Pen-credible

Team Name: PAAF-team

Abstract

While reading books we need dictionary often, so to make finding meaning of words convenient we thought of a device which will display /speak the meaning,synonyms of any word just by gesture.
It is convenient to draw / take notes on paper, so We can make soft copies of our sketches, notes, directly using this device.

The device will consist of a clip on camera, a microphone, speaker, wifi/Bluetooth module and a power source.

1)Reading

editing

than other feature is without any pen. just by your hand's gestures. i.e if i am reading some article or research paper and i want to highlight some points than i just have to virtually underline that part, it will be highlighted and will be saved in file by this i don't have to scan whole document using camscanner or so and read from there and highlight it over there and we can comment too.

saving pictures / graphs / charts/paragraphs

also if i like some graph or photo or table or some paragraph then drawing a virtual rectangle will crop that part and save it in your report file. (here also you don't have to put efforts to click-transfer-and crop-insert in file, just a rectangle) and if i select a line from the hard copy it will be saved in another document on PC.

gesture dictionary

one other, dictionary feature. while reading just double tap and underline difficult word, you will know its meaning! (Voice feedback, through inbuilt speakers)

2)Writing

notes

here our concept is to do it automatically as in, i am writing notes in lecture in my notebook, then this will make it's soft copy without any efforts from my side. i just have to attach
the device. by this i can access all my offline notes online, even edit them. writing offline is way more faster (with editing,bullets, important signs and all) for most people. and clicking all stuffs after completion is a tedious job for me.

sketching

for sketching- it is very convenient for an artist to draw on paper than digital screen using mouse or even digital pad which do not show you what are you drawing on the board. so we are intended to use this device to help in sketching. I will draw whatever i want to draw on the paper as i draw normally, this will save it in computer. i can edit it afterwards. While drawing by voice command (like green color), we can change the colour by giving apt command, while my pen/brush is the same. I haven't change my color offline.

Timeline:

Week 1:

Basic designing and learning the concept involved

-finalise the features-with proper detailing-of the product

-prioritize the features

-Designing of device(required parts)

-image processing

(if possible

-audio processing

-Different trigger and response mechanisms)

Week 2:

-Designing of device(required parts)

-image processing

-audio processing

-Different trigger and response mechanisms

{change due to heavy sickness of two members}

-Finalize design of the hardware and preferably starting with fabrication

-choosing proper ocr software and getting familiarized

-cropping and highlighting feature

-other reading features

-learning extra things, doing sufficient research as per finalised features

-wifi/bluetooth connectivity

-learning of communicating with other softwares/websites

Week 3:

-adding other features

advancement in both hardware and continuing with software part, adding other features(notes, sketching etc.)

Week 4:

toward finalisation, testing in real life, problem finding and solving (trouble shooting), making final marketable product (work on look, portability and user friendliness)

Having fun with our all new _____ :)