**PROJECT DEVELOPMENT AGREEMENT**

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| **NAME OF THE PROJECT** | Ship Intrusion System using 3-axis Accelerometer |
| **OWNER NAME** |  |
| **OWNER CONTACT** |  |
| **PROJECT ID** | ELRMD059046 |
| **LOCATION** |  |
| **LAST DATE** |  |
| **PRICING USING OUR COMPONENTS** |  |
| **PRICING USING YOUR COMPONENTS** |  |

**DESCRIPTION –**

Surveillance is a critical problem for harbor protection, border control or the security of commercial facilities. The effective protection of vast near-coast sea surfaces and busy harbor areas from intrusions of unauthorized marine vessels, such as pirates, smugglers, illegal fishermen is particularly challenging. Using signal processing techniques and cooperative signal processing, we can detect the passing ships by distinguishing the ship-generated waves and the ocean waves.

**APPLICATION –**

1. **Harbor protection.**
2. **Border control or the security of commercial facilities**
3. **Check intrusions of unauthorized marine vessels.**

**HARDWARE MATERIAL –**

1. **Arduino Microcontroller.**
2. **Accelerometer**
3. **Connecting Wires.**
4. **Battery Unit in case of power cut.**

**SOFTWARE MATERIAL –**

1. **Arduino SDK.**

**DEVELOPMENT PROCESS –**

1. **Arduino microcontroller will receive signals from 3-Axis Accelerometer.**
2. **Accelerometer sensor is sensing transducer that provides an output proportional to acceleration vibration and shock.**
3. **The Analog Signals from Sensor is converted into Digital Signal for further processing.**
4. **These digital signals will be formed as a packet and will be sent to the server node.**
5. **The server will receive this signal and it will be displayed in the terminal.**

ACCELEROMETER

SERVER ( PC )

POWER SUPPLY

ARDUINO   
MICRO-  
CONTROLLER