

FINAL YEAR PROJECT REPORT

**GSM BASED MOBILE OPERATED
VENDING MACHINE**



A PROJECT REPORT
Submitted by

NAME OF THE CANDIDATES

| | |
|---------------------|------------------|
| <i>AMAR ABBAS</i> | <i>101519042</i> |
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| <i>SOHAIL YASIR</i> | <i>101519084</i> |

in partial fulfillment of the requirements for the award of degree
of
BACHELOR OF SCIENCE
IN
ELECTRICAL ENGINEERING

APPROVED

Project Advisor _____ Director Projects _____

DEPARTMENT OF ELECTRICAL ENGINEERING

SCHOOL OF ENGINEERING

UNIVERSITY OF MANAGEMENT AND TECHNOLOGY

SEPTEMBER 2014

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**DEPARTMENT OF ELECTRICAL ENGINEERING
SCHOOL OF ENGINEERING
UNIVERSITY OF MANAGEMENT AND TECHNOLOGY
SEPTEMBER 2014**



University of Management & Technology
 School of Engineering
 Department of Electrical Engineering

Senior Year Project- I Evaluation

Project ID 45

Date 10-04-2014

Project Title: GSM based mobile operated Vending Machine

Particulars of the Students

| Code | ID | Name | Semester in which Registered | Contact Number |
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| S.No | Topic | Max Marks | Obtained Marks |
|------|---|-----------|----------------|
| 1 | Problem Statement | 10 | |
| 2 | Objective/Scope | 10 | |
| 3 | Methodology | 10 | |
| 4 | Scope of the Project/Utilization | 10 | |
| 5 | Literature Review/Data collection | 10 | |
| 6 | Design and Analysis | 10 | |
| 7 | Expected Output/Outcome/Final Deliverable | 10 | |
| 8 | Conclusion and Recommendation | 10 | |
| | FYP-1 Documentation | 20 | |

$\frac{241}{300} \times 20 = 16.06$

Suggested Changes

- ① Security alarm front & back, sms to owner & audio siren
- ② Inventory status to owner after 90% sale
- ③ Web or mobile phone can be used to purchase

- ④ No electricity message
- ③ At least three product selection

Name _____ Role: (adviser/member) Signature: _____

DECLARATION OF ORIGINALITY

We hereby declare that the project work entitled “GSM BASED MOBILE OPERATED VENDING MACHINE” submitted to the “UNIVERSITY OF MANAGEMENT AND TECHNOLOGY”, is a record of original work done by us under the guidance of “SIR ABUBAKAR SIDDIQUE” We declare that this project is our own original work, and that all sources have been accurately reported and acknowledged, and that this project has not been previously in its entirety, or in part been submitted at any academic institution in order to obtain an academic qualification.

Amar Abbas 101519042

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Name of advisor: Sir Abubakar Siddique

Date: _____

Acknowledgment

First of all we would like to thank **Allah Almighty**, for the courage, will and unbounded desire to learn, which **He** has given us.

We would like to express our profound gratitude, most sincere appreciation and special thanks to our project advisor Sir Abubakar Siddique for his fabulous support and facilitating us with time and other demands of ours.

We wish to acknowledge the kindness and courage extended by our seniors, for their moral and practical support.

Finally we wish our deepest appreciation to our parents and family for being always besides us and for their financial support and prayers and also unlimited patience.

ABSTRACT

A vending machine provides snacks, beverages, lottery tickets, and other products to consumers without a cashier. Items sold via these machines vary by country and region.

In our project we introduce the concept which is reliable and secure for trade in Pakistan. We are using Mobile (GSM module) as a cashier. All payment will be through the mobile phone and an account will be opened with the reference to the customer's mobile phone number.

The purpose of designing this project is to build a vending machine which could provide a soft drink, biscuits and snacks to the people using simple steps through mobile phone or manually. These steps would not consume much time.

Project is implemented using following major constituents.

- ✚ **Hardware Design (Motors, Switches, security adaptations)**
- ✚ **Embedded System interaction with GSM modem/module.**

Index Terms- DC motors, Dispenser Mechanism, PIC micro-controller, GSM module, User interface, security alarm, limit switches.

Table of contents

Chapter 1: Introduction

| | |
|-----------------------------------|----|
| 1.0- Introduction | |
| 1.0.1- Introduction | 10 |
| 1.0.2- History | 10 |
| 1.0.3- Background | 10 |
| 1.0.4- Safety | 11 |
| 1.1- Problem statement | 12 |
| 1.2- Objective | 13 |
| 1.3- Expected output/deliverables | 14 |

Chapter 2: Literature review

| | |
|--|----|
| 2.1- World-wide usage and history | 15 |
| 2.2- Prepaid pin-code entry method | 15 |
| 2.3- Egg Vending Machine | 16 |
| 2.4- Lack of promotion of vending machines in Pakistan | 16 |
| 2.5- Japanese Vending Machine | 16 |
| 2.6- Smart Car Vending Machine | 17 |
| 2.7- Samsung Touch Screen | 18 |
| 2.8- Fresh pizza | 19 |
| 2.9- Batteries | 20 |
| 2.10- Gadgets | 21 |

Chapter 3: Theoretical Design

| | |
|--------------------|----|
| 3.1- Block diagram | 22 |
| 3.2- PCB design | 23 |

Chapter 4: Detail of theoretical Design

| | |
|---|----|
| 4.1- 12V DC relays | 24 |
| 4.1.1- Properties of relays | 24 |
| 4.1.2- Voltage ratings | 25 |
| 4.1.3- Relay coil resistance Value | 25 |
| 4.2- PIC Micro-controller 16f877a | 26 |
| 4.2.1- Properties | 26 |
| 4.2.2- Data sheet | 27 |
| 4.3- GSM Modem/Module | 27 |
| 4.3.1- Overview | 28 |
| 4.3.2- Features | 28 |
| 4.3.3- Development Board for GSM module | 29 |
| 4.3.4- Properties of LM317 | 29 |
| 4.3.5- Properties of “SMS” | 30 |
| 4.4- Dispenser of Machine | 31 |

Chapter 5: Components selection and bill of material

| | |
|-----------------------------|----|
| 5.1- Components order guide | 34 |
| 5.2- Bill of material | 35 |

Chapter 6: Testing and evaluation

36

Chapter 7: Results and error analysis

38

Chapter 8: Difficulties faced

| | |
|---|----|
| 8.1- Difficulties in availability of components | 40 |
|---|----|

| | |
|---|----|
| Chapter 9: Manufacturability, usability and sustainability | 42 |
| Chapter 10: Future development | 43 |
| Chapter 11: Societal issues | |
| 11.1- Social Issues | 44 |
| 11.2- Ethical issues | 44 |
| 11.3- Economical issues | 45 |
| 11.4- Health & Safety | 46 |
| 11.5- Environmental impact | 47 |
| Chapter 12: Conclusion | 48 |
| Chapter 13: References | 49 |

List of Figures

| | |
|--------------|----|
| Figure 1.1 | 11 |
| Figure 1.2 | 11 |
| Figure 2.1 | 17 |
| Figure 2.2 | 17 |
| Figure 2.3 | 18 |
| Figure 2.4 | 19 |
| Figure 2.5 | 20 |
| Figure 2.6 | 20 |
| Figure 2.7 | 21 |
| Figure 3.1 | 23 |
| Figure 3.2 | 24 |
| Figure 4.1 | 24 |
| Figure 4.2 | 26 |
| Figure 4.2.1 | 27 |
| Figure 4.3 | 28 |
| Figure 4.3.1 | 29 |
| Figure 4.3.2 | 29 |
| Figure 4.4 | 31 |
| Figure 4.5 | 32 |
| Figure 4.6 | 32 |

| | |
|------------------|----|
| Figure 4.7 | 33 |
| Figure 4.8 | 33 |
| Figure 6.1 | 36 |
| Figure 6.2 | 37 |
| Figure 7.1 | 38 |
| | |
| Appendix: | |
| Coding | 49 |