

SmartRead Contract

Mechatronics & Software

Team 3 - SmartRead: Instant Translation with Wearable Device

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Date	Developers	Change
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Table 1: Revision History

The final version of SmartRead will deliver the following items:

1. **Translation Support.** The program will support English-French translation for small-volume content such as street signs, restaurant menus, posters, and video game text, specifically for text entries containing 50 words or fewer.
2. **Translation Accuracy.** Translation accuracy will meet or exceed a 55% threshold, consistent with common industry platforms, evaluated against human-translated samples to ensure translation quality.
3. **Text Display Interface.** The translated text will be displayed on an end-user interface compatible with smartphones, ensuring readability and accessibility.
4. **Image Capture and Text Extraction Accuracy.** The device will have a camera module to capture images of objects at a suitable quality within typical reading distances from the user's eyes, with image capture initiated by a button press. A backend algorithm will extract and populate legible text, focusing on tangible text entries while omitting text that is too small for effective recognition¹.
5. **Portability.** The wearable device will be lightweight, ensuring easy portability for users.

¹ extract over 80% of visible characters with an accuracy higher than 70%

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