

CHAPTER 3: Design Considerations

Theoretical BG

- Purpose: eliminate dependency
- Importance - low-cost, adaptable to various writing tool, smooth surface
- General methodology: Sensors, Microcontroller ---- data processing programmed via python

Conceptual Framework

MCU - storage and transmission

Sensors - coordinates, raw data

Battery - supply

Storage

Desktop Computer - data processing via python

I. Statement of the Design Problem

A device is designed to be attachable

Stable, considering the size, non-invasive

Sensors -- as near as possible sa tip

Three main: Microcontroller, Sensors, Power Supply,

Sub parts: Buttons, LED, storage

II. Function Requirements

****SPECIFICATION OF DEVICE**

- With indicators (LED)
- Bluetooth Connection,
- Able to reconstruct the output blabla
- Adapt to various surfaces and writing tools
- Storage
- Functional Buttons
- Able to interact with the PC
- TWO MODES - store now blabla

*BLOCK DIAGRAM

*formula

III. Design Requirements

- Any smooth surface
- Pen diameter not smaller than _____

- Stable, attachable
- Powered by _____
- Platform to integrate the different components

CASE STUDY

Sensors will send raw data to the nodemcu blabla, depending on the set mode, the mcu will store or transmit the data etc etc,
Using the probabilistic method etc

CHAPTER 4

Site and Participant Selection

- Teachers
- Students

Data Collection

- Time to process
- Pagkahawig
- Connection distance
- Storage, gano kadami

Definition of Terms etc etc

Qualitative and quantitative

Research setting

*Educational institutions

- Hybrid setup etc etc