



# Online Business Management

Usama Akhlaq

**01-235151-039**

Zaighum Abbas

**01-235151-019**

Group ID: IT-S18-17

**Bachelor of Science in Information and Technology**

Supervisor: Saima Jawad

**Department of Computer Science Bahria University, Islamabad**

**©Usama Akhlaq & Zaighum Abbas 2018**

## **Certificate**

we accept the work contained in the report titled “Online Business Management System” written by Usama Akhlaq and Zaigham Abbas as a confirmation to the required standard for the partial fulfillment of the degree of Bachelor of Science in information and Technology.

### **Approved By**

Supervisor:  
Saima Jawad

Internal Examiner:  
(                      )

External Examiner:  
(                      )

Project Coordinator:  
Dr Sumaira Kausar

Date:  
6th December 2018

## **Acknowledgments**

First of all, we would like to express our sincere thanks to our supervisor Ma'am Saima Jawad. Her contribution and constructive criticism led us to show our effort. It was used to make the job as original as possible. Thanks to her. Our research and knowledge in this area have expanded.

## **Abstract**

In every field of life people want to do their work effectively, efficiently and transparently. For this they use different technologies and methodologies to do their work in more effective and in accurate way. Rahat Bakers Islamabad also want to upgrade their systems to save time, money, man power and resources. This Online Business Management system is developed to automate business of Rahat Bakers. To help the user to do their work fast and in convenient way. It helps the user to save their precious time. The user is able to manage the inventory online. Whenever the inventory gets low it will generate notification to vendor so that they could supply more inventory. Manager can watch all sales history without going to branch by branch. They can also use mobile to access their system because the system is web-based system. Through online point of sale system, the user can manage their sales records. And with online inventory management system the user manages their inventory of multiple franchises. The system helps them to save their daily transactions and records, to review them at any time from any place. There are 3 primary users of the system sales-man, managers and executives they could view their profile as per their requirements. A sales man will be shown an interface through which he could sell an item in inventory and could also give discount to the special customers which are permanent customers of the Rahat Bakers.

The system had been implemented using AdminLTE theme which is open-source, on server side we use PHP's framework which is named as CodeIgniter. With this we also use jQuery and java script.

# Contents

<b>Certificate</b>	<b>ii</b>
<b>Acknowledgments</b>	<b>iii</b>
<b>Abstract</b>	<b>iv</b>
<b>Table of Contents</b>	<b>v</b>
<b>List of Figures</b>	<b>ix</b>
<b>List of Tables</b>	<b>xi</b>
<b>1 Introduction</b>	<b>2</b>
1.1 Background and Overview . . . . .	2
1.2 Problem Description . . . . .	2
1.3 Objectives . . . . .	2
1.4 Project Scope . . . . .	3
1.5 Methodology . . . . .	3
1.5.1 Requirement Gathering . . . . .	3
1.5.2 Analysis . . . . .	4
1.5.3 Design . . . . .	4
1.5.4 Development . . . . .	4
1.5.5 Testing . . . . .	4
1.5.6 Deployment . . . . .	4
<b>2 Literature Review</b>	<b>6</b>
<b>3 Software Requirement Specification</b>	<b>11</b>
3.1 Existing System . . . . .	11
3.2 Proposed System . . . . .	11
3.3 Sales Person Login . . . . .	11
3.4 Managers . . . . .	11
3.5 Executives . . . . .	11
3.6 Requirement Specification . . . . .	12
3.7 Functional Requirements . . . . .	12
3.8 Non-Functional Requirements . . . . .	12
3.9 Use cases . . . . .	13
3.9.1 Use Case 1 . . . . .	13
3.9.2 Use Case 2 . . . . .	14
3.9.3 Use Case 3 . . . . .	15
3.9.4 Use Case 4 . . . . .	16

3.9.5	Use Case 5 . . . . .	17
3.9.6	Use Case 6 . . . . .	18
3.9.7	Use Case 7 . . . . .	19
3.9.8	Use Case 8 . . . . .	20
3.9.9	Use Case 9 . . . . .	21
3.9.10	Use Case 10 . . . . .	22
<b>4</b>	<b>System Design</b>	<b>25</b>
4.1	System Architecture . . . . .	25
4.2	Point of Sale System . . . . .	25
4.3	Inventory Management System . . . . .	25
4.4	Executives Module . . . . .	26
4.5	Sequence Diagrams . . . . .	26
<b>5</b>	<b>System Implementation</b>	<b>29</b>
5.1	System Architecture . . . . .	29
5.2	Development Environment . . . . .	29
5.3	Component of system . . . . .	29
5.4	Work flow of the system . . . . .	30
5.5	Tools and Technology . . . . .	31
5.5.1	HTML . . . . .	31
5.5.2	CSS . . . . .	31
5.5.3	Bootstrap . . . . .	31
5.5.4	Php . . . . .	32
5.5.5	CodeIgniter frame work . . . . .	32
5.5.6	Apache server . . . . .	32
5.5.7	MySQL . . . . .	32
5.5.8	Sublime Text 3 . . . . .	32
<b>6</b>	<b>System Testing and Evaluation</b>	<b>34</b>
6.1	Graphical User Interface Testing . . . . .	34
6.2	Usability Testing . . . . .	34
6.3	Easy to Use . . . . .	34
6.4	Pleasant Interface . . . . .	34
6.5	Easy to Learn . . . . .	35
6.6	Software Performance Testing . . . . .	35
6.7	Compatibility Testing . . . . .	35
6.8	Installation Testing . . . . .	35
6.9	Test Cases . . . . .	36
6.9.1	Test Case 1 . . . . .	36
6.9.2	Test Case 2 . . . . .	36

6.9.3	Test Case 3 . . . . .	36
6.9.4	Test Case 4 . . . . .	37
6.9.5	Test Case 5 . . . . .	37
6.9.6	Test Case 6 . . . . .	37
6.9.7	Test Case 7 . . . . .	38
6.9.8	Test Case 8 . . . . .	38
6.9.9	Test Case 9 . . . . .	38
6.9.10	Test Case 10 . . . . .	39
<b>7</b>	<b>Conclusion</b>	<b>41</b>
7.1	Future Work . . . . .	41
<b>8</b>	<b>References</b>	<b>42</b>
<b>A</b>	<b>User Manual</b>	<b>44</b>
A.1	Login Page . . . . .	44
A.2	Select Branch . . . . .	44
A.3	Dashboard . . . . .	45
A.4	Navigation Bar . . . . .	45
	A.4.1 Admin Navigation bar . . . . .	46
	A.4.2 Manager Navigation bar . . . . .	47
	A.4.3 Employee Navigation bar . . . . .	48
A.5	Sales Module . . . . .	49
	A.5.1 Add Sales . . . . .	49
	A.5.2 View Sales . . . . .	51
A.6	Voucher . . . . .	52
	A.6.1 Add Voucher . . . . .	52
	A.6.2 View Voucher . . . . .	52
A.7	Expense . . . . .	53
	A.7.1 Add Expense . . . . .	53
	A.7.2 View Expense . . . . .	54
A.8	Inventory Module . . . . .	55
	A.8.1 Add Inventory . . . . .	55
	A.8.2 View Inventory . . . . .	56
A.9	Vendors . . . . .	57
	A.9.1 Add Vendor . . . . .	57
	A.9.2 View Vendors . . . . .	58
A.10	Customers . . . . .	59
	A.10.1 Add Customer . . . . .	59
	A.10.2 View Customers . . . . .	60
A.11	Employee . . . . .	61

A.11.1 Add Employee . . . . .	61
A.11.2 View Employees . . . . .	62
A.12 ERD Diagram . . . . .	63

## List of Figures

2.1	Login Page . . . . .	7
2.2	Main Page . . . . .	7
2.3	Sale Page . . . . .	8
2.4	Temporary Contact . . . . .	9
3.1	Overall System . . . . .	13
3.2	Sales Counter . . . . .	14
3.3	Sales History . . . . .	15
3.4	Sales Commision . . . . .	16
3.5	Manage Branch . . . . .	17
3.6	Branch Sales History . . . . .	18
3.7	See Inventory . . . . .	19
3.8	Order Inventory . . . . .	20
3.9	Inventory Alert . . . . .	21
3.10	Add new Branch/Employee . . . . .	22
3.11	Sales Statistics . . . . .	23
4.1	Inventory Management System . . . . .	26
4.3	Sequence Diagram (2) . . . . .	27
4.2	Sequence Diagram (1) . . . . .	27
5.1	Point of Sale System . . . . .	31
A.1	Login Screen . . . . .	44
A.2	Select Branch . . . . .	44
A.3	Dashboard screen . . . . .	45
A.4	Admin Navigation bar . . . . .	46
A.5	Manager Navigation Bar . . . . .	47
A.6	Employee Navigation Bar . . . . .	48
A.7	Add Sales . . . . .	49
A.8	Proceed to Checkout . . . . .	50
A.9	View Sales . . . . .	51
A.10	Add Voucher . . . . .	52
A.11	View Voucher . . . . .	52
A.12	Add Expense . . . . .	53
A.13	view Expense . . . . .	54
A.14	Add Inventory . . . . .	55
A.15	View Inventory . . . . .	56
A.16	Add Vendor . . . . .	57
A.17	View Vendors . . . . .	58
A.18	Add Customer . . . . .	59
A.19	View Customer . . . . .	60
A.20	Add Employee . . . . .	61

A.21 View Employee . . . . .	62
A.22 ERD Diagram . . . . .	63

## **List of Tables**

3.1	Sales Counter . . . . .	14
3.2	Sales History . . . . .	15
3.3	Sales Commision . . . . .	16
3.4	Manage Branch . . . . .	17
3.5	Branch Sales History . . . . .	18
3.6	Sales Inventory . . . . .	19
3.7	Order Inventory . . . . .	20
3.8	Inventory Alert . . . . .	21
3.9	Add new Branch/Employee . . . . .	22
3.10	Sales Statistics . . . . .	23
6.1	Manager Login . . . . .	36
6.2	Employee Login . . . . .	36
6.3	Sale Module Testing . . . . .	37
6.4	Voucher Adding . . . . .	37
6.5	Expense Adding . . . . .	37
6.6	Vendor Adding . . . . .	38
6.7	Customer Adding . . . . .	38
6.8	Employee Adding . . . . .	38
6.9	New Branch adding . . . . .	39
6.10	Logout . . . . .	39