UNIVERSITY OF PUERTO RICO AT MAYAGÜEZ

MAYAGÜEZ, PUERTO RICO

DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING

WaveSphere

A PROJECT PROPOSAL SUBMITTED AS A PARTIAL REQUIREMENT OF THE MICROPROCESSOR INTERFACING COURSE ICOM-5217

by

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For: Dr. M. Jiménez
Course: ICOM 5217, Section 096
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Report goes here!

A. Work Distribution Table

Table 1: A work distribution table showing a list of tasks to be performed for this project and the resources assigned to them

Task Title	Adrian	Daniel	Nelian	Samuel
Topic Research	✓	✓	✓	✓
Define System Requirements and Specifications	✓	✓	✓	✓
Define Essential Hardware and Software	✓	✓	✓	✓
Create System Block Diagram			✓	
Set up Project Website		✓		
Cover Page, Table of Contents, Report Format	✓			
Specifications: Requirements and Features	✓	✓	✓	✓
Specifications: Limitations				✓
Market Description		✓		
Specifications: Essential HW/SW			✓	
Block Diagram			✓	
System Conception: Global System View	✓			
System Conception: UI Level			✓	
Design Criteria		✓		✓
Expert Opinion			✓	
Introduction		✓		
Abstract				✓
Proof Reading	✓	✓	✓	✓
Project Journal				✓
Project and Work Distribution Table	✓			
MCU Research	✓	✓	✓	✓
Other Components Research	✓	✓	✓	✓
Brainstorm: Discussion and Selection of MCU	✓	✓	✓	✓
Design Team Logo and Poster			✓	
Set up Git Repository		✓		
Component Selection	✓	✓	✓	✓
Update Block Diagram	✓			
Brainstorm: Software Plan (Operating Chart)	✓	✓	✓	✓

Task Title	Adrian	Daniel	Nelian	Samuel
Build System Schematics				✓
Cost Analysis				✓
Timing Analysis and Diagrams			✓	
Power Analysis	✓			
Software Brainstorm Requirement Definition and Verification	✓	✓	✓	✓
Use Case Diagrams			✓	
Design User Interface		✓		
Flow Charts, Module and Interface Design for MCU Software			✓	
Connect and Work with Accelerometer and Gyroscope	✓			
Connect and Work with Magnetic Field and Light Sensor			✓	
Connect and Work with GPS Software and Hardware Module		✓		
Connect and Work with SD Card Software and Hardware Module				✓
Connect and Work with Power Supply and Management	✓			
Connect and Work with Xbees				
Implement Sampling Mode Software Module	✓			
Implement Transfer Mode Software Module		✓		
Implement Diagnostic Mode Software Module				✓
Implement LED Controller Module			✓	
Software and Hardware Testing and Debugging	✓	✓	✓	✓
Implement Out of Memory Alert Software Module				✓
Implement Low Power State Software Module	✓			
Implement User Interface			✓	
Design and Make PCBs		✓		
Connect, Solder, Test	✓			
Field Testing (Water Tank)	✓	✓	✓	✓
Software Testing and Debugging	✓	✓	✓	✓
Hardware Testing and Debugging	✓	✓	✓	✓