



**FINAL YEAR PROJECT REPORT**

**A WEB BASED VIRTUAL KITCHEN  
BUILDER AND DESIGNER  
(V-KUCHE)**

**In fulfillment of the requirement  
For degree of  
BS (Information Technology)**

**By**

**HAFIZ MUHAMMAD JAWAD  
MUHAMMAD SAADAT  
MUHAMMAD SHAZER KHAWAJA**

**43856 BSIT  
43859 BSIT  
45921 BSIT**

**SUPERVISED**

**BY**

**MISS. LUBNA SIDDIQUE  
BAHRIA UNIVERSITY (KARACHI CAMPUS)  
2016-2020**

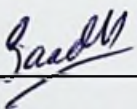
## DECLARATION

We hereby declare that this project report is based on our original work except for citations and quotations which have been duly acknowledged. We also declare that it has not been previously and concurrently submitted for any other degree or award at Bahria University or other institutions.

Signature :  \_\_\_\_\_

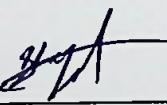
Name : Hafiz Muhammad Jawad

Registration Number : 43856

Signature :  \_\_\_\_\_

Name : Muhammad Saadat

Registration Number. : 43859

Signature :  \_\_\_\_\_

Name : Muhammad Shazer Khawaja

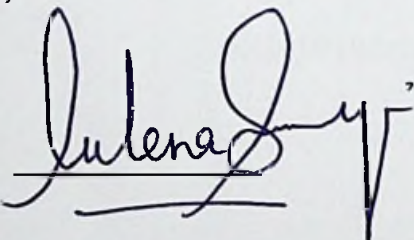
Registration Number : 45921

Date : 15/06/2020

## APPROVAL FOR SUBMISSION

We certify that this project report name **“VIRTUAL KITCHEN BUILDER AND DESIGNER (V-KUCHE)”** was prepared by **“Hafiz Muhammad Jawad, Muhammad Saadat, Muhammad Shazer Khawaja”** has met the required standard for submission in the partial fulfilment of the requirements for the award of Bachelor of Computer Science from Bahria University.

Approved by,

Signature : 

Supervisor: Lubna Siddique

Date : 15/09/2020

The copyright of this report belongs to Bahria University according to the Intellectual Property Policy of Bahria University BUORIC-P15 amended on April 2019. Due acknowledgement shall always be made of the use of any material contained in, or derived from, this report.

© 2019 Bahria University. All right reserved.

## ACKNOWLEDGEMENTS

We would like to thank everyone who had contributed to the successful completion of this project. We would like to express gratitude to our research supervisor, **LUBNA SIDDIQUE** for his invaluable advice, guidance and her enormous patience throughout the development of research.

In addition, we would also like to express my gratitude to our loving **parent** and **friends** who had helped and given us encouragement.

## ABSTRACT

Construction of a kitchen is costly and takes time so we are looking for a better alternative where everyone can virtually design and look at their kitchens before they actually start building them. For users, it is a very effective way because it will save their time and money. Users can also look in for ideas at some of our pre-built kitchens. The result of this project will be a webpage that will enable you to virtual build your kitchen facility in Pakistan.

Furniture Store provide their models and cost which can be used by a user to create their kitchen virtually and there is an option for setting budget and have limitation so user cannot go out of the budget.

## "TABLE OF CONTENTS"

<b>DECLARATION</b>	<b>2</b>
<b>APPROVAL FOR SUBMISSION</b>	<b>3</b>
<b>ACKNOWLEDGEMENTS</b>	<b>5</b>
<b>ABSTRACT</b>	<b>6</b>
<b>TABLE OF CONTENTS</b>	<b>7</b>
<b>LIST OF FIGURES</b>	<b>9-10</b>
<b>LIST OF TABLES</b>	<b>11</b>
<b>CHAPTER</b>	
1	<b>INTRODUCTION</b> <span style="float: right;"><b>12</b></span>
1.1	Background <span style="float: right;">12</span>
1.2	Problem Statements <span style="float: right;">13</span>
1.3	Aims and Objectives <span style="float: right;">13</span>
1.4	Scope of the project <span style="float: right;">14</span>
1.5	Motivation <span style="float: right;">14</span>
1.6	Benefits of the Project <span style="float: right;">14</span>
1.7	Outcome <span style="float: right;">14-17</span>
2	<b>LITERATURE REVIEW</b> <span style="float: right;"><b>18</b></span>
2.1	Virtual Design And Construction <span style="float: right;">18</span>
2.2	Virtual Design And Construction in Practice <span style="float: right;">18</span>
2.3	Interactive Home Design In Virtual Enviroment <span style="float: right;">19</span>
2.4	ALNOPlan <span style="float: right;">19</span>
2.5	IKEA <span style="float: right;">20</span>
2.6	FEBUWOOD <span style="float: right;">20</span>

2.7	KitchenPlanner	21
2.8	RoomSketcher	22
<b>3</b>	<b>DESIGN AND METHODOLOGIES</b>	<b>23</b>
3.1	Design	23
3.2	Modules	23
	3.2.1 User	23
3.3	Methodology	23
3.4	Tools And Languages	24
3.5	Modular Design	24
3.6	Flow Chart	25
3.7	Use Case Diagram	26
3.8	Data Flow diagram	27
3.9	ERD (Entity-Relationship Diagram)	28
<b>4</b>	<b>IMPLEMENTATION</b>	<b>29</b>
4.1	Implemetation Steps	29-33
4.2	Front End	33
	4.2.1 Drag Items	33-36
	4.2.2 Game Manager	36-38
	4.2.3 Price Manager	38
	4.2.4 Drag Items	39
<b>5</b>	<b>RESULT AND DISCUSSION</b>	<b>40</b>
5.1	Testing	40
5.2	Testing Technique	40-47
5.3	Testing Outcome	47
<b>6</b>	<b>CONCLUSION AND RECOMMENDATION</b>	<b>48</b>
6.1	Conclusion	48
6.2	Future Work	48