

**UNIVERSITI TEKNOLOGI MARA**

**PELADANG VEGETABLE  
CROP MANAGEMENT SYSTEM**

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## **ABSTRACT**

PELADANG needs an effective system to manage its operations of vegetable farming and to increase coordination with the wholesalers. At present, the manual system of crop management leads to limitedly crop visibility, cumbersome communication channels and unorganized invoice and payment process. The proposed project consist of a web-based PELADANG Vegetable Crop Management System that manage the handling of data in its internal farms data, automate the documentation of sales, and streamlines communication with wholesalers for greater efficiency. The system gives the PELADANG staff (internal farmers) the ability of registering and updating the crop availability and the wholesalers can browse and order produce. The staff also create invoices, check payments and make monthly reports to evaluate the purchase trends. The Adapted Waterfall Model was used during the development of the system, including the following elements planning, analysis, design, implementation, testing, and documentation. It also integrates User-Centered Design (UCD) to make sure that the interface can be visible and easy to operate both by staff and wholesalers, including those with low technical background. The results of the usability tests, detailed in Chapter 4, demonstrated improved task efficiency, more effective communication with wholesalers, and a reduction in the use of informal processes, such as messengers and paper-based invoicing. This system enhances operational transparency, strengthens the farmer-to-buyer process, and supports data-driven decision-making within PELADANG. Future enhancements could include mobile support, payment gateway integration, and expanded reporting features to further assist in digital transformation and sustainability in internal farm management.

## TABLE OF CONTENTS

<b>Contents</b>	<b>Page</b>
<b>SUPERVISOR APPROVAL .....</b>	<b>i</b>
<b>STUDENT DECLARATION .....</b>	<b>ii</b>
<b>ACKNOWLEDGMENT .....</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>LIST OF ABBREVIATIONS .....</b>	<b>xiii</b>
<b>CHAPTER 1 INTRODUCTION .....</b>	<b>1</b>
<b>1.1 Introduction .....</b>	<b>1</b>
<b>1.2 Background of Study .....</b>	<b>1</b>
<b>1.3 Current Business Process .....</b>	<b>3</b>
<b>1.4 Problem Statement.....</b>	<b>5</b>
<b>1.5 Objectives .....</b>	<b>7</b>
<b>1.6 Scope .....</b>	<b>7</b>
<b>1.6.1 Users – Wholesaler .....</b>	<b>7</b>
<b>1.6.2 Farmer .....</b>	<b>8</b>
<b>1.6.3 Staff.....</b>	<b>8</b>
<b>1.6.4 Administrator .....</b>	<b>9</b>
<b>1.6.5 Functionalities.....</b>	<b>9</b>
<b>1.6.6 Process .....</b>	<b>9</b>
<b>1.6.7 Data .....</b>	<b>9</b>
<b>1.6.8 Reporting Capabilities.....</b>	<b>10</b>
<b>1.6.9 Security Features .....</b>	<b>10</b>
<b>1.7 Significance .....</b>	<b>11</b>
<b>1.8 Project Framework .....</b>	<b>13</b>
<b>1.9 Gantt Chart.....</b>	<b>14</b>
<b>1.10 Conclusion.....</b>	<b>16</b>
<b>CHAPTER 2 LITERATURE REVIEW .....</b>	<b>17</b>

<b>2.1</b>	<b>Introduction .....</b>	<b>17</b>
<b>2.2</b>	<b>Management Information System (MIS).....</b>	<b>17</b>
2.2.1	<b>Definition of Management Information System .....</b>	<b>18</b>
2.2.2	<b>History and Evolution of Management Information System .....</b>	<b>19</b>
2.2.3	<b>Advantages of Management Information System.....</b>	<b>20</b>
2.2.4	<b>Management Information System in the Agriculture Industry.....</b>	<b>23</b>
2.2.5	<b>Role of Management Information System in Crop Management.....</b>	<b>25</b>
<b>2.3</b>	<b>Web-Based Vegetable Crop Management System .....</b>	<b>27</b>
2.3.1	<b>Concept of Vegetable Crop Management System.....</b>	<b>28</b>
2.3.2	<b>Advantages of Web-Based in Vegetable Crop Management.....</b>	<b>29</b>
<b>2.4</b>	<b>Human-Computer Interaction (HCI).....</b>	<b>31</b>
2.4.1	<b>Fitts' Law .....</b>	<b>32</b>
2.4.2	<b>Hick's Law .....</b>	<b>33</b>
2.4.3	<b>User-Centered Design (UCD).....</b>	<b>34</b>
2.4.4	<b>Advantages of using User-Centered Design (UCD) .....</b>	<b>35</b>
<b>2.5</b>	<b>System Development Life Cycle (SDLC) .....</b>	<b>36</b>
2.5.1	<b>Waterfall Model .....</b>	<b>38</b>
2.5.2	<b>Adapted Waterfall Model.....</b>	<b>40</b>
<b>2.6</b>	<b>Similar Existing Systems .....</b>	<b>41</b>
2.6.1	<b>Pasar Online Malaysia .....</b>	<b>42</b>
2.6.2	<b>Agro Bazaar Online.....</b>	<b>43</b>
2.6.3	<b>Cari Sayur.com .....</b>	<b>46</b>
<b>2.7</b>	<b>Comparison Between Similar Existing Systems.....</b>	<b>48</b>
<b>2.8</b>	<b>Implication of Literature Review on Proposed System.....</b>	<b>49</b>
<b>2.9</b>	<b>Conclusion.....</b>	<b>51</b>
 <b>CHAPTER 3 METHODOLOGY .....</b>		<b>53</b>
<b>3.1</b>	<b>Introduction .....</b>	<b>53</b>
<b>3.2</b>	<b>Project Methodology .....</b>	<b>54</b>
<b>3.3</b>	<b>Planning Phase.....</b>	<b>58</b>
<b>3.4</b>	<b>Analysis Phase .....</b>	<b>59</b>
<b>3.5</b>	<b>Design Phase.....</b>	<b>61</b>
3.5.1	<b>Context Diagram .....</b>	<b>62</b>
3.5.2	<b>Data Flow Diagram (DFD) .....</b>	<b>63</b>