VISVESVARAYA TECHNOLOGICAL UNIVERSITY BELAGAVI-590018



"PROJECT PHASE-II REPORT" 15ISP85

ON

"CLOUD BASED RESCUE MANAGEMENT SYSTEM"

Submitted in partial fulfillment for the requirements for the Award of Degree of

BACHELOR OF ENGINEERING IN INFORMATION SCIENCE AND ENGINEERING BY

Anjali M A	(1EP16IS005)
Bhavishya P	(1EP16IS019)
Bhavyashree N	(1EP16IS020)
Kavyashree Jalapur	(1EP16IS037)

UNDER THE GUIDANCE OF

Dr. Nanda Ashwin Professor Dept. Of ISE, EPCET



Department of Information Science and Engineering Jnana Prabha Campus, Bidarahalli, Bangalore – 560 049

2019-2020



DEPARTMENT OF INFORMATION SCIENCE & ENGINEERING

(Affiliated to Visvesvaraya Technological University, Belagavi)

Bangalore-560049

CERTIFICATE

This is to certify that the **Project Phase-II** (15ISP85) entitled "CLOUD BASED RESCUE MANAGEMENT SYSTEM" is a bonafied work carried out by **Anjali M A** bearing USN 1EP16IS005, Bhavishya P bearing USN 1EP16IS019, BhavyaShree N bearing USN 1EP16IS020, Kavyashree Jalapur bearing USN 1EP16IS037 in partial fulfillment for the award of Bachelor of Engineering in Information Science and Engineering under Visvesvaraya Technological University, Belagavi during the year 2019- 2020. It is certified that all the corrections/suggestions indicated in the Internal Assessment have been incorporated in the report and submitted in the department library. This Project Report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the award of the said degree.

GUIDE Dr. Nanda Ashwin Professor **HOD Prof. Kemparaju N,**Professor and Head

PRINCIPAL Dr. Prakash S, Principal

Examiners

Name of the Examiners

Signature with date

1.

2.



DEPARTMENT OF INFORMATION SCIENCE & ENGINEERING

(Affiliated to Visvesvaraya Technological University, Belagavi)

Bangalore-560049

DECLARATION

We, Anjali M A, Bhavishya P, BhavyaShree N, Kavyashree Jalapur students of 8th semester B.E, in Information Science and Engineering, East Point College of Engineering and Technology, Bengaluru, declare that the Project entitled "CLOUD BASED RESCUE MANAGEMENT SYSTEM" has been carried out by us and submitted in partial fulfillment of the course requirements for the award of degree in Bachelor of Engineering in Information Science and Engineering of Visvesvaraya Technological University, Belagavi, during the academic year 2019-2020. The matter embodied in this report has not been submitted to any other university or institution for the award of any other degree.

ANJALI M A (1EP16IS005)

BHAVISHYA P (1EP16IS019)

BHAVYASHREE N (1EP16IS020)

KAVYASHREE JALAPUR (1EP16IS037)

ACKNOWLEDGEMENT

Any achievement, be it scholastic or otherwise does not depend solely on the individual efforts but on the guidance, encouragement and cooperation of intellectuals, elders and friends. We would like to take this opportunity to thank them all.

First and foremost, we would like to express our sincere regards and thanks to Mr. Pramod Gowda S V and Mr. Rajiv Gowda S V, CEO's, East Point Group of Institutions, Bangalore, for providing necessary infrastructure and creating good environment.

We express our gratitude to **Dr. Prakash S,** Principal, EPCET who has always been a great source of inspiration.

We express our sincere regards and thanks to **Prof. Kemparaju N**, Professor and Head of Department of Information Science and Engineering, EPCET, Bangalore, for his encouragement and support.

We are grateful to acknowledge the guidance and encouragement given to us by **Dr.Nanda Ashwin,** Professor, Department of Information Science and Engineering, EPCET, Bangalore, as the Project Co-ordinator who have rendered a valuable assistance.

We obliged to **Dr. Nanda Ashwin,** Professor who rendered valuable assistance as the project guide.

We also extend our thanks to the entire faculty of the **Department of Information** Science and Engineering, EPCET, Bangalore, who have encouraged us throughout the course of the Project.

Last, but not the least, we would like to thank our family and friends for their inputs to improve the Project.

ANJALI M A (1EP16IS005)

BHAVISHYA P (1EP16IS019)

BHAVYASHREE (1EP16IS020)

KAVYASHREE JALAPUR (1EP16IS037)

ABSTRACT

Emergency never comes with prior intimation. In real world scenarios detecting such emergencies and reporting is a real challenge. Our project proposes a new cloud based system to overcome common problem of having manual intervention while reporting emergency. We are proposing the new idea to automate this process of emergency detection and reporting, this system will record and report emergency in real time. It works in three steps as user press an alert button in android application installed in smart phone. It will trigger the system unit connected via Bluetooth with IP address of the user. The system authenticate user in the cloud database and send Email and SMS alert notification to concern authorities.

CONTENT LIST

SI.NO	TOPIC	PAGE NO.
1	Introduction	
	1.1 Overview	1
	1.2 Problem statement	2
	1.3 Existing System	3
	1.3.1 Disadvantages Of Existing System	3
	1.4 Proposed System	3
	1.4.1 Advantages Of Proposed System	4
2	Literature Survey	5
3	System Requirement Specification	8
	3.1 Function Requirement	8
	3.2 Non-Function Requirement	8
	3.3 Software requirement	9
	3.3.1 Python	9
	3.3.2 MIT App Inventor	11
4	System Analysis	12
	4.1 Feasibility Study	12
	4.1.1 Economic Feasibility	12
	4.1.2 Technical Feasibility	12
	4.1.3 Social Feasibility	13
5	System Design	14
	5.1 Fundamental Design Concepts	14
	5.1.1 Input Design	14
	5.1.2 Output Design	15
	5.2 System Development Methodology	16
	5.2.1 sequential software Development	17
	Methodology	17
	5.3 System Architecture	18
	5.4 Class Diagram	21

5.5 Usecase Diagram	23
5.6 Sequence Diagram	25
Implementation	27
6.1 Langauage Used For Implementation	27
6.2 Platform Used For Implementation	29
6.2.1 MIT App Inventor	29
6.2.2 Bluetooth Module	35
6.2.3 AWS Cloud	36
Testing	40
7.1 Unit Testing	40
7.2 Integration Testing	42
7.2.1 Top Down Integration	43
7.2.2 Bottom –Up Integration	43
7.3 Validation Testing	44
Interpretation Result	46
Conclusion and Future Enhancement	
References	
	Implementation 6.1 Langauage Used For Implementation 6.2 Platform Used For Implementation 6.2.1 MIT App Inventor 6.2.2 Bluetooth Module 6.2.3 AWS Cloud Testing 7.1 Unit Testing 7.2 Integration Testing 7.2.1 Top Down Integration 7.2.2 Bottom –Up Integration 7.3 Validation Testing Interpretation Result Conclusion and Future Enhancement

LIST OF FIGURES

FIG NO	O TODIC	
FIG. NO.	TOPIC	NO.
5.2.1	Sequential Waterfall Model	18
5.3	Architectural Diagram	20
5.4	Class Diagram	21
5.5	Usecase Diagram	22
5.6	Sequence Diagram	25
6.1	Features Of Python	28
6.2.1.1	MIT App Inventor	29
6.2.1.2	MIT App Inventor Design Editor	32
6.2.1.3	MIT App Inventor Block Editor	33
6.2.1.4	Fast Iteration and Design Using Companion	34
6.2.2	Bluetooth Module	35
6.2.3	AWS Cloud	37
8.1	Creating Bucket	47
8.2	Lambda Handler	48
8.3	Athena Sources	48
8.4	Data Storage	49
8.5	Cloud Watch	50
8.6	Lambda Function	50

LIST OF TABLES

TABLE	DESCRIPTION	PAGE
NO.		NO.
7.2.2	Bottom-up Integration Table	43
7.3	Validation Table	44