account.
- Returning Users: Allows existing users to log in with their email and password.

This page is designed to be intuitive, ensuring users can easily sign up or log in without confusion.

3. Avatar Creation Page



Description

This page allows users to create and customize their own character that objectively represent their persona. It is divided into two sections, focusing on different aspects of character customization.

Purpose

- Customization: Provides options for users to define basic characteristics of their avatar, ensuring it represents them as an individual.
- Engagement: Enhances user engagement by allowing personalization.

4. Avatar Information Page

Create your own character

Objectively define basic characteristics of your character that will represent you as an individual



Character Name

Pronouns

Select ▾

Age

Ethnicity

Select ▾

Nationality

Select ▾

NEXT

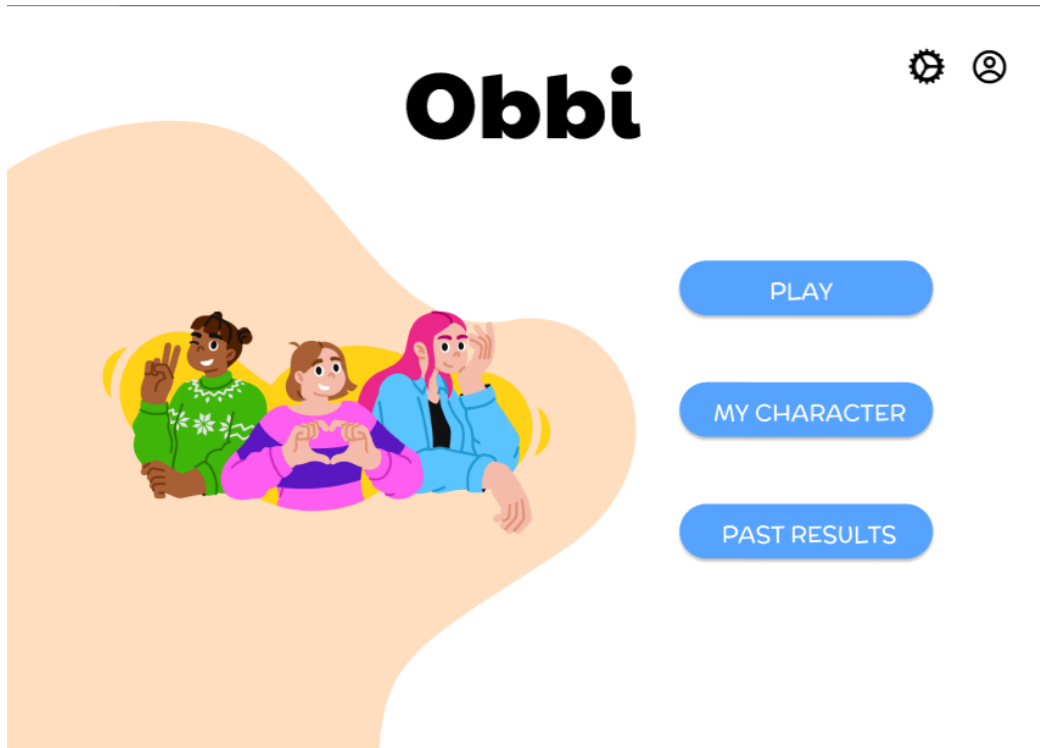
Description

This page allows users to input specific personal details for their character, such as name, pronouns, age, ethnicity, and nationality.

Purpose

- Collect Detailed Information: Gathers more concrete information that can be useful in detecting possible biases.
- Personalization: Ensures that the character represents the user accurately and inclusively.

5. Menu Page:



Description

The main menu page serves as the central hub from which users can navigate to different sections of the OBBI application. It includes options to start a game, view and edit their character, and check past results.

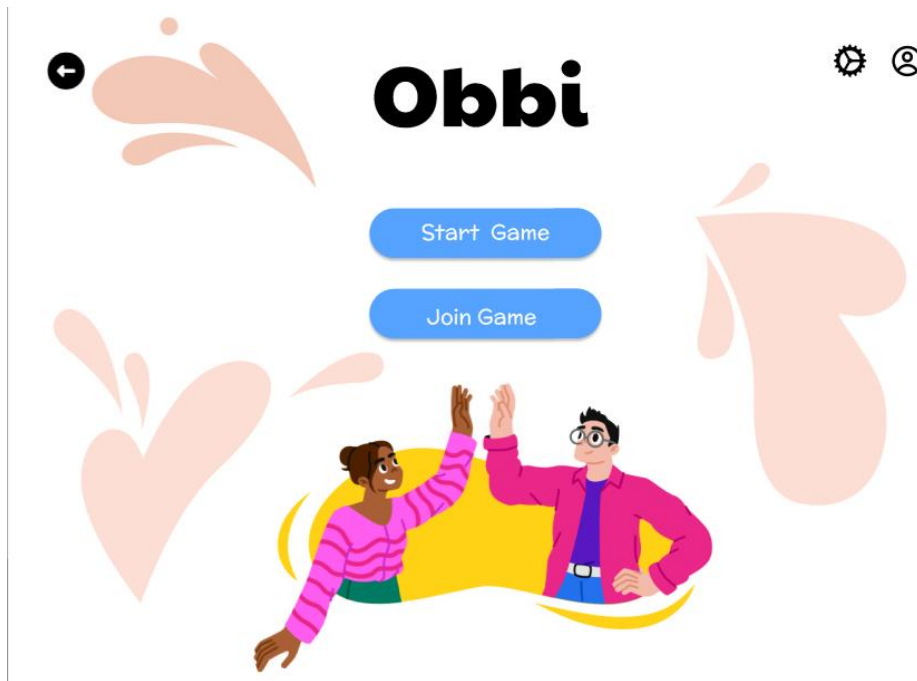
Purpose

- Navigation Hub: Provides easy access to the core functionalities of the application.
- User Engagement: Ensures users can quickly start playing, customize their character, or review past interactions.

Additional Features:

Settings Icon: Added next to the profile icon based on expert feedback, ensuring users feel secure and have access to additional information or help if needed.

6.Play Page



Description

This page is accessed by clicking the "Play" button from the main menu. It allows users to choose between starting a new game individually or joining an existing game to compare results with other team members.

Purpose

- Individual Play: Enables users to start a solo game, providing a personalized experience.
- Team Play: Allows users to join a team game, fostering a collaborative environment where results can be compared with others.

Based on feedback gotten on the demo market and from Amer (media software teacher), the design was well-received for its clarity and simplicity, making it easy for users to choose their preferred game mode.

7. Results Page



HISTORY



GAME	DATE	BIAS CATEGORY	ANALYTICS
Game123	30-01-2024	Race	RESULTS
Game456	24-01-2024	Height	RESULTS
Game789	10-01-2024	Age	RESULTS
Game987	7-01-2024	Age	RESULTS
Game654	20-12-2023	Height	RESULTS
Game321	17-12-2023	Race	RESULTS

Description

The history page allows users to review their past game results. It displays a list of previous games, including the game name, date, bias category, and a button to view detailed results.

Purpose

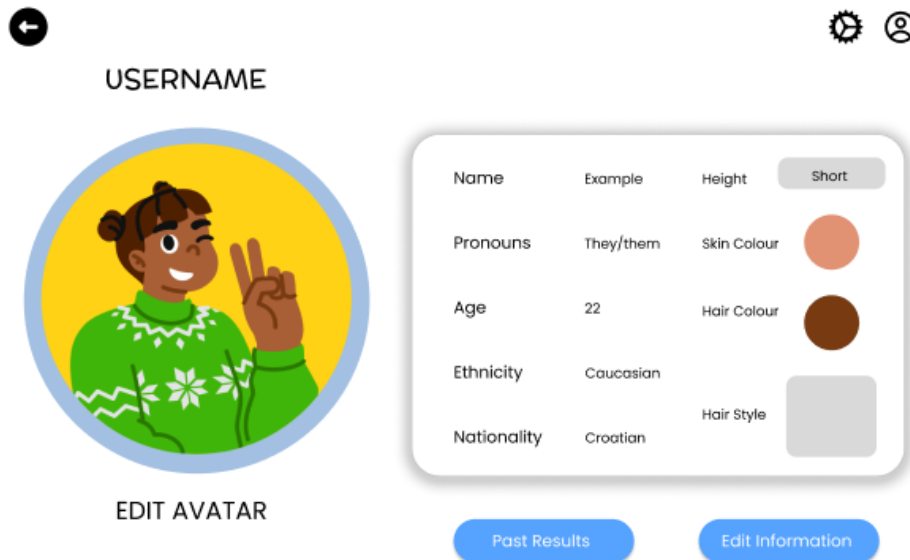
- Review Past Results: Provides users with a summary of their past games, helping them track their progress and understand trends over time.
- Access Detailed Analytics: Each game entry includes a "Results" button, allowing users to delve deeper into the analytics of their performance.

Table Columns:

- Game: Lists the game identifiers.
- Date: Shows when each game was played.
- Bias Category: Indicates the type of bias assessed in each game.
- Analytics: Includes a "Results" button for accessing detailed analytics of each game.

This page is designed to be straightforward and informative, allowing users to easily navigate through their history and access detailed analytics when necessary.

8. Profile Page



Description

The profile page displays detailed information about the user's character, including personal attributes and customization options. It also provides options to view past results and edit the character's information.

Purpose

- Display Character Information: Shows all the personal details and characteristics of the user's avatar.
- Manage Profile: Allows users to update their avatar's information and access past results.

Sections:

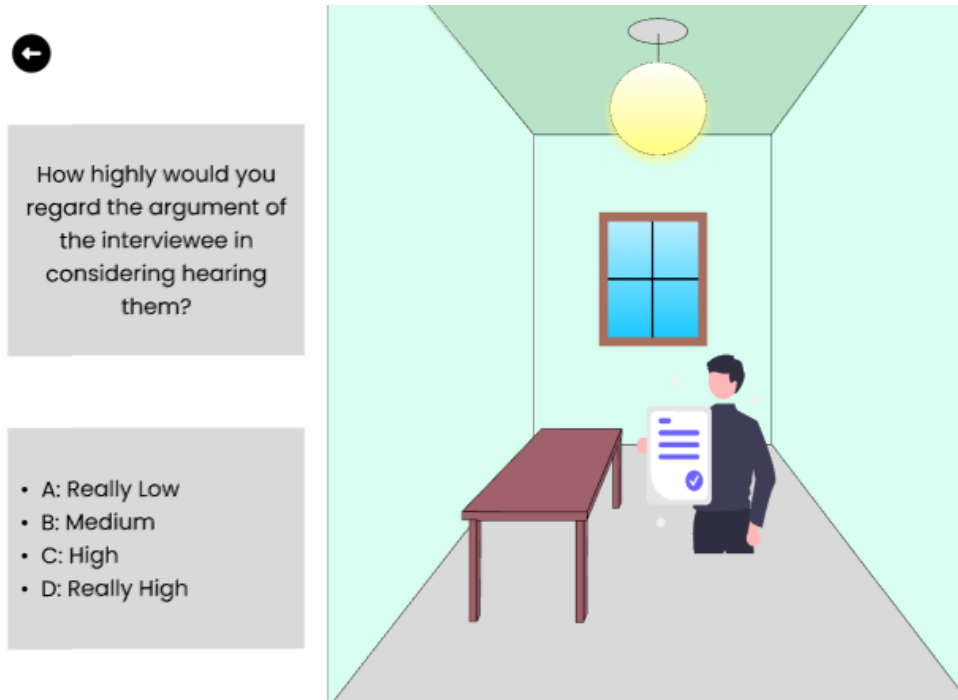
- Avatar Illustration: Visual representation of the user's avatar with an option to edit.
- Personal Information: Displays fields such as name, pronouns, age, ethnicity, nationality, height, skin color, hair color, and hair style.

Action Buttons:

- Past Results: Allows users to view their past game results.
- Edit Information: Provides access to update avatar details.

This page is designed to be user-friendly and informative, making it easy for users to manage their profile and access important information about their past game results.

9.Scenario Page:



Description

This page represents a scenario within the game where the user's avatar is placed in a simulated HR situation. The user is presented with a question on the left and a visual scenario on the right, where they must choose a response based on what they would do in that situation.

Purpose

- Interactive Learning: Engages users in realistic scenarios to help identify unconscious biases.
- Assessment: Collects responses to evaluate and provide feedback on potential biases.

Scenario Elements

- Visual Scenario: Illustration of an HR situation, such as an interview room with an interviewee.
- Question: A prompt related to the scenario (e.g., "How highly would you regard the argument of the interviewee in considering hearing them?").

- Answer Options: Multiple-choice answers (e.g., A: Really Low, B: Medium, C: High, D: Really High).

Additional Features

- Navigation: A back button to return to the previous screen or exit the scenario.

This page is designed to be interactive and reflective, encouraging users to consider their actions and decisions in realistic scenarios, which helps in accurately assessing their biases.

Engagement

- Illustrations and interactive elements are used to make the application visually appealing and engaging.
- The character creation process and scenario-based interactions are designed to be fun and immersive.

3.5. Initial Feedback and Iterations

3.5.1. *Feedback from Stakeholders and Coaches*

Rens (coach):

- Emphasized the need to make the problem statement concrete.
- Pointed out that if the tool maps unconscious bias, it might not be truly unconscious.
- Appreciated the gamification aspect.

Senne (coach):

- Positive feedback on gamification.
- Questioned how the target audience fits into the picture.
- Advised not to make the design too childish.

Marc (stakeholder):

- Confirmed existing design principles.
- Liked the gamification approach.
- Suggested starting with expert input and keeping the content factual and non-judgmental.

Melissa (stakeholder):

- Expressed interest in the gamification concept.
- Noted that black and white design was not suitable for avatar creation (especially for skin color).

3.5.2. *Feedback from Market Day*

John (teacher) :

- Commended the clear pitch and context provided.
- Advised on simplifying the measurement explanation.
- Suggested avoiding over-analysis.

Malissa (stakeholder):

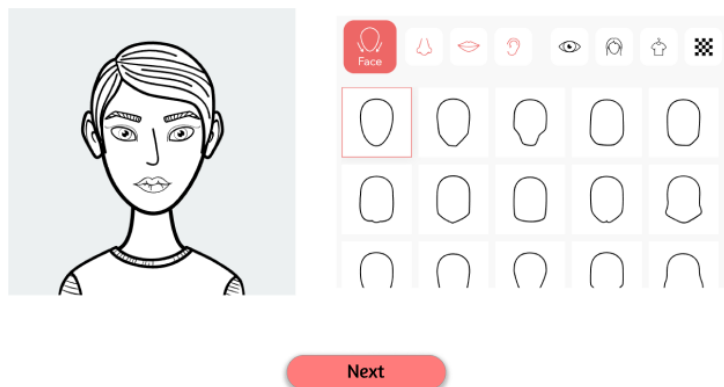
- Positive feedback on the scenario-based concept.

3.6. Influence of Feedback on Design

Based on the feedback received, we made several key iterations to the initial prototype:

Visual Design Enhancements: Based on feedback about the initial black and white design, particularly for avatar creation, we added more color and detail to make the interface more engaging and visually appealing. We incorporated a diverse color palette to represent different skin tones and clothing options and added facial features. This has made the avatars more visually appealing and ensured they were more inclusive and representative of our diverse user base. These enhancements were implemented using Figma, where we iteratively tested and refined the avatars to achieve the desired visual appeal.

AVATAR CREATION



Before feedback

Create your own character

Objectively define basic characteristics of your character that will represent you as an individual



NEXT

Height

☐ Short ☐ Average ☐ Tall

Skin Colour

☐ ☐ ☐ ☐ >

Hair Colour

☐ ☐ ☐ ☐ >

Hair Style

☐ ☐ ☐ >

After feedback

Neutral and Non-Judgmental Content: To ensure that our approach was neutral and presented in a factual, non-judgmental manner, we collaborated with a psychologists. We reviewed and revised some question sets with her guidance, focusing on language that avoided any leading or biased phrasing. The psychologists provided input on how to frame questions and approach to be objective and non-directive, ensuring that users would not feel judged or biased against. This collaboration helped us understand how to approach this topic and validate our scenario-based concept. We documented our findings in [Research Document](#) and since our focus was to develop this concept and more research was out of our scope, we did not go into details with researching on psychology level what questions should be presented so that is left for future iterations.

3.8. Design Details

This section will contain specific design details from the scenario-based concept, such as:

Fonts: Typefaces used throughout the application.

- Primary Font: McLaren
- Secondary Font: Poppins

Sizing: Standards for text sizes, margins, and paddings.

- Heading Size: 48px
- Subheading Size: 24px
- Body Text Size: 20px
- Button Text Size: 24px

Color Scheme: Primary, secondary, and accent colors used in the design.

- Primary Color: #F9ECE0
- Secondary Color: #55A2FF
- Accent Color: #FFD215
- Background Color: #FFFFFF

Margins and Padding: Consistent spacing guidelines to ensure a cohesive layout.

- Page Margins: 20px
- Element Spacing: 10px

Chapter 4: Metrics-Based Concept Development

4.1. Concept Overview

The metrics-based concept emerged from concerns raised by stakeholders that the scenario-based concept could be too subjective. The initial idea was to create a questionnaire that objectively maps users' biases based on their answers to specific questions about themselves, such as height, race, ethnicity, etc. This approach aims to provide an objective assessment of potential biases.

To enhance user engagement and interactivity, we evolved this concept into a web application. The application allows users to learn about OBBI, understand biases, and select their preferred target audience. Based on their chosen target audience, users receive tailored questions, and the results offer concrete explanations of potential biases.

4.1.1. Tools Used

Figma was our primary tool for wireframing and prototyping due to its collaborative features and ease of use.

4.1.2. Persona

After the switch in our projects scope and our target audience getting a lot more broad than just HR expert our persona also changed. After discussion within the team and our stakeholders we defined a persona for which this product would be targeted towards.

Alex Martinez



Goals

- Ensure product designs are inclusive and cater to the target audience's needs.
- Identify and address any biases in his team's perspectives and decisions.
- Utilize a tool that provides objective feedback on potential biases and their implications.

Age: **40**
Work: **Product Developer Manager**
Location: **City, State**

Bio

Alex oversees a team developing products for diverse user groups. Recently, his team started working on a project to design shoes for elderly individuals who play football. He wants to ensure that his team does not harbor any biases that could affect the product's development and market success.

4.2. Initial Research and Feedback

The switch to a metrics-based concept was significantly influenced by feedback from our stakeholders. Below are key insights that inspired this shift:

Mark : Highlighted that the scenario-based concept is better suited for HR processes like hiring, where a deeper understanding is needed. The metrics-based concept, however, is more applicable to groups working on specific projects with a product focus, as it helps identify gaps without requiring a deep psychological understanding.

Tips from Mark:

- Accept that we are not psychology experts.
- Put more thought into the creation of target audiences.
- Ensure that analyses have proper explanations.

Tops from Mark:

- Both concepts are great.
- Liked the designs and implementation ideas.

Marc: Suggested incorporating checkboxes for applicable metrics (age, nationality, etc.) during target audience creation, guiding users to setup their target audience effectively.

Tips from Marc:

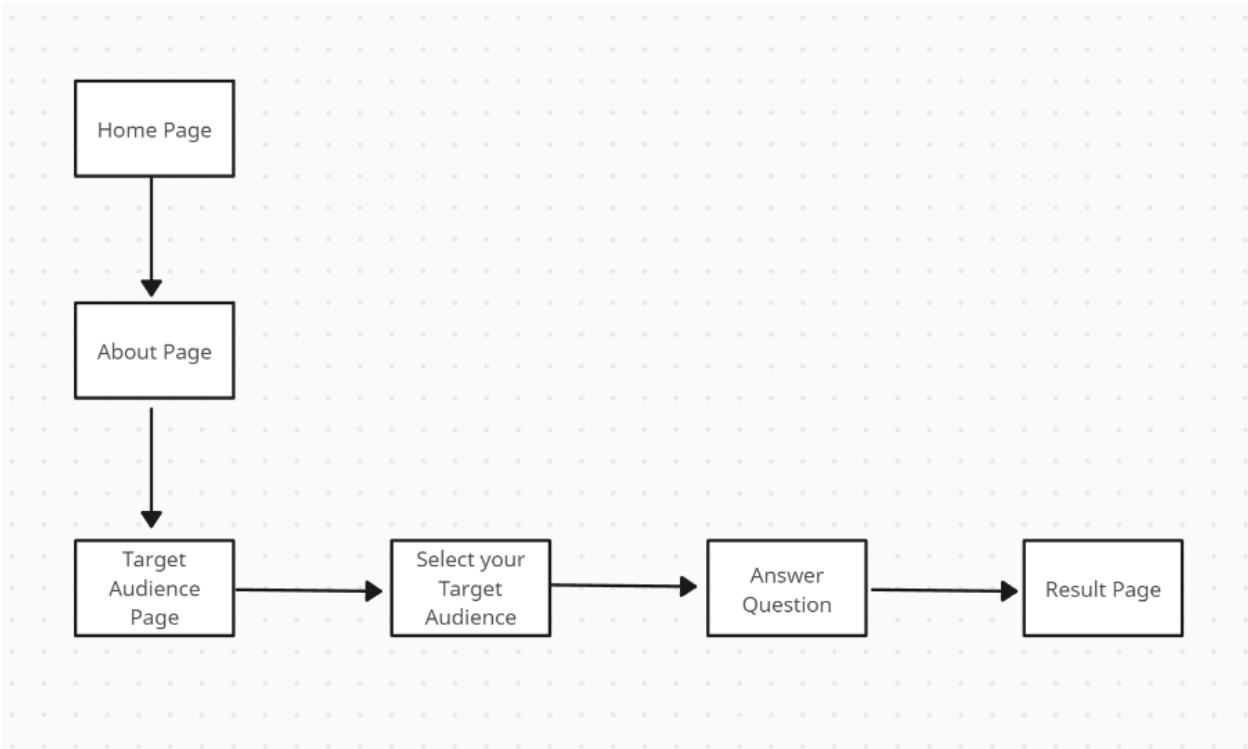
- During the creation of the target audience, include checkboxes for applicable metrics.
- Attach relevant questions to these metrics.

4.3. User Flow

4.3.1. Detailed User Flow

The detailed user flow for the metrics-based concept involves several key steps, guiding the user from learning about OBBI to receiving their bias assessment results.

- Home Page: Introduction to the application with an option to start.
- About Page: Users can access information about biases and the purpose of the application.
- Target Audience Selection: Users select if they would like to upload existing target audience, select already set ones or create their own
- Target Audience Page: Users select their preferred target audience with checkboxes for applicable metrics.
- Questionnaire: Tailored questions based on the selected target audience.
- Results Page: Objective bias assessment results with explanations.



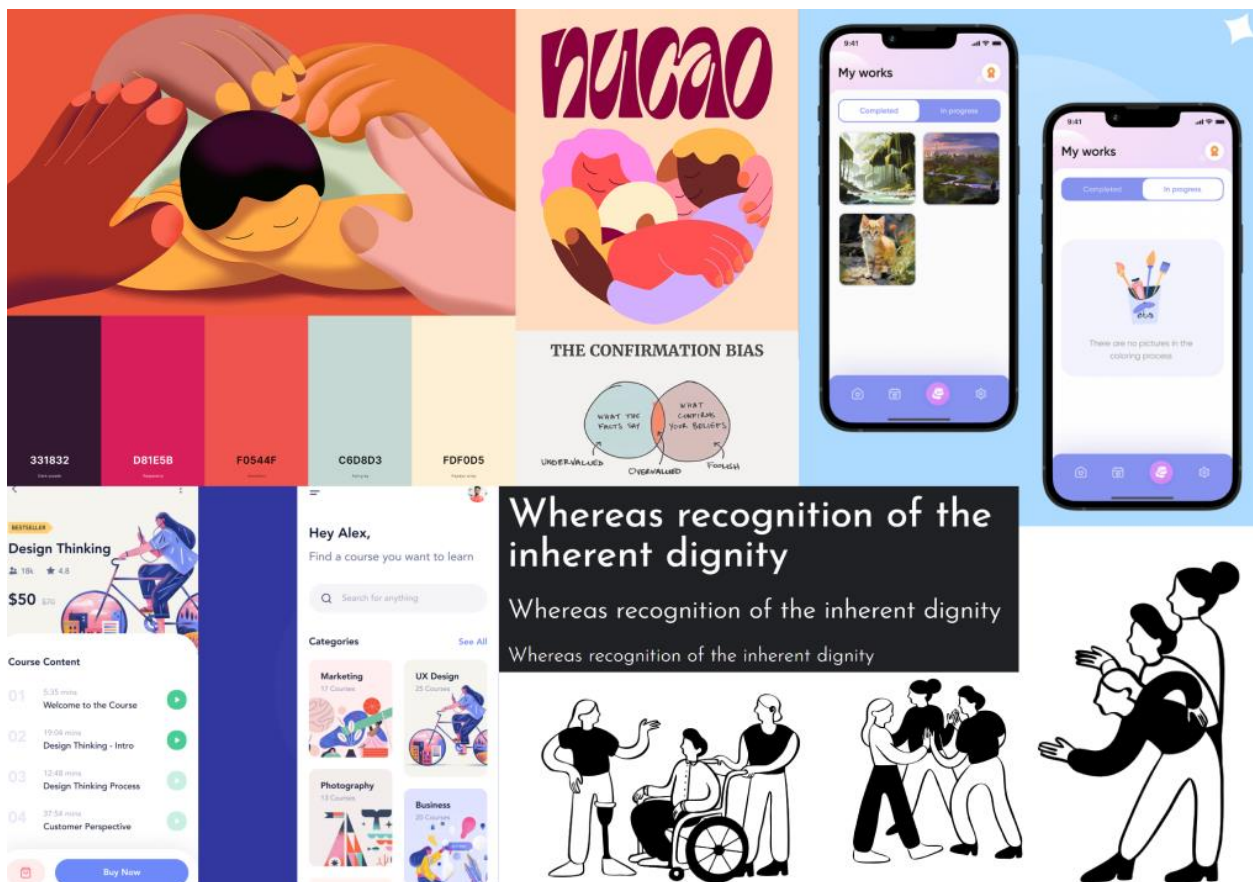
4.4. Mood Boards and Wireframes

4.4.1. Mood Board

For this design a mood board that was previously one of the mood boards used for scenario-based concept was used for this metric-based design.

The mood board showcased:

- Color Palette: A selection of colors that convey professionalism, inclusivity, and modernity.
- Typography: Fonts that are clean, readable, and align with the application's tone.
- Imagery: Illustrations and icons that are engaging and relevant to the content.
- Design Inspirations: Examples of existing applications and websites that influenced our design choices.

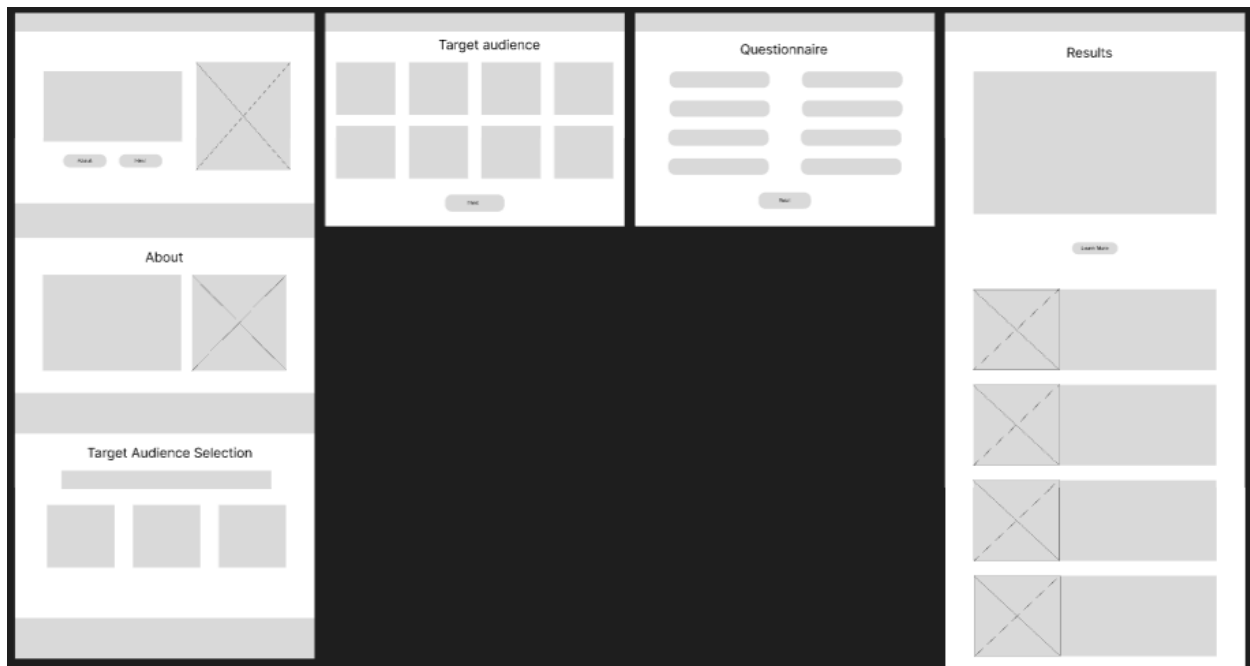


4.4.2. Wireframes

The initial wireframes mapped out the basic structure and layout of the application. These low-fidelity wireframes helped visualize the flow of information and user interactions.

The wireframes included:

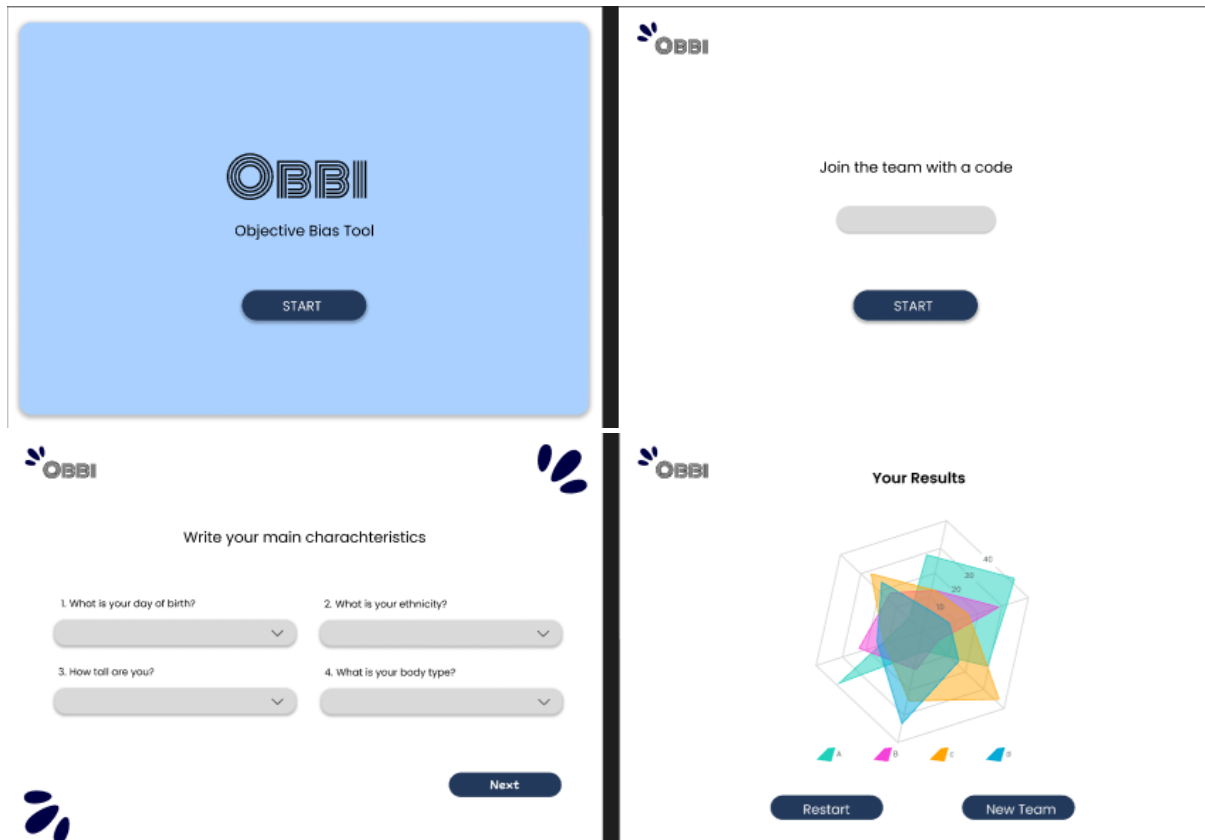
- Landing Page: Introduction to the application with options to learn more or start.
- Learning Module: Sections explaining biases and the purpose of the application.
- Target Audience Selection: Interface for users to define their target audience with checkboxes for relevant metrics.
- Questionnaire: Structured flow for users to answer questions based on selected metrics.
- Results Page: Display of user results and insights into potential biases.



4.5. Prototype Development Process

4.5.1. Initial Development

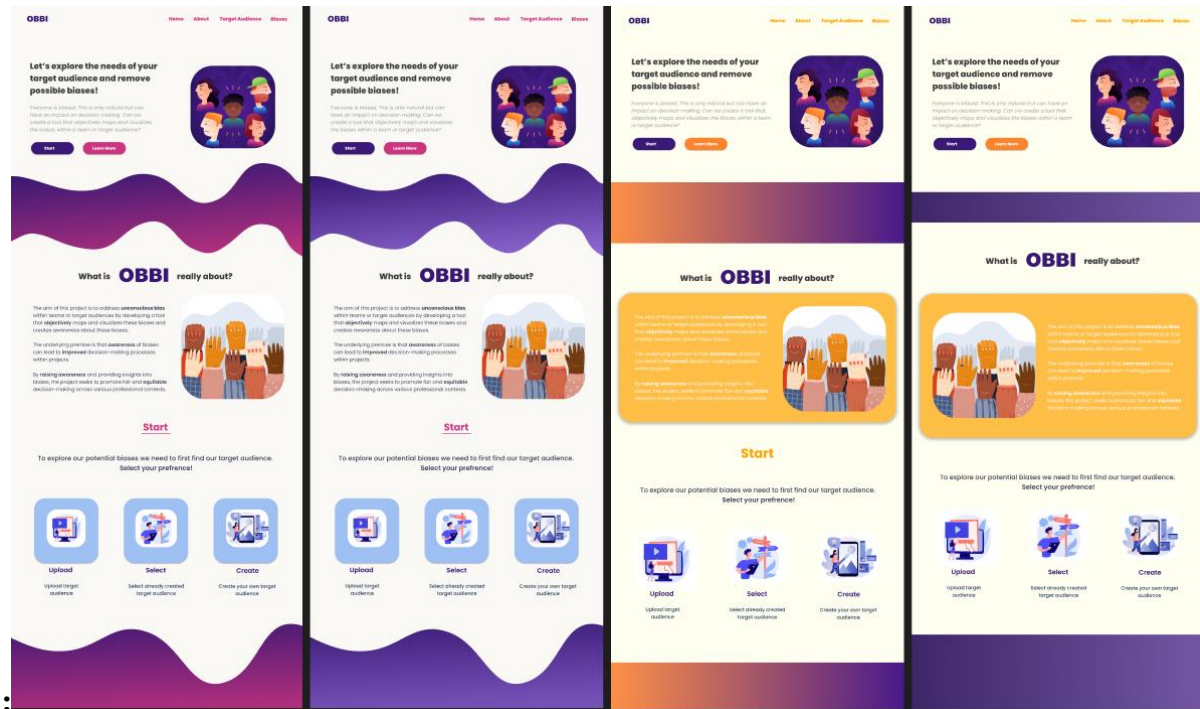
Initially, the metrics-based concept was developed alongside the scenario-based concept. The first draft included a basic questionnaire aimed at objectively mapping biases. This was tested concurrently with the scenario-based concept

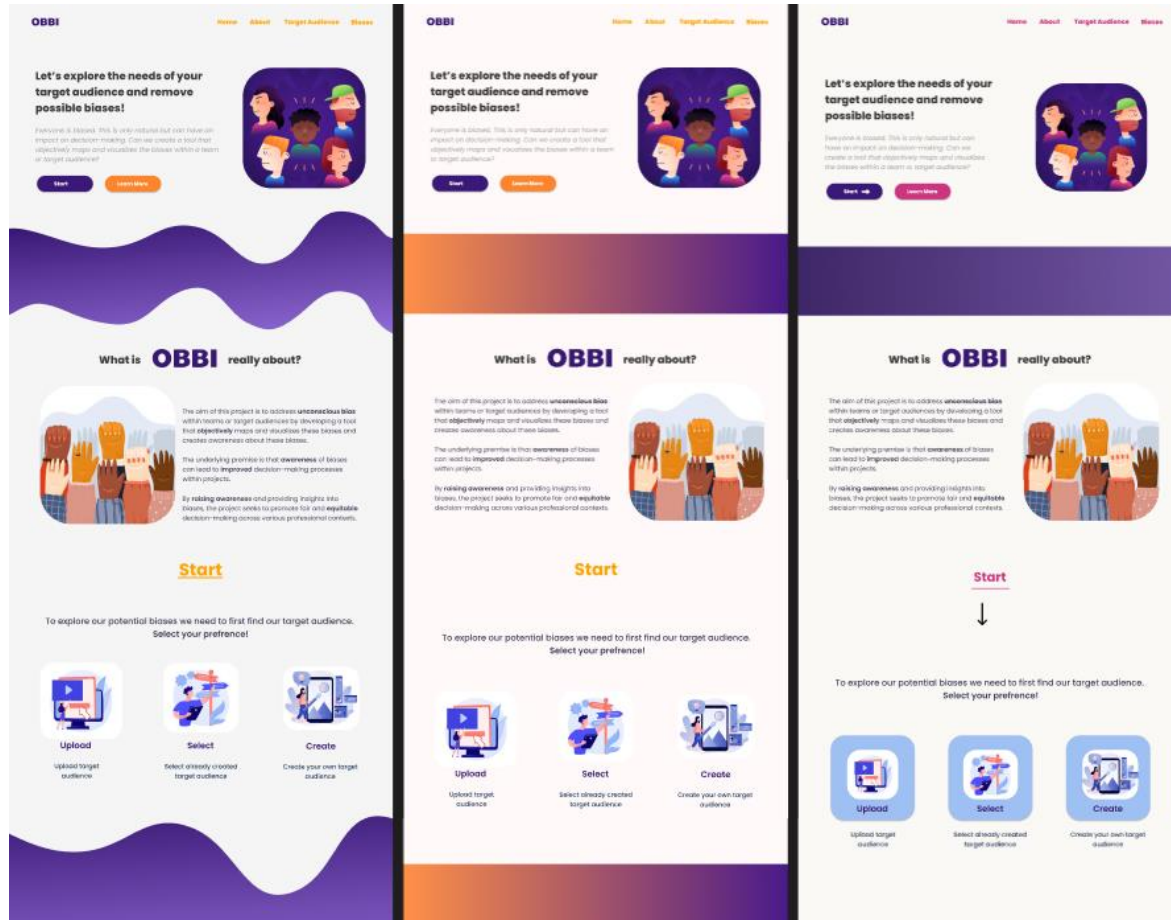


4.5.2. Iteration and Testing

After deciding to focus solely on the metrics-based concept, we refined the prototype and continued with testing.

Prototype Iterations:

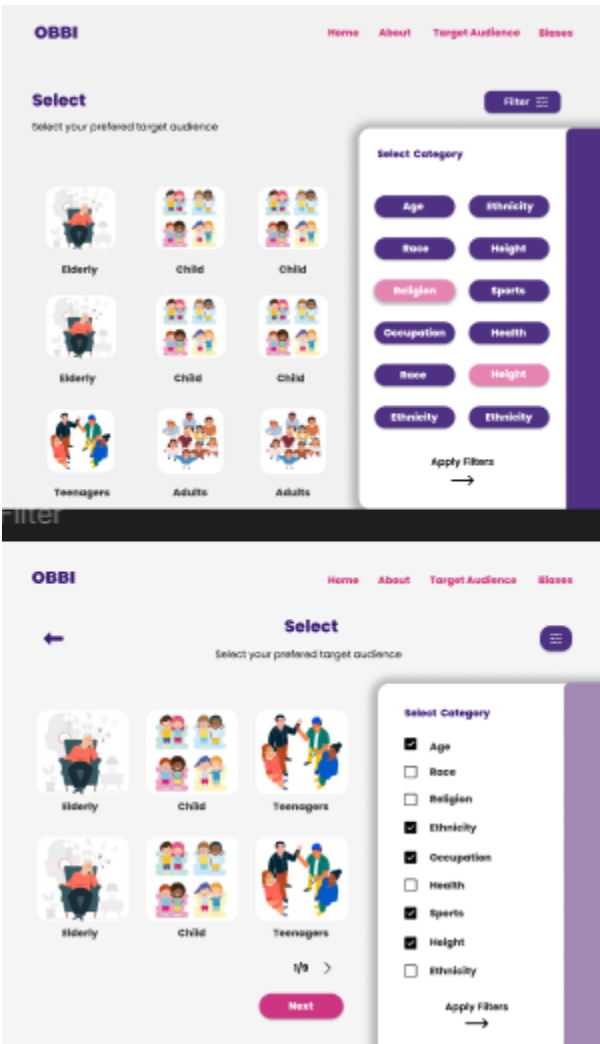




Target Audience Page and Filter Button placement:



Filter Page:



Questionnaire Page:

OBBI

[Home](#) [About](#) [Target Audience](#) [Biases](#)

Answer

Fill in objective information about yourself

1. What is your day of birth?

2. What is your ethnicity?

3. How tall are you?

4. What is your body type?

5. What religion do you come from?

6. What is your religion now?

7. Where were you born?

8. Where were you raised?

Submit

ANSWERS

OBBI

[Home](#) [About](#) [Target Audience](#) [Biases](#)

Answer

Fill in objective information about yourself

1. What is your day of birth?

2. What is your ethnicity?

3. How tall are you?

4. What is your body type?

5. What religion do you come from?

6. What is your religion now?

7. Where were you born?

8. Where were you raised?

Submit

ANSWERS

OBBI

[Home](#) [About](#) [Target Audience](#) [Biases](#)

←

Answer

Fill in objective information about yourself

1. What is your day of birth?

2. What is your ethnicity?

3. How tall are you?

4. What is your body type?

1/2

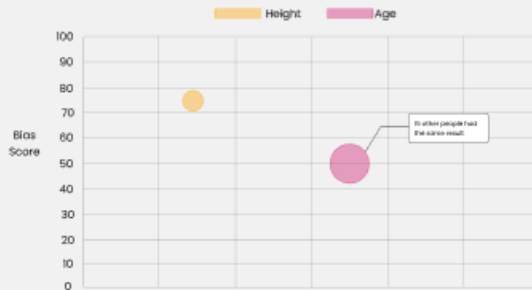
Next

Result Page:



Results

Based on your target audience here are the results for possible biases


[Learn More](#)

Why?

These results may leave you wondering how and why are these my possible biases. Based on general metrics we come to these conclusion and to have a better understanding of them make sure to further explore.



Height

The research has shown that individuals that fall into a group of taller people might have biases towards shorter group of people. Based on your answers your target audience falls in the short group while you fall into a taller group of individuals.



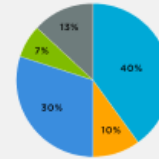
Age

The research has shown that most young individuals in the age range from 18-26 might have some biases toward a group of people of age from 52-62.

Results

Based on your target audience here are the results for possible biases

Height Age Ethnicity Religion Age


[Learn More](#)

Why?

These results may leave you wondering how and why are these my possible biases. Based on general metrics we come to these conclusion and to have a better understanding of them make sure to further explore.



Race

As a white individual with Christian background, we believe you might have some biases towards race since your target audience is black community. You may want to include a black skilled expert for your project to have better results.



Gender

As a male individual we believe you might have some biases towards gender since your target audience is transgender community. You may want to include a gender expert for your project to have better results.



Religion

As a individual with Christian back ground we believe you might have some biases towards religion since your target audience is Muslim community. You may want to include a religion expert for your project to have better results.

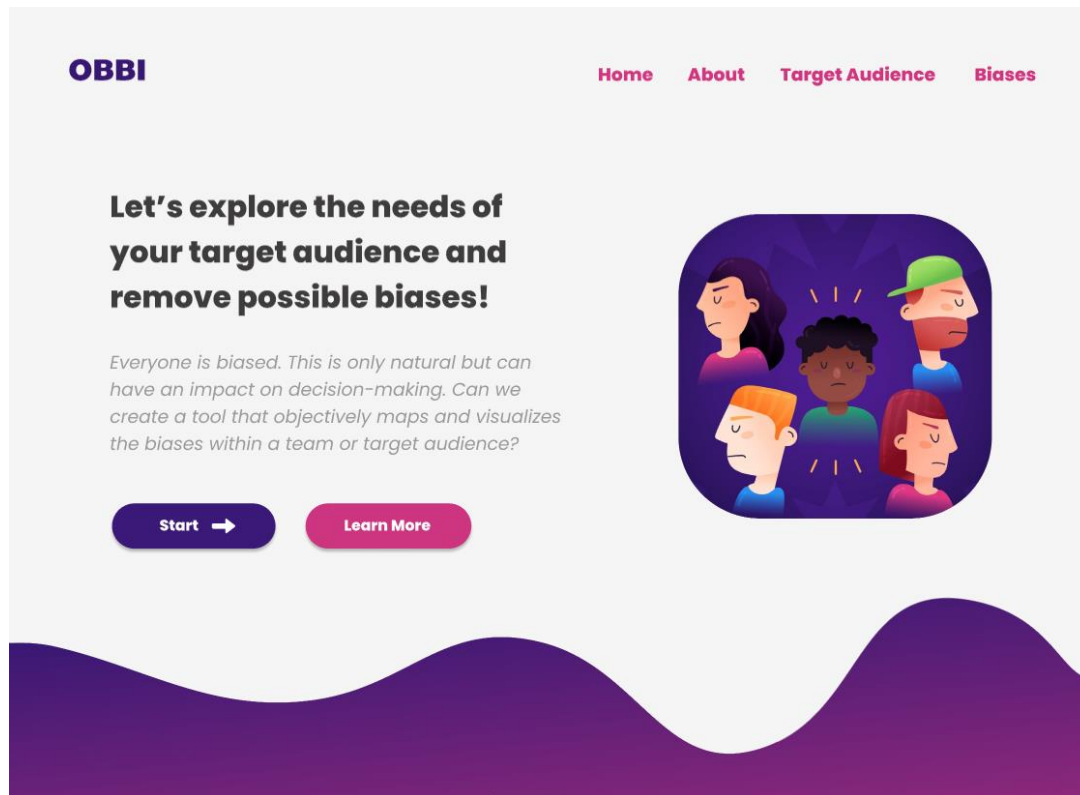


Ethnicity

As a individual with Christian background we believe you might have some biases towards ethnicity since your target audience is Muslim community. You may want to include a ethnicity expert for your project to have better results.

Final Prototype pages:

1. Menu Page:



Description

The home page is the first thing users see when they open the OBBI web application. It introduces users to the tool and provides two main options: "Start" and "Learn More."

Purpose

- Introduction: Briefly explains the purpose of OBBI and the goals of the application.
- Navigation: Provides quick access to the "About" section and the "Target Audience" selection page via the main buttons and navigation bar.

Page Elements:

- Header: Includes the application name ("OBBI") and a navigation bar with links to "Home," "About," "Target Audience," and "Biases" for easy navigation.
- Introduction Text: Provides a brief overview of OBBI's purpose, highlighting the goal of removing possible biases.

Buttons:

- Start: Scrolls down to the target audience selection page.
- Learn More: Scrolls down to the about page to provide more information about OBBI.
- Illustration: A graphic that represents different types of biases to engage users visually.

Design Iterations:

- Button Color: After several iterations, the team chose pink buttons over orange ones for better visual appeal.
- Curve Design: The wavy curve at the bottom of the page was preferred over a straight line for its fun and visually pleasing effect.

This home page sets the tone for the application, ensuring it is welcoming, easy to navigate, and engaging for users.

2. About Page:



Description

The "About" page introduces OBBI, explaining its purpose and goals. It aims to educate users about the significance of addressing unconscious biases and how OBBI helps in this process. A "Start" button at the bottom of the page scrolls down to the target audience selection page.

Purpose

- Education: Inform users about the objectives of OBBI and the importance of addressing unconscious biases.
- Engagement: Encourage users to proceed with the application after understanding its purpose.
- Navigation: The "Start" button offers a seamless transition to the next step in the user journey.

Page Elements:

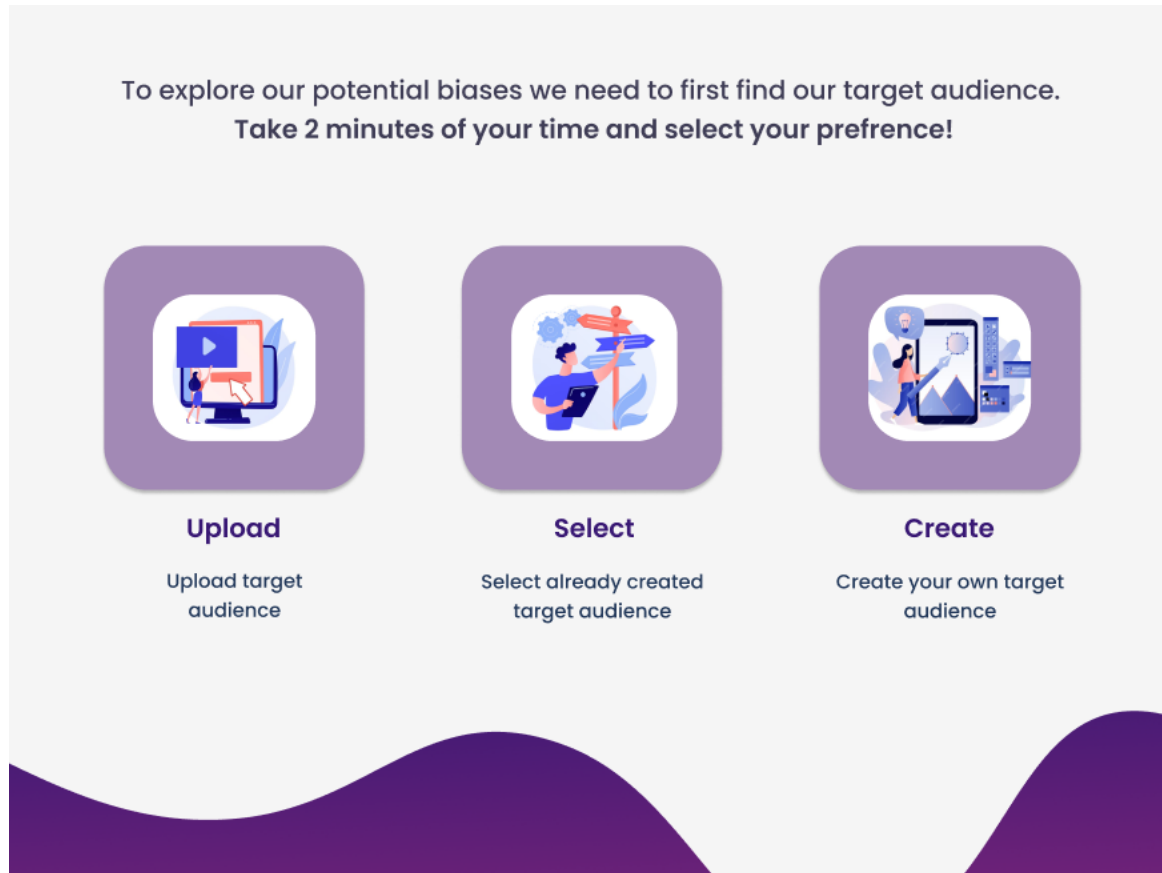
- Header: The question "What is OBBI really about?" to capture the user's attention.
- Introduction Text: Provides an overview of OBBI's aim to address unconscious bias by mapping and visualizing biases within teams or target audiences. Emphasizes the importance of awareness in improving decision-making processes.
- Illustration: A graphic representing diversity, aligning with the message of inclusivity.

Button:

- Start: Scrolls down to the target audience selection page to continue the user's journey.

This "About" page aims to engage users by providing essential information about OBBI, encouraging them to proceed with the application after understanding its significance.

3. Target Audience Selection



Description

The target audience selection page allows users to choose how they want to define their target audience. It offers three options: upload a target audience, select an already created target audience, or create a new target audience.

Purpose

- User Customization: Provides users with different methods to define their target audience, catering to various preferences and needs.
- Engagement: Encourages users to actively participate in the setup process, making the tool more interactive.
- Navigation: Facilitates smooth navigation to the next steps based on the user's choice.

Page Elements:

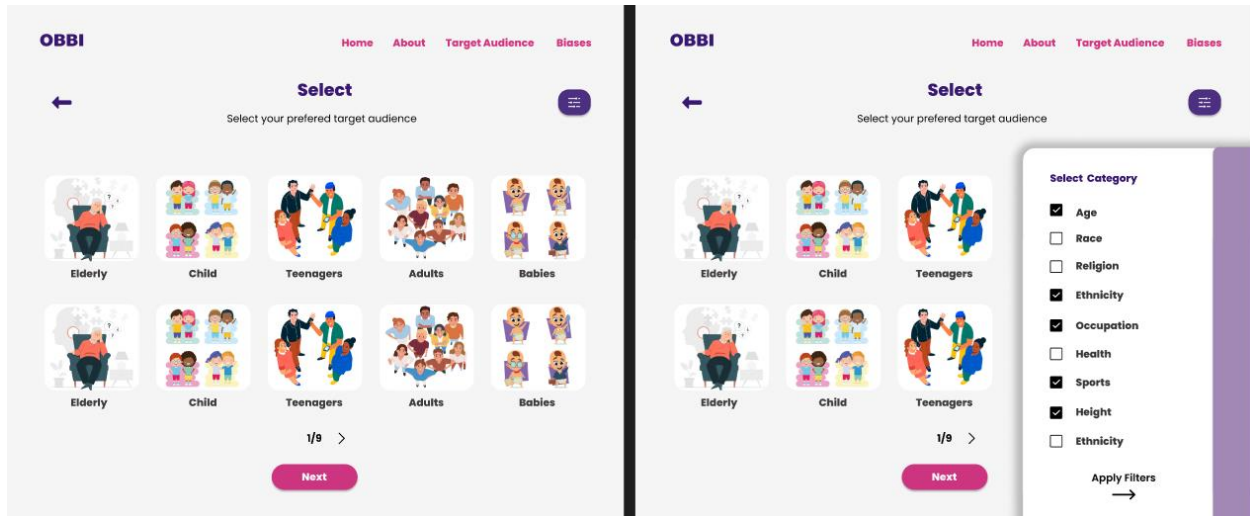
- Header: Instructional text that guides users to select their preferred method for defining their target audience.

Options:

- Upload: Allows users to upload a predefined target audience.
- Select: Enables users to choose from an already created target audience (this is the option we focused on designing).
- Create: Provides users with the tools to create a new target audience from scratch.
- Buttons: Each option is represented by a clickable illustration, making the selection process intuitive.

This target audience selection page aims to engage users by offering multiple methods to define their target audience, ensuring flexibility and customization in the bias assessment process.

4. Target Audience Page



Description

The "Select Target Audience" page allows users to choose their preferred target audience from a variety of predefined options. Each illustration represents a different target audience group. Users can select multiple options to create their ideal target audience. A filter button is available to help users narrow down their options.

Purpose

- Customization: Enables users to tailor their target audience by selecting from various predefined groups.
- Navigation: Provides intuitive navigation options, including a back button and a filter button to enhance the user experience.
- Efficiency: The filter button allows users to quickly find specific target audience categories without scrolling through all options.

Page Elements:

- Header: Instructional text that guides users to select their preferred target audience.

Buttons:

- Next: Proceeds to the next step after selecting the target audience.
- Back: Returns to the previous page, providing a sense of control and easy navigation.
- Filter: Opens a pop-up window with checkboxes to filter target audience options by categories like age, race, religion, ethnicity, occupation, health, sports, height, etc.

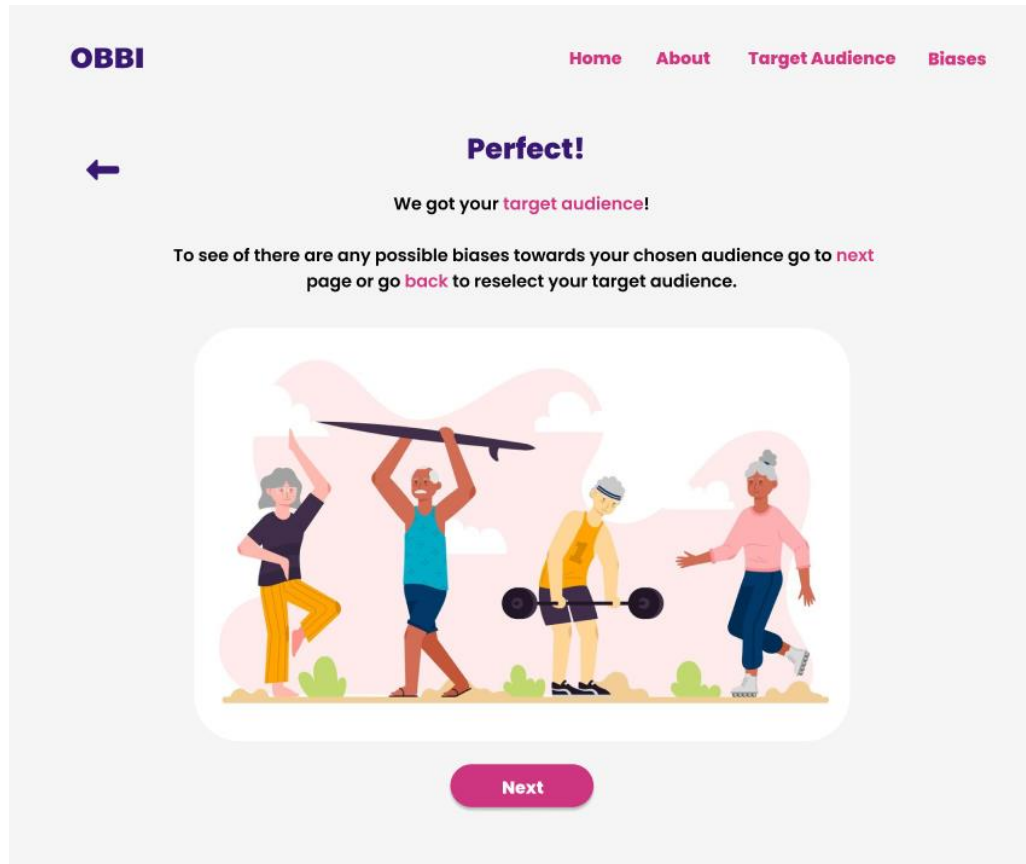
Design Iterations:

- Filter Button Position: Initially suggested to be on the left side for natural feel, but moved to the right to accommodate the back button and maintain logical flow.
- Filter Pop-up Window: Added to enhance user experience by allowing easy filtering of target audience categories.
- Checkboxes: Replaced small buttons representing each category to minimize visual intensity and make the selection process more straightforward.

Feedback and Changes:

- Design Expert Feedback: Emphasized the importance of giving users control, hence the addition of the back button.
- Filter Functionality: Adjusted to ensure ease of use and reduce visual clutter by switching from buttons to checkboxes.

5. Guide Page



Description

The guide page informs users that their target audience selection is complete and guides them to the next step. It provides clear instructions on what to do next, reinforcing the user's progress in the application process.

Purpose

- User Guidance: Ensures users know they have successfully selected their target audience and what the next steps are.
- Navigation: Provides options to proceed to the next step or go back to reselect their target audience.

Page Elements:

- Header: A congratulatory message ("Perfect!") to confirm the user's progress.
- Instructional Text: Guides users to either proceed to the next step or go back to reselect their target audience.

- Illustration: Visual representation of the selected target audience to reinforce the user's choice.

Buttons:

- Next: Proceeds to the next page where users will answer questions based on their selected target audience.
- Back: Allows users to return to the target audience selection page if they wish to make changes.

Design Iterations:

This page was added based on design expert feedback emphasizing the importance of guiding users through the process and making actions clear.

The design ensures that users are aware of their progress and know the next steps, enhancing the overall user experience.

Feedback and Changes:

- Design Expert Feedback: Highlighted the need for a confirmation step to clearly communicate progress and next actions to the users.
- Guidance and Clarity: Added to provide users with a sense of accomplishment and clear instructions on the next steps.

This confirmation page is essential for maintaining user engagement and ensuring a smooth, guided experience through the application process.

6. Questionnaire Page

The image displays two side-by-side mockups of the OBBI questionnaire page, separated by a vertical line. Both pages share a common header with the OBBI logo and navigation links: Home, About, Target Audience, and Biases. A back arrow is located on the left side of each page. The title 'Answer' is centered, followed by the subtitle 'Fill in objective information about yourself'.

Page 1/2 (Left Mockup):

- 1. What is your day of birth?
- 2. What is your ethnicity?
- 3. How tall are you?
- 4. What is your body type?

The progress indicator shows '1/2' and a 'Next' button is at the bottom.

Page 2/2 (Right Mockup):

- 5. What religion do you come from?
- 6. What is your religion now?
- 7. Where were you born?
- 8. Where were you raised?

The progress indicator shows '2/2' and a 'Submit' button is at the bottom.

Description

The questionnaire page is where users answer a series of questions about themselves based on their selected target audience. The questions are split across two screens to prevent the page from looking cluttered and to enhance readability.

Purpose

- Data Collection: Gather objective information about users to assess potential biases.
- User Experience: Ensure a smooth and manageable flow of questions to avoid overwhelming users.

Page Elements:

- Header: Instructional text guiding users to fill in objective information about themselves.
- Progress Indicator: Indicates the number of pages and current page (e.g., 1/2, 2/2).

Buttons:

- Next: Advances to the next page of questions.
- Submit: Submits the answers after completing all questions.
- Back Button: Allows users to return to the previous page, ensuring control and flexibility in navigation.

Purple Blocks: Added for visual appeal and to break up the content, making the page more engaging.

Design Iterations:

- Initial Design: All questions were on one page, which made it look cluttered and overwhelming.
- Current Design: Split the questions across two pages to improve readability and user experience. The addition of progress indicators helps users track their progress.
- Visual Enhancements: Purple blocks were added to enhance visual appeal and create a more engaging interface.

Feedback and Changes:

- Design Expert Feedback: Emphasized the importance of breaking down content to avoid clutter and improve user experience. The split-screen design and progress indicators were implemented based on this feedback.
- User Experience: Ensured a more manageable flow of questions, preventing users from feeling overwhelmed.

This questionnaire page is designed to effectively gather necessary information while maintaining a user-friendly and visually appealing interface.

7. Results Page



Description

The results page presents users with their potential biases based on their answers to the questionnaire. The page is divided into two main sections: a bar chart displaying the bias scores and a detailed explanation of each bias category with recommendations for improvement.

Purpose

- Data Presentation: Visually display the user's bias scores in a clear and understandable manner.
- User Guidance: Provide detailed explanations and actionable insights to help users understand and address their biases.

Page Elements

- Header: Instructional text that guides users on what the results represent and how to interpret them.
- Bar Chart: Displays the bias scores for different categories (Race, Gender, Religion, Ethnicity) to allow for easy comparison.

Detailed Explanation Section:

- Why Section: Provides context and explanations for each bias category.
- Illustrations: Accompanying images for each bias category to enhance visual engagement.
- Explanatory Text: Describes what the bias scores mean and offers recommendations for addressing these biases.

Buttons:

- Learn More: Directs users to additional resources or explanations.
- Back: Allows users to return to the previous page if needed.

Design Iterations

- Initial Design: The first version of the results page used a circle chart to present bias scores. Feedback indicated that while visually pleasing, it was not clear what the percentage of the bias represented, leading to confusion.
- Current Design: After several iterations and feedback sessions, the bar chart was chosen for its simplicity and clarity. This design allows users to easily compare their bias scores across different categories.

Feedback and Changes

Design Expert Feedback:

- Suggested looking into existing diagrams and charts for better data presentation.
- Recommended trying different chart types like bubble charts, bar charts, and pie charts to find the most effective one.
- Highlighted the importance of the message conveyed by the chart—bar charts are good for clear comparison, while pie charts might suggest a total bias percentage, which could be misleading.
- Bar charts were more familiar and easier for users to understand.
- Bubble charts were considered unclear until explained in detail.
- Pie charts were seen as potentially misleading in suggesting a total bias percentage.



Parić, Ines I. 21 days ago

Today I had a meeting with Pieter to validate designs for both the group project and my personal project. This is the feedback that was given to me:

Group project feedback:

- can do the design, but no time for a really cool end product
- he likes the overall view of the design (modern and stylish, uses the grid and proper navigation)
- who's my target audience and how can i make a design that fits them (in this case target audience is broad so probably here not the best to do it)
- the use of illustrations is really clever
- shouldn't say "we believe you are this" because that says that we know better than them
- so keep in mind the tone of voice in notifying users about their biases
- always give users the opportunity to go back
- people are stupid, so give them more control to go back/forward etc.
- first part is really clean and open
- make one area more open, more white space around the image
- play around with white margins
- make similar designs and compare them side to side to see which one you prefer
- the images are really in your face and they have a lot of visual information but we need white areas to bring some calm in the design
- graphical hierarchy
- there is a lot of visual information in certain areas that is not useful
- some areas are a bit hard to focus on and scan
- is all the graphical stuff everywhere the same? be consistent and compare designs
- use off-white instead of white



Parić, Ines I. 9 days ago

Feedback from Pieter

- likes the changes made based on the last feedback received
- think about how you plan to show results on a page so it's informative and clear for users, look at examples from experienced designers and use it as inspiration (look at information is beautiful website)
- make a few iterations of the result page and validate with design experts
- overall the design is good and considering the time constrain the focus should now be only on finalizing it by validating the results page with experts and users, don't waste time on more details



Parić, Ines I. 4 days ago

Feedback from Pieter:

Choice of Graph: The choice of graph depends on the message you want to deliver and the time constraints you have.

Bar Chart: This is preferred for its clarity and immediate comparability of results. It effectively shows the score of each bias, allowing for easy comparison.

Bubble Chart: This is useful but needs clearer explanations regarding the size of the bubbles and their vertical placement in the graph. Consider adding hover pop-ups to explain bubble sizes or placing explanations above the chart.

Pie Chart: While clear and straightforward, the pie chart implies a definite bias by filling in 100% of the chart, suggesting that one must be biased towards something. It may be more effective in a group setting where comparing results is beneficial.

Improvements & Suggestions:

Instead of multiple charts, consider a single interactive chart with buttons that display different biases when clicked. This can replace the need for five different charts.

Continuously communicate and evaluate the goal of your presentation to choose the most suitable graph.

The current version is a significant improvement over the previous one, but further detail can be added in future iterations, especially in the advisory document.

Visual Enhancements

- Bar Chart Selection: Chosen for its straightforward comparison capabilities and ease of understanding.
- Illustrations: Added to the detailed explanation section to make the page more engaging and visually appealing.
- Color Scheme: Consistent use of the primary and secondary colors to maintain visual coherence.
- Spacing: Adequate whitespace around the elements to ensure a clean and organized look.

The results page, through multiple iterations and extensive feedback, has been optimized to provide clear and actionable insights into users' biases. The use of a bar chart for bias scores, along with detailed explanations and recommendations, ensures that users can easily understand and address their biases.

This final design effectively combines visual appeal with clarity, making it a valuable tool for users to gain insights into their biases and take steps towards improvement.

4.6. Feedback and Iterations

Feedback was important in refining the metrics-based concept. Below are the key iterations based on feedback:

Initial Feedback:

- Concerns about subjectivity in the scenario-based concept led to the metrics-based approach.
- Suggestions to ensure objective mapping and provide clear explanations in analyses.

Marc's Feedback:

- Suggested using checkboxes for applicable metrics during target audience creation.
- Recommended attaching questions to these metrics to guide users in setting up their target audience effectively.

Mark (de Graaf)'s Feedback:

- Emphasized the need for clear explanations in the analysis.
- Suggested focusing on project groups where the metrics-based concept could display gaps without requiring deep psychological understanding.

Second Student Market Feedback:

- Recommended creating flat, static visualizations for user testing.
- Advised making many iterations of data visualizations to ensure clarity.
- Suggested simplifying data retrieval to make it less intrusive and easier to understand.

Design Expert Feedback:

- Emphasized the need for a clean, modern design that uses the grid and proper navigation.
- Suggested adding more white space around images to bring calm to the design.
- Advised maintaining a consistent tone of voice and allowing users to navigate back and forth easily.
- Recommended using off-white instead of pure white to reduce visual strain.

4.6. Influence of Feedback on Design

Based on the feedback received, we made several key iterations to the initial prototype:

Enhanced Target Audience Selection:

- Added checkboxes for relevant metrics instead of buttons (age, nationality, etc.) during target audience filter setup to minimize visual overload and for more clarity.
- Set premade target audience.

Improved Result Visualizations:

- More iterations will be made and tested to ensure the best and clear visualizations of the results

Simplified Data Retrieval:

- Reduced the level of detail required in data collection (e.g., using age ranges instead of exact ages).
- Made the data collection process less intrusive to increase user comfort.

Design Enhancements:

- Increased white space around images to create a calmer design.
- Maintained a consistent graphical hierarchy and ensured visual consistency across the application.
- Used off-white backgrounds instead of pure white to reduce visual strain.

4.7. Key Features

The metrics-based concept includes several key features designed to provide an objective assessment of potential biases:

- Learning Module: Educates users about biases and the purpose of the application.
- Target Audience Selection: Allows users to select and define their target audience with relevant metrics.
- Tailored Questionnaire: Provides questions based on selected target audience metrics to ensure objective bias mapping.
- Results Page: Displays bias assessment results with concrete explanations, helping users understand potential biases.

4.8. Design Details

Purpose

This style guide serves as the definitive source for the app's design standards, ensuring consistency across all user interface elements.

Color Palette

- Primary Color: Light Blue (# F5F5F5) - Used for main color background as an off white color.
- Secondary Color: Blue (#3B1978) - Used as a second main color.
- Accent Color: White (# CD3580) - Used for input fields and buttons to call to action.

Typography

- Headings: Poppins, ExtraBold, 40px
- Body Text: Poppins, SemiBold, 24px
- Special Text: Poppins, Italic, 24px

Imagery and Icons

Icons:

- Total Icons: w
- Used for “back” navigation: 1
- Used for filter option: 1
- Size: Width 35px, Height 40px

Illustrations:

- Style: Colorfull and friendly, welcoming design to align with the app's purpose.

Layout and Spacing

- Grid System: 10px grid to ensure consistent spacing and alignment.
- Alignment: Focus on text alignment, consistency, visual balance, and whitespace to create a clean, organized look.

Interactive Elements

Buttons:

Next Button/Start/Learn More:

- Size: Width 200px, Height 60px
- Colors: Purple (#3B1978) and Pink (# CD3580)
- Text: Popping, Bold, 24px

Brand Elements

Brand Voice:

- Tone: Clear, informative, and supportive.
- Language: Objective and straightforward to promote understanding and ease of use.
- Overall Feel: Professional and inclusive, aiming to create a sense of trust and credibility while addressing unconscious biases.

This style guide ensures a consistent and user-friendly design across all elements of the OBBI web application, enhancing the overall user experience and maintaining a cohesive visual identity.

Conclusion

In conclusion, the design and development process of the OBBI web application has been an insightful journey. Our goal was to create a tool that objectively maps and visualizes unconscious biases within teams or target audiences. Through a structured and iterative design process, we have developed a user-friendly and engaging application that meets the needs of our users and stakeholders.

We began with the scenario-based concept, focusing on creating interactive scenarios to identify biases. However, after extensive feedback and testing, we switched our focus to a metrics-based approach based on stakeholders' decision. This approach allowed us to create a more objective and structured method for assessing biases, making the tool applicable to a broader range of users and contexts.

Throughout the project, we emphasized the importance of user feedback and expert input. Stakeholder meetings, expert interviews, and user testing sessions were important in shaping the final design. Key feedback included the need for clear guidance, user control, and a non-judgmental tone in presenting results. These insights were incorporated into our design, ensuring a user-centric approach.

The design process involved creating wireframes, mood boards, and prototypes. We used Figma as our primary tool for collaboration and design iteration. Each design element, from color palettes to typography, was chosen to create a cohesive and visually appealing interface and was validated with a design expert. The inclusion of illustrations and interactive elements aimed to make the application engaging and easy to use.

The final design of OBBI reflects our commitment to creating a tool that is not only functional but also aesthetically pleasing and user-friendly. The application provides a seamless user experience, guiding users through the process of selecting a target audience, answering questions, and receiving insights into potential biases.