

**MOBILE BASED FIRE DETECTION SYSTEM USING SMOKE AND
TEMPERATURE SENSOR IN TANGUB CITY'S ESTABLISHMENTS**

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Tagaloguin, Mae-Reyjane S.

Olasiman, Rex M.

Mier, Mary Jean B.

Pitogo, Christine R.

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GOV. ALFONSO D. TAN COLLEGE
Tangub City, Misamis Occidental
7214 PHILIPPINES



INSTITUTE OF COMPUTER STUDIES
CERTIFICATE OF PANEL APPROVAL

This study attached hereto, **“MOBILE BASED FIRE DETECTION SYSTEM USING SMOKE AND TEMPERATURE SENSOR IN TANGUB CITY’S ESTABLISHMENTS”**, prepared and submitted by **Mae-Reyjane S. Tagaloguin, Rex M. Olasiman, Mary Jean B. Mier and Christine R. Pitogin** in partial fulfilment of the requirements for Degree of BACHELOR OF SCIENCE IN COMPUTER SCIENCE is hereby recommended for approval.

Approved by the committee on Oral Examination

MARICELLE M. NUEVA, DM

Chairperson

Date

FRITZIE ANN D. FLORIDA, MBA

Member

Date

JENIEFFER T. TIA, MBA

Member

Date

GENEVIEVE B. HILOT, MM-ITM

Member

Date

JUNREY M. SANTARITA

Adviser

Date

JADE MARK ABAPO

Adviser

Date

This research is approved in partial fulfilment of the requirements for degree of **BACHELOR OF SCIENCE IN COMPUTER SCIENCE**.

ENGR.ERWIN E. LACPAO

Dean, Institute of Computer Studies

Date

LOVE H. FALLORAN, MSCRM

VP for Academic Affairs

Date

PROF. EMELIO S. PASCUAL, MA

Consultant of the President and
GADTC Development and Operations Specialist

Date

Abstract

Mobile Based Fire Detection System provides efficient way of access and security purposes to the establishment owners. This Mobile Based Fire Detection System has its purpose to cater the users who are away from their firm most likely establishment owners in Tangub City. This study presents a model design of the Short Message Service (SMS) based Alert System installed on a smoke alarm device using extensive Global System for Mobile Communication (GSM) technology for communication purposes and the Arduino Mega2560 microcontroller for the entire control of the system. Through that, the users take advantage of this technological advancement which this system features a wide range communication process. The system alerts on the exact location through predefined messages and calls to the programmed numbers, fast and easy fire signalling information, save time in case of the emergency, help establishment owners in times of emergency and provides efficient way of access in investigation process. As concluded, the study of Mobile Based Fire Detection System is much more reliable. As realization of the system, the Mobile Based function of notifying is really useful to fasten the process of warning establishment owners as soon as possible when they're out.

Keywords: Fire Detection System, Mobile Based, Arduino and Microcontroller.

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Mr. and Mrs. Godofredo M. Olasiman

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Mrs. Sinfioriana A. Mier

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Table of Contents

TITLE PAGE	i
ENDORSEMENT	ii
ABSTRACT	iii
ACKNOWLEDGMENT	iv
DEDICATION	.....	v
TABLE OF CONTENTS	.....	vi
LIST OF FIGURES	.....	vii
LIST OF TABLES	.....	viii
LIST OF APPENDICES	.....	ix

CHAPTER

1 INTRODUCTION

Project Context	.....	1
Purpose and Description	.....	3
Objectives of the Study	.....	4
Scope and Limitations	.....	5

2 RELATED LITERATURES AND STUDIES

Rail Fire and Smoke Standards	.....	7
Fire Detection Alarm Systems and Equipment in Buildings	.....	7
Wire Chubb Edwards Photoelectric Smoke Detector	.....	8
Addressable Simplex True Alarm Smoke Detectors	.....	9
Commercial Smoke Detectors	.....	10

3 DESIGN AND METHODOLOGY

Methodology	11
Technical Background	12
Use Case Diagram	13
Use Case Scenario	14
Hierarchical Input Process Output	20
Narrative Flow (Existing)	21
Data Flow Diagram (Existing)	21
Narrative Flow (Proposed)	22
Data Flow Diagram (Proposed)	22

4 COST AND BENEFITS ANALYSIS

Cost and Benefit Analysis	23
---------------------------------	----

5 SUMMARY, RESULT, CONCLUSION AND RECOMMENDATION

Summary	26
Result	26
Conclusion	27
Recommendations	27

APPENDICES	23
-------------------------	----

BIBLIOGRAPHY	63
---------------------------	----

CURRICULUM VITAE	70
-------------------------------	----

LIST OF FIGURES

Figures	Pages
1 Wire Chubb Edwards Photoelectric Smoke Detector	8
2 Addressable Simplex True Alarm Smoke Detectors	9
3 Commercial Smoke Detectors	10
4 Use Case Diagram (System)	13
5 Use Case Diagram (User)	13
6 Hierarchical Input Process Output	20
7 Data Flow Diagram (Existing)	21
8 Data Flow Diagram (Proposed)	22
9 Upload Firmware	29
10 Form the Tools menu	29
11 Phone numbers installation.	20
12 Upload button	31
13 New window	31
14 Open SIM to the shield	32
15 Insert the SIM	32
16 Slide the SIM	33
17 Push the SIM to the board	33
18 Wire to Electric Bell	34
19 Power On the system	35
20 Arduino Mega2560	36
21 Receive Call Notification	37

22	Receive Text Notification	38
23	Open File	39
24	Compile Sketch	39
25	ChooseArduino Mega2560 Board	40
26	Configure Communication Port	40
27	Receive Call Notification	41
28	Receive Text Notification	42

LIST OF TABLES

Tables		Pages
1	Use Case for Detect Smoke and Temperature	14
2	Use Case for Alarm..... 14	
3	Use Case for Call	15
4	Use Case for Predefined Messages	15
5	Use Case for Receive Call and Text	16
6	Use Case for Notice Alarm	16
7	Costs and Benefit Design Analysis Proposed	23
8	Survey Result	66

LIST OF APPENDICES

Appendix	Pages
A. Mobile Based Fire detection System user's Manual	28
B. GUI (Graphical User Interface)	39
C. Source Code	43
D. Survey Questionnaire	68
E. Survey Result	69