

## Table of Contents

|                                                                        |     |
|------------------------------------------------------------------------|-----|
| AUTHORIZATION .....                                                    | i   |
| STATEMENT OF ORIGINALITY .....                                         | ii  |
| FOREWORD .....                                                         | iii |
| <i>ABSTRAK</i> .....                                                   | v   |
| ABSTRACT.....                                                          | vi  |
| Figure List.....                                                       | x   |
| Table List .....                                                       | xi  |
| CHAPTER 1 INTRODUCTION .....                                           | 1   |
| 1.1. Background .....                                                  | 1   |
| 1.2. Problem Formulation.....                                          | 4   |
| 1.3. Research Objectives .....                                         | 4   |
| 1.4. Problem Limitation .....                                          | 4   |
| 1.5. Benefit of Research .....                                         | 5   |
| 1.6. Discussion Systematics .....                                      | 6   |
| CHAPTER 2 LITERATURE REVIEW.....                                       | 8   |
| 2.1. Previous Research .....                                           | 8   |
| 2.1.1. Digitization of Qur'anic Exegesis .....                         | 8   |
| 2.1.2. The Application of MVC Architecture in Website Development..... | 9   |
| 2.2. Theoretical Foundation .....                                      | 11  |
| 2.2.1 Scientific Exegesis.....                                         | 11  |
| 2.2.2 Website .....                                                    | 12  |
| 2.2.3 Model-View-Controller .....                                      | 13  |
| 2.2.4 Laravel.....                                                     | 14  |
| CHAPTER 3 RESEARCH METHODOLOGY .....                                   | 16  |
| 3.1. Activity Plan.....                                                | 16  |
| 3.2. Tools and Materials .....                                         | 16  |

|                                                                                                |    |
|------------------------------------------------------------------------------------------------|----|
| 3.3. Research Stages.....                                                                      | 17 |
| 3.3.1. Requirements Analysis and Definition .....                                              | 17 |
| 3.3.2. System and Software Design .....                                                        | 19 |
| 3.3.3. Implementation and Unit Testing .....                                                   | 30 |
| 3.3.4. Integration and System Testing .....                                                    | 31 |
| 3.3.5. Operation and Maintenance.....                                                          | 34 |
| CHAPTER 4 RESULTS AND DISCUSSION .....                                                         | 35 |
| 4.1. Application of the Model-View-Controller .....                                            | 35 |
| 4.1.1. Model.....                                                                              | 36 |
| 4.1.2. View .....                                                                              | 36 |
| 4.1.3. Controller.....                                                                         | 37 |
| 4.2. System Development Results.....                                                           | 38 |
| 4.3. Testing .....                                                                             | 42 |
| 4.3.1. Laravel Feature Testing .....                                                           | 42 |
| 4.3.2. Black Box Testing.....                                                                  | 43 |
| 4.3.3. Subject Matter Expert Test .....                                                        | 44 |
| 4.3.4. Media Expert Test.....                                                                  | 44 |
| 4.3.5. User Usability Testing .....                                                            | 44 |
| 4.3.6. Testing Summary .....                                                                   | 45 |
| 4.4. Discussion .....                                                                          | 46 |
| CHAPTER 5 CLOSING .....                                                                        | 47 |
| 5.1. Conclusion.....                                                                           | 47 |
| 5.2. Recommendations .....                                                                     | 47 |
| BIBLIOGRAPHY .....                                                                             | 48 |
| ATTACHMENTS.....                                                                               | 53 |
| 1. Results of the Questionnaire Analysis of the Needs of the Scientific Exegesis Website ..... | 53 |
| 2. Usability Test Results by Users.....                                                        | 53 |

|                                                                          |    |
|--------------------------------------------------------------------------|----|
| 3. Subject Matter Expert Testing Questionnaire .....                     | 54 |
| 4. Media Expert Testing Questionnaire.....                               | 55 |
| 5. Evidence of website searches with several variations of keywords..... | 57 |



## Figure List

|                                                             |    |
|-------------------------------------------------------------|----|
| Figure 2.1. Model-View-Controller .....                     | 14 |
| Figure 3.1. Model Waterfall .....                           | 17 |
| Figure 3.2. Use Case Diagram .....                          | 20 |
| Figure 3.3. Activity Diagram Home Menu .....                | 21 |
| Figure 3.4. Activity Diagram Theme Menu .....               | 22 |
| Figure 3.5. Activity Diagram Verse Menu .....               | 23 |
| Figure 3.6. Activity Diagram About Menu .....               | 24 |
| Figure 3.7. Activity Diagram Contact Menu .....             | 25 |
| Figure 3.8. Activity Diagram Admin Menu .....               | 26 |
| Figure 3.9. Desain Database .....                           | 27 |
| Figure 3.10. Home Page.....                                 | 28 |
| Figure 3.11. Science Theme Page .....                       | 28 |
| Figure 3.12. Science Verses Page .....                      | 28 |
| Figure 3.13. Search Results Page.....                       | 29 |
| Figure 3.14. About Page.....                                | 29 |
| Figure 3.15. Contact Page.....                              | 29 |
| Figure 3.16. Verse Details Page .....                       | 30 |
| Figure 3.17. Admin Dashboard Page .....                     | 30 |
| Figure 4.1. Digital Science Tafsir Website (tafsil.id)..... | 38 |
| Figure 4.2. Science Theme Page.....                         | 39 |
| Figure 4.3. Science Verse Page .....                        | 39 |
| Figure 4.4. Science Verse Details Page.....                 | 40 |
| Figure 4.5. Contact Page.....                               | 40 |
| Figure 4.6. About Page.....                                 | 41 |
| Figure 4.7. Admin Dashboard Page .....                      | 41 |

## Table List

|                                                                            |    |
|----------------------------------------------------------------------------|----|
| Table 2.1. Comparison between previous research and current research ..... | 9  |
| Table 3.1. Activity Plan.....                                              | 16 |
| Table 3.2. Questionnaire Results Needs Analysis.....                       | 18 |
| Table 3.3. Application Design.....                                         | 28 |
| Table 3.4. Validity and practicality criteria for learning media .....     | 32 |
| Table 3.5. Usability Test Questions for Users.....                         | 32 |
| Table 3.6. Subject Matter Expert Test Questions .....                      | 33 |
| Table 3.7. Media Expert Test Questions .....                               | 33 |
| Table 4.1. Model Summary.....                                              | 36 |
| Table 4.2. View Summary .....                                              | 36 |
| Table 4.3. Controller Summary.....                                         | 37 |
| Table 4.4. Laravel Feature Testing Summary .....                           | 42 |
| Table 4.5. Black Box Testing .....                                         | 43 |
| Table 4.6. Summary of Subject Matter Expert Testing Results .....          | 44 |
| Table 4.7. Summary of Media Expert Testing Results.....                    | 44 |
| Table 4.8. Summary of User Usability Test Results .....                    | 45 |
| Table 4.9. Summary of Test Results .....                                   | 45 |