

සිංහLearn - Enhance Grade 5 scholarship students' Sinhala proficiency and examination performance

Main Objective -

Modernize and enhance Grade 5 scholarship exam preparation for Sinhala language learning by developing and implementing the "සිංහLearn" mobile application

Sub Objectives -

1. Sinhala Handwriting Capturing and Recognition on images
2. Detect and correct the errors in spellings in Sinhala sentences
3. Generate a simplified explanation for the complex words and proverbs/idioms
4. Evaluate the handwritten answer for the essay question of the past paper

Component 1 - Capture handwritten sentences through images.

Using OCR

- Novelty - Vision transformers – classification model – clean the image and uplift the quality of image

Component 2 - Spelling error detection and correction of sentences

- Novelty –

Component 3

1. Generate a simplified explanation for the complex words
2. Generate a simplified explanation for the proverbs/idioms

- Novelty –

Component 4 - Points calculation system for handwritten answers for the essay question

- Novelty -