Detailed Design

For <<Analysing sensor data>>

Version 1

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**Revision History**

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| --- | --- | --- | --- | --- | --- |
| Version (x.y) | Date of Revision | Description of Change | Reason for Change | Affected Sections | Approved By |
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**Approval History**

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# Overview

The main overview of the project is to receive the information of different types of sensors (like accelerometer), the sensor data obtained is processed based on the application logic and presented to the user.

## Scope of this Document

Scope of this Project is obtain data of different kinds of sensors and parse through based on user input.

## Definitions and Acronyms

The terms in use in the document are explained below.

|  |  |
| --- | --- |
| Acronym | Description |
| AS | Analyzing sensor data |
| GNU | GNU Not Unix |

## Platform and Tools

# Software : Linux 3.13 version.

# Language : C, Linux, Makefile and Python

|  |  |
| --- | --- |
| Tool Name | Purpose for which the Tool is proposed to be used |
| GNU-toolchain | For Compilation, debugging  Makefile for integration |

1. **Module Design**

## Module Description

The main aim is to receive the information of different sensors like accelerometer, Gyroscope, proximity etc. The sensor data has 3 dimensions like x,y and z this will be in the form of a string and we need to parse in such a way that we should be able to display individual values of each sensors based on the user input.

## Block Diagram

INTEL

EDISON

TRANSPORTER

SENSORS

WI-FI WI-FI

Blue-tooth B Blue-tooth

## Error & Exception Handling

|  |  |  |
| --- | --- | --- |
| Error Code | Error Description | Action taken |
|  |  |  |
|  |  |  |

# Flow Diagram

Extract sensor data

to a text file

Processing the data

Display the data

based on User input

Filter the data

Store the data