1. Personas	 	 	
1.1 Administrator	 	 	4
1.2 Academic researcher	 	 	5
1.3 Study participant	 	 	6
1.4 Possible synaesthete	 	 	7

Personas

Construction of Personas

1. Identification of variables that differentiate distinct aspects of observed behaviour

a. Activities

We split activities based on what the administrative user (i.e. administrator) and application user (i.e. academic researcher, study participant, and possible synaesthete) would be able to do within the application.

b. Motivations

Attitudes for administrator and academic researcher were to be able to gather data from test results for research purposes, while attitudes for study participants and possible synaesthete were to be able to understand more about synaesthesia and take the test.

c. Aptitudes

The administrator and academic researcher would be researchers who have an interest and passion in understanding synaesthesia, while the study participant and possible synaesthete could include a wide range of educational qualifications and trainings, but predominantly professionals in art and creative industries.

2. Mapping of the subjects to behavioural variables

The behavioural variables that we chose were creative disposition, research experience and specialisation. This was decided based on the client's motivations for the project, as creative and artistic individuals are more likely to have synaesthesia, therefore data can be gathered faster.

3. Behaviour pattern identification.

Study participant higher creative disposition

Administrator higher research experience and specialisation

Possible synaesthete lower creative disposition

Academic researcher lower research experience and specialisation

4. Synthesis of relevant characteristics and goals

Here we created fictional characters with appropriate backgrounds and goals relevant to the project and application tool.

Persona types

We identified four different types of personas.

Туре	Background	Goals	Motivation	Frustration
Administ rator	Jonathan is a 45-year-old man based in Melbourne. He holds a PhD in Musicology from the Royal College of Melbourne and currently is a senior lecturer at Monash University, Melbourne. He has a family of six members and is actively involved in his local community. In his free time, Jonathan is passionate about playing badminton and was once a national badminton player for Australia.	Enhance research on music-to-visual synaesthesia by collecting more comprehensive demographic data and test results from users. Increase public awareness and knowledge of synaesthesia by providing informative content. Utilize users' demographic data and test results to conduct a thorough analysis. Manage the test questions by creating, updating, and deleting them as needed.	He would like to use an application that could help him collect meaningful data about the music to visual forms of synaesthesia. Get more study participants that could take the test on the application which would be engaging and easy to use.	The interface of existing tests is too complex for users, making it frustrating to use. The existing diagnosis tools provide only limited information, primarily focusing on the color-to-letter forms of synaesthesi a. These tests fail to effectively capture the vivid mental images that synaesthete s experience.
Academi c research er	Rachel is a PhD candidate in Music Psychology at the University of Melbourne, currently researching music-to-visual synaesthesia for her thesis. In addition to her academic pursuits, Rachel is a classically trained flutist and an avid runner, frequently participating in marathons to support charities close to her heart.	To gather comprehensive research data on music-to-visual synaesthesia. To expand outreach and connect with individuals who may possess synaesthetic abilities for additional testing.	To enhance her understandin g of synaesthesia and gain further insight into the phenomenon. Analyse synaesthete data for her thesis.	 The current data available is insufficient to conduct in-depth research. Struggling to find sufficient participants for the research.

Study participa nt	Ayanda is a Melbourne-born and raised piano teacher who discovered she had a unique experience of seeing shapes involuntarily when listening to music. This experience led her to research synaesthesia, a concept that resonated with her own experience. Ayanda connected with Rachel Perez, a researcher from the Music Psychology department at the University of Melbourne, and confirmed that she had the condition through synaesthesia tests. She has been participating in the synaesthesia study for a year now, contributing her experiences to the research.	To continue participating in the synaesthesia study using an easier user interface that enables her to accurately input the images that she perceives during the tests.	To be able to take the test from any device at her own convenience. Get more insight into her condition of synaesthesia.	She does not feel safe trusting the existing tests with her personal information. The interface of the existing tests is complex, and she finds it hard to use.
Possible synaesth ete	Song Jie is a telephone operator with over five years of experience in the sales industry. He began his career as a customer service representative and quickly rose through the ranks due to his exceptional communication skills. In his free time, he enjoys playing basketball and visiting art galleries. Recently, Song Jie became interested in synaesthesia after a colleague mentioned that their child had the condition. He was able to relate to the condition as he had always experienced a heightened sensory perception especially when he hears music while he is placed on hold during work calls. He had never discussed this with anyone before and wanted to know more about this condition.	Determine if he possesses synaesthesia through tests. Obtain test results indicating the probability of his synaesthetic abilities. Develop better understanding of synaesthesia	He wants to discover and learn more about the reason behind the images formed in his mind. He is looking for an accurate and short test that he can take during his free time.	He is uncertain about the cause and potential triggers for these vivid images. He lacks knowledge about resources for information on synaesthesi a or for getting tested.

Tools

Creation of personas and structure - https://uxpressia.com/

Image generation - https://this-person-does-not-exist.com/en

Administrator

NAME

Jonathan Bryant



Demographic

o™ Male 45 years

Melbourne, Australia

Lecturer of the subject Music Psychology and Arts at Monash University

Goals

Enhance research on music-to-visual synaesthesia by collecting more comprehensive demographic data and test results from users.

Increase public awareness and knowledge of synaesthesia by providing informative content.

Utilize users' demographic data and test results to conduct a thorough analysis.

 ${\tt Manage}\ the\ test\ questions\ by\ creating,\ updating,\ and\ deleting\ them\ as\ needed.$

Background

Jonathan is a 45-year-old man based in Melbourne. He holds a PhD in Musicology from the Royal College of Melbourne and currently is a senior lecturer at Monash University, Melbourne. He has a family of six members and is actively involved in his local community. In his free time, Jonathan is passionate about playing badminton and was once a national badminton player for Australia.

Motivations

- He would like to use an application that could help him collect meaningful data about the music to visual forms of synaesthesia.
- Get more study participants that could take the test on the application which would be engaging and easy to use

Frustrations

- The interface of existing tests is too complex for users, making it frustrating to use.
- The existing diagnosis tools provide only limited information, primarily focusing on the color-to-letter forms of synaesthesia.
- These tests fail to effectively capture the vivid mental images that synaesthetes experience.

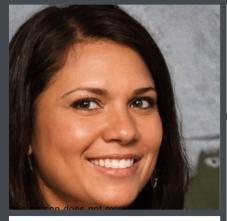
Expectations

The application's user interface should be simple and engaging to direct users to take the test. It should be scalable to be able to gather more data for research purposes. I should be able to modify and update the test to make sure it is up to date with new developments in synaesthesia.

Academic researcher

NAME

Rachel Perez



Demographic

,O Female 31 years

Melbourne, Australia

PhD Research Student in Music Psychology

Goals

To gather comprehensive research data on music-to-visual synaesthesia.

To expand outreach and connect with individuals who may possess synaesthetic abilities for additional testing.

Background

Rachel is a PhD candidate in Music Psychology at the University of Melbourne, currently researching music-to-visual synaesthesia for her thesis. In addition to her academic pursuits, Rachel is a classically trained flutist and an avid runner, frequently participating in marathons to support charities close to her heart.

Motivations

- To enhance her understanding of synaesthesia and gain further insight into the phenomenon.
- Analyse synaesthete data for her thesis

Frustrations

- The current data available is insufficient to conduct in-depth research
- Struggling to find sufficient participants for the research.

Expectations

The application is easy-to-use, and I can gather insightful test data from an extensive pool of participants. I would also like to be able to make contact with participants who had given consent for further study.

Study participant

NAME

Ayanda Issa



Demographic

,O Female 30 years

Melbourne, Australia

Piano teacher

Goals

To continue participating in the synaesthesia study using an easier user interface that enables her to accurately input the images that she perceives during the tests.

Background

Ayanda is a Melbourne-born and raised piano teacher who discovered she had a unique experience of seeing shapes involuntarily when listening to music. This experience led her to research synaesthesia, a concept that resonated with her own experience. Ayanda connected with Rachel Perez, a researcher from the Music Psychology department at the University of Melbourne, and confirmed that she had the condition through synaesthesia tests. She has been participating in the synaesthesia study for a year now, contributing her experiences to the research.

Motivations

- To be able to take the test from any device at her own convenience.
- Get more insight into her condition of synaesthesia.

Frustrations

- She does not feel safe trusting the existing tests with her personal information.
- The interface of the existing tests is complex, and she finds it hard to use.

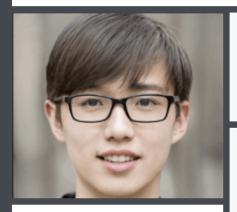
Expectations

The application has clear instructions when I take the test and all my personal information are test data are disclosed to the researcher I consent to only.

Possible synaesthete

NAME

Song Jie



Demographic

o⁴ Male

26 years

Penang, Malaysia

Telephone operator at a sales company

Goals

Determine if he possesses synaesthesia through tests.

Obtain test results indicating the probability of his synaesthetic abilities.

Develop a better understanding of synaesthesia.

Background

Song Jie is a telephone operator with over five years of experience in the sales industry. He began his career as a customer service representative and quickly rose through the ranks due to his exceptional communication skills. In his free time, he enjoys playing basketball and visiting art galleries. Recently, Song Jie became interested in synaesthesia after a colleague mentioned that their child had the condition. He was able to relate to the condition as he had always experienced a heightened sensory perception especially when he hears music while he is placed on hold during work calls. He had never discussed this with anyone before and wanted to know more about this condition.

Motivations

- He wants to discover and learn more about the reason behind the images formed in his mind.
- He is looking for an accurate and short test that he can take during his free time.

Frustrations

- He is uncertain about the cause and potential triggers for these vivid images.
- He lacks knowledge a bout resources for information on synaesthesia or for getting tested.

Expectations

The test questions are clear and descriptive to understand and the design of the application is simple to use.