GrowAI - A Platform for Plant Monitoring with AI-Based Recommendations

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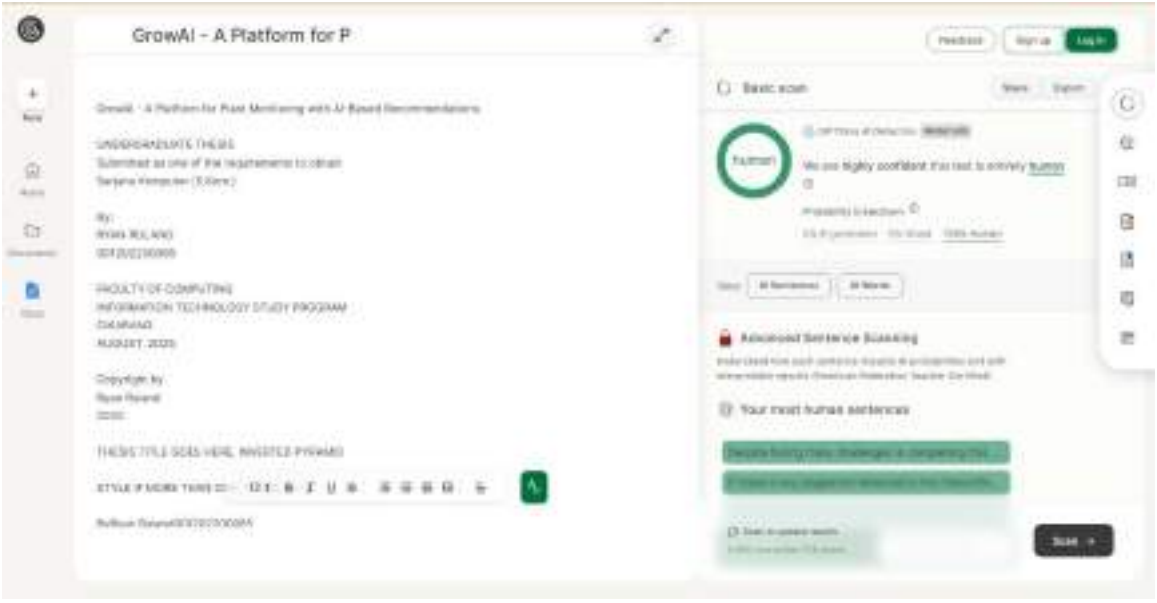
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ABSTRACT

This thesis introduces GrowAI Web, a web application designed for monitoring hydroponic farming in real time. Built using HTML, CSS, and JavaScript, it displays sensor data of pH, temperature, and nutrient levels along with AI-generated recommendations in the form of interactive graphs and actionable alerts. Our month-long pilot test with one small-scale plant showed that this tool can reduce manual monitoring time. In line with the Faculty of Computing guidelines, this project demonstrates how web-based front-end technologies can make precision agriculture accessible to producers with limited resources.

Keywords: Hydroponics, Web Dashboard, Real-time Monitoring

TABLE OF CONTENTS

STATEMENT OF ORIGINALITY iii
SCIENTIFIC PUBLICATION APPROVAL FOR ACADEMIC INTEREST iv
ABSTRACT v
DEDICATION vi
ACKNOWLEDGMENTS vii
TABLE OF CONTENTS viii
INTRODUCTION 11
I. 1.1 Background 11
II. 1.2 Problem Statement 12
III. 1.3 Objectives 13
IV. 1.4 Scope and Limitations 14
V. 1.5 Significance of the Study 14
LITERATURE REVIEW 16
VI. 2.1. Agricultural System and Hydroponic Monitoring 16
VII. 2.2 Web -Based Agricultural Monitoring Solutions 17
VIII. 2.3 Gaps in Current Research 18
IX. 3.1 Research Approach 19
3.2.1 User Needs 19
3.2.2 Requirements 19
3.2.3 Functional Requirements 20
X. 3.3 System Design 20
3.3.1 Architecture Design 20
3.3.2 User Interface Design 21
3.3.3 Data Visualization Design 21
XI. 3.4 Implementation Methodology 22

3.4.1 Technology Stack 22
3.4.2 Development Process 22
XII. 3.5 Evaluation Techniques 23
3.5.1 Quantitative Performance Metrics…. 23
XIII. 4.1 Overview of the System 25
XIV. 4.2 Frontend Technology Stack 25
XV. 4.3 Application Modules and Components 25
4.3.1 Dashboard Module 25
4.3.3 Alert and Notification Module 26
4.3.4 Recommendation Interface 27
4.3.5 User Management and Customization 27
XVI. 4.4 Interface Design and Interaction 27
4.4.1 UI/UX Design Principles 27
4.5.3 Interaction Techniques 28
XVII. 4.6 Development Tools and Environment 28
XVIII. 4.7 Code Explanation 29
4.7.1. Frontend Code 29
4.7.2. Back-End Server (server.js) 117
4.7.3. AI and Data Processing 143
4.7.4. IoT Sensor Publisher (sensor_publisher.py) 163
RESULT AND DISCUSSION 174
5.1 System Functionality and Performance 174
5.1.1 Real-Time Data Display 174
5.1.2 Data Visualization Effectiveness 174
5.1.3 Warning System Performance 175
XIX. 5.2 User Experience Assessment 175
5.2.1 Ease of Use and Learning Curve 175
5.2.2 Impact on Manual Monitoring Time 175
5.2.3 Confidence in Decision-Making 176

XX. 5.3 Limitations and Future Research Plans 176
5.4 AI Model Performance 177
CONCLUSION 180
APPENDIX 183

List Table and Figure

Figure 5.1 dashboard.html1

Figure 5.2 dashboard.html2

Figure 5.3 dashboard.html3

Figure 5.4 dashboard.html4

Figure 5.5 dashboard.html5

Figure 5.6 dashboard.js1

Figure 5.7 dashboard.js2

Figure 5.8 dashboard.js3

Figure 5.9 dashboard.js4

Figure 5.10 dashboard.js5

Figure 5.11 dashboard.js6

Figure 5.12 dashboard.js7

Figure 5.13 dashboard.js8

Figure 5.14 dashboard.js9

Figure 5.15 dashboard.js10

Figure 5.16 dashboard.js11

Figure 5.17 dashboard.js12

Figure 5.18 dashboard.js13

Figure 5.19 dashboard.js14

Figure 5.20 dashboard.js15

Figure 5.21 dashboard.js16

Figure 5.22 dashboard.js17

Figure 5.23 dashboard.js18

Figure 5.24 dashboard.js19

Figure 5.25 dashboard.js20

Figure 5.26 dashboard.js21

Figure 5.27 dashboard.js22

Figure 5.28 dashboard.js23

Figure 5.29 dashboard.css1

Figure 5.30 dashboard.css2

Figure 5.31 dashboard.jcss3

Figure 5.32 dashboard.css4

Figure 5.33 dashboard.css5

Figure 5.34 dashboard.css6

Figure 5.35 dashboard.css7

Figure 5.36 dashboard.css8

Figure 5.37 dashboard.css9

Figure 5.38 dashboard.css10

Figure 5.39 dashboard.css11

Figure 5.40 dashboard.css12

Figure 5.41 dashboard.css13

Figure 5.42 server.js1

Figure 5.43 server.js2

Figure 5.44 server.js3

Figure 5.45 server.js4

Figure 5.46 server.js5

Figure 5.47 server.js6

Figure 5.48 server.js7

Figure 5.49 server.js8

Figure 5.50 server.js9

Figure 5.51 server.js10

Figure 5.52 server.js11

Figure 5.53 plant_data Table

Figure 5.54 plant_done Table

Figure 5.55 sensor_data Table

Figure 5.56 prediction.py1

Figure 5.57 prediction.py2

Figure 5.58 prediction.py3

Figure 5.59 plant_ai_recommendation.py1

Figure 5.60 plant_ai_recommendation.py2

Figure 5.61 plant_ai_recommendation.py3

Figure 5.62 plant_ai_recommendation.py4

Figure 5.63 database_config.json1

Figure 5.64 database_config.json2

Figure 5.64 sensor_publisher.py1

Figure 5.65 sensor_publisher.py2

Figure 5.66 sensor_publisher.py3

Figure 5.67 sensor_publisher.py4

Figure 5.68 sensor_publisher.py5

Figure 5.1 AI Summary

Figure 7.2 Login Page

Figure 7.3 Dashboard Page

Figure 7.4 Plants Page

Figure 7.5 Sensors Page

Figure 7.6 Reports Page

Figure 7.7 About Us Page

Figure 7.8 Settings Page