

## **Criterion B: Design Overview**

### **Testing Plan for Handwriting Application:**

#### **1. Empty Canvas Submission:**

- User presses the submit button without writing anything and a message would appear stating that writing is required before submission.

#### **2. Partial Input Submission:**

- User writes only one or two letters instead of the full word (e.g., writing only “c” or “ca” instead of “cat”), which would give back a warning message, prompting the user to complete the full word before submission.

#### **3. Stroke Responsiveness:**

- User draws with large strokes, and it would be made, so that no lag or disruption in the drawing happens.

#### **4. Valid Submission with a full word:**

- User correctly writes all letters of the given word. From here on, statistics and feedback would be displayed below the canvas, an overall score which would be calculated in percentage and message that would all letters were recognized, as well as score being 100% if everything's perfect.

#### **5. Recognition Accuracy and Scoring:**

- 1 mistake: Feedback states not all letters were recognized. Score: 66.7%.
- 2 mistakes: similar score as the one above. Score: 33.3%.
- 3 mistakes: message states no letters were recognized. Score: 0%.

- All mistakes would be documented below the canvas.

#### 6. Real-Time Feedback Timing:

- Submission time after writing would take less than one second, providing instant results without any delay.

#### 7. Scrolling Prevention Mechanism:

- User attempts to scroll while writing, for which it would be disabled to prevent disruption in handwriting.

#### 8. Design & Visual Appeal:

- Outline color is red to enhance clarity and symbolic meaning. Additionally, proper spacing and outlines of letters ensure user-friendly design.

#### 9. Clear Button Functionality:

- User wants to erase handwriting before submitting. This would reset the canvas completely.
- The application would allow users to retry writing before submission.

**Design overview of the application (screenshots of the application with different words for writing/drawing over):**

# Handwriting Improvement

Write a letter in the canvas below using your device's touchscreen.



Clear

Submit

## Statistics

No data yet.

# Handwriting Improvement

Write a letter in the canvas below using your device's touchscreen.



Clear

Submit

## Statistics

No data yet.

# Handwriting Improvement

Write a letter in the canvas below using your device's touchscreen.



Clear

Submit

## Statistics

No data yet.

Below is a flowchart that demonstrates the functionality of the software

(Next page as it does not fit in one page when there is text above it):



