### **Assignment 3: High Fidelity Game**

GBDA 302: Global Digital Project 2

Group 10A

Katrina Lau – 21010713

Makenzie Chiu – 21015907

Soomin Lee - 21000154

Chelsea Wu – 20948375

Victoria Wang – 20992331

Olivia Cao – 21025046

University of Waterloo

# **Group Charter**

Team Members:

Katrina Lau - 21010713

Student Email: kwhlau@uwaterloo.ca

**Makenzie Chiu – 21015907** 

Student Email: <a href="mailto:mchiu@uwaterloo.ca">mchiu@uwaterloo.ca</a>

Soomin Lee - 21000154

Student Email: <u>s54lee@uwaterloo.ca</u>

Chelsea Wu - 20948375

Student Email: c349wu@uwaterloo.ca

**Victoria Wang - 20992331** 

Student Email: <a href="mailto:vh2wang@uwaterloo.ca">vh2wang@uwaterloo.ca</a>

Olivia Cao - 21025046

Student Email: weiyacao@gmail.com

## Roles and Responsibilities

Role	Primary Member(s)	Shadow Member(s)
Researcher and Game	Makenzie Chiu	Katrina Lau and Olivia Cao
Mechanic Designer		
Game Designer	Victoria Wang	Makenzie Chiu
Programmer	Olivia Cao	Katrina Lau
Visual Designer	Soomin Lee	Chelsea Wu
Project Manager	Chelsea Wu	Victoria Wang

#### Roles and Responsibilities

Clearly define each role and shadow role. You can use the notes above and should add your own tasks that are required.

#### Researcher and Game Mechanic Designer (1 member)

#### Primary Role

- Conduct thorough research on dysgraphia, focusing on its global and cultural context.
- Identify specific challenges or adaptations associated with dysgraphia and propose innovative gameplay mechanics inspired by these findings.
- Collaborate with the Game Designer to integrate research insights into the game's structure and mechanics.
- Ensure the mechanics reflect a universal or globally adaptable design, fostering empathy and understanding.
- Curation of game mechanics through research and discussion between the group members.

#### Secondary Role

- Assist in researching additional tools, cultural perspectives, or adaptations that could enhance the game's design.
- Provide support by verifying the accuracy of information and ensuring proper citations for references.
- Step in to develop or refine mechanics if the primary Researcher and Game Mechanic Designer is unavailable.
- Discuss plausibility amongst the primary and other group members to determine what is most suitable moving forward in the project.

#### Game Designer (1 member)

#### Primary Role

- o Conceptualize the core gameplay mechanics aligned with dysgraphia.
- Design the structure and flow of three functional levels, emphasizing accessibility and engagement.
- Brainstorm creative solutions to translate abstract ideas about dysgraphia into gameplay elements.
- Work closely with the Researcher and Game Mechanic Designer to ensure the mechanics are grounded in research and align with the game's objectives.

#### Secondary Role

- Assist with brainstorming and provide feedback on mechanics and level design.
- Collaborate with the Programmer(s) to ensure the mechanics are implemented as intended.
- o Step in to refine the design if the primary Game Designer is unavailable

#### **Programmer** (1-2 members)

#### Primary Role

- o Implement the game mechanics and core functionality using p5.js
- o Ensure the game runs smoothly, with intuitive and accessible interactions.
- Debug and optimize the code to resolve performance issues and maintain usability.
- Collaborate with other team members to integrate visual, audio, and gameplay elements seamlessly.

#### Secondary Role

- Assist with minor programming tasks or debugging issues as needed.
- Provide support during testing and troubleshooting to ensure the game operates as intended.
- Playtest the game and find friends to try it out as well to check for bugs in the game
- Step in to handle programming responsibilities if the primary Programmer(s) are unavailable.

#### Visual Designer (1 member)

#### Primary Role

- Create visual assets that reflect the theme and mechanics of the game.
- Design high-contrast visuals and other accessibility-focused elements relevant to the chosen disability.
- Source or generate AI-assisted visuals as needed, ensuring proper citation of any external tools or resources.
- Work with the Programmer(s) to integrate visuals effectively into the gameplay.

#### Secondary Role

- Support the Visual Designer by providing suggestions or assisting in sourcing additional visual assets.
- Collaborate with the Researcher and Game Mechanic Designer to ensure the visuals align with the intended representation of the disability.

 Step in to create or refine visuals if the primary Visual Designer is unavailable.

#### Project Manager (1 member)

#### Primary Role

- Oversee the overall progress of the project, ensuring deadlines are met and tasks are completed on time
- Support any group members that need additional support including become a shadow role for any of the other roles.
- Support the programmer shadow role on playtesting and help finding friends to play the game.
- o Make sure the group charter is completed and followed
- Manage communication between group members and ensure everyone understands their roles and responsibilities.
- Organize files and prepare the final submission (zip folder), ensuring it adheres to assignment requirements.
- Act as the primary liaison with the instructor or TAs for clarification or support.

#### Secondary Role

- Help monitor task completion and assist with communication between group members.
- Support other roles by helping prioritize tasks and balancing workloads when challenges arise.
- Step in to manage timelines and responsibilities if the primary Project Manager is unavailable.

### **Group Expectations**

#### Communication Methods:

Communication will be via our Instagram group chat. Response time should be within 24 hours unless a specific reason why someone is unavailable is given.

#### Meeting Schedule:

Weekly in-person meetings on Mondays at 12pm.

#### Decision-Making

Decisions will be made based on majority vote.

### **Conflict Resolution**

#### Should conflicts arise:

- 1. Identify the issue
- 2. Talk to the people involved
- 3. Notify the group
- 4. Listen to both sides
- 5. Notify the professors if needed
- 6. Find a solution

# Project Milestones/Tasks and Deadlines

Split the assignment into smaller milestones or tasks (which ever your group prefers) and clearly agree upon deadlines.

Milestone/Tasks	Target Completion Date	Responsible Member(s)
Research	March 18 <sup>th</sup> , 2025	Makenzie and Olivia
Game Design	March 18 <sup>th</sup> , 2025	Victoria and Makenzie
Programming	March 30 <sup>nd</sup> , 2025	Olivia, Katrina, Soomin
Visuals	March 18 <sup>th</sup> , 2025	Soomin and Chelsea
Final Check	March 31 <sup>st</sup> , 2025	All

### Commitment to Fair Contribution

We understand that failure to adhere to these commitments may result in discussions with the instructor or TA and potential adjustments to individual grades.

# Signatures

Group Member 1	
Katrina Lau	
	Mar.5/25
Signature	Date
Group Member 2	
Makenzie Chiu	May 5 /05
Signature	Mar.5/25 Date
Group Member 3	
Soomin Lee	
Signature	Mar.5/25 Date
Group Member 4	
Chelsea Wu	
Signature	Mar.5/25 Date
Group Member 5	
Victoria Wang	
Signature	Mar.5/25 Date
Group Member 6	
Olivia Cao	
Signature	Mar.5/25 Date