

# **Accessibility Report**

## **The 7 Principles of Universal Design**

### **Principle 1: Equitable Use**

For this principle, we made the colours of texts in our game as white, cyan and green, and the background colour as black, so that even users who have colour weakness can read the texts and find the buttons. This gives an identical program to whoever has colour weakness or not. When running the program, the game runs the same for everyone, with the same features available to all users, preventing segregation of users and provision of the same features for privacy, security and safety. The game's design is simple enough to be appealing to all users.

### **Principle 2: Flexibility in Use**

Since our program is a dog petter game, users can easily choose their pace. If they want to pause, then what they have to do is just stop clicking the mouse, and also, we give users the choice to play our minigames or not. The user can go as fast or slow as they want when petting the dog as well which provides adaptability to all users and their pace. Both right handed and left handed users can play the game, and the dog sprite is large enough that it does not take too much effort to click it which helps to facilitate the user's accuracy and precision.

### **Principle 3: Simple and Intuitive Use**

The dog is the biggest element in the screen because our game is a 'dog' petter game, and we put buttons at the bottom right corner with smaller size than the dog but larger than the text that shows the user's current coins and experience. This helps users find the buttons quite easily. The layout of the game is simple and the shop buttons and minigame buttons are on different screens so that it is easier to navigate for the user. The initial screen also only has two buttons that allow the user to start a new game or load a previous game. When a user purchases an item from the shop, the button says "Purchased!" to provide feedback after task completion and let the user know they successfully purchased an item.

### **Principle 4: Perceptible Information**

As mentioned above in principle 1, we chose background colour as black and text colours as white, light green and cyan to maximize 'legibility or essential information', which also provides 'adequate contrast' between important information and unimportant information. The buttons in the minigame selection screen and the shop screen are separated by light green or cyan colours but the text within is white to make the information more legible to the user. We did not use too many colours and complicated graphics so the necessary information is easily perceptible.

### **Principle 5: Tolerance for Error**

We did not apply this rule because our game is simple and we have implemented it so that there's no feature that can cause errors. Our game is a dog petter game which does not have any hazards or adverse consequences so we do not need to include any warnings or fail safe features.

### **Principle 6: Low Physical Effort**

Since our program is to pet the dog, repetitive actions are inevitable. However, except that we minimize unnecessary repetitive actions and physical effort. To play the game, the users only need to use their fingers while in any body position. Moreover, the only force required is to click the mouse or keyboard keys, thus minimizing fatigue. Users are also able to stop whenever they would like and go at their own pace, so there is no sustained physical effort required.

### **Principle 7: Size and Space for Approach and Use**

At the moment, we only provide the fixed size of screen and elements such as dog and texts. However, in the future, we could implement code that gives users options to zoom or zoom out the screen. There is a clear line of sight to the user whether they are sitting or standing as the important elements are large enough to be viewed from any angle. We can improve our implementation of this principle by adding more options for screen or object size in the future.

### **Target Users**

The target users of our program, the 'dog petter game', are people who are not familiar with complex games or people who enjoy playing games casually. Kids who are too young to play complicated games can play simple games like ours. Users that are more interested in casually playing games may also enjoy playing our game. Our game can be played by anyone as it is simple to use and it's just for fun without any complex mechanics.

### **Write a paragraph about whether or not your program is less likely to be used by certain demographics.**

Since our game asks users to click a mouse and play minigames, it is less likely to be used by people who have visual impairment. However, our game is simple and easy to play, so it is likely to be used by those who are not familiar with complex games such as kids and people with dementia.