

**UNIVERSITI TEKNOLOGI MARA**

**E-HADITH DV: HADITH  
SCRIPTURES IN SYAFIE  
MADHHAB RETRIEVAL USING  
DATA VISUALIZATION**

**NOR FAEZAHTUL SALME BINTI NORHISAM**

**BACHELOR OF COMPUTER SCIENCE (HONS)  
FACULTY OF COMPUTER AND  
MATHEMATICAL SCIENCE**

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## **SUPERVISOR APPROVAL**

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By

**NOR FAEZAHTUL SALME BINTI NORHISAM  
2017412282**

This thesis was prepared under the supervision of the project supervisor, Dr. Khyrina Airin Fariza Binti Hj. Abu Samah. It was submitted to the Faculty of Computer and Mathematical Science and was accepted in partial fulfillment of the requirement for the degree of Bachelor of Computer Science (Hons.).

Approved by



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Dr. Khyrina Airin Fariza Binti Hj. Abu Samah  
Project Supervisor

JULY 10, 2020

## STUDENT DECLARATION

I certify that this thesis and the project to which it refers is the product of my own work and that any ideas or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.



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NOR FAEZAHTUL SALME BINTI NORHISAM  
2017412282

JULY 10, 2020

## **ABSTRACT**

Hadith is known as the second resource for Muslims to refer to that have the specific statements of an act, saying of the Prophet concerning some matter or action. The emergence of information technology has offered many applications and systems to access the content of the hadith via indexing and information retrieval (IR). Nonetheless, it is inconvenient to use indexing for searching due to the nature of the hadith itself for being disordered and scattered. In the meantime, the existing IR system only cater the usage of simple and single keyword searching, which do not highlight the relevance of retrieved results. Apart from these, numerous results from the searching could lead to cognitive strain. For this project, it will use Agile methodology that has five phases, which are requirement analysis phase, design phase, development phase, testing phase and maintenance. Therefore, a progressive web-based information retrieval visualization system that utilizes Term Frequency-Inverse Document Frequency (TFIDF) algorithm and data visualization are suggested to solve these problems. First, the hadith data and the user query will go through the pre-processing method. Next, the TF-IDF algorithm is performed on the processed data to find the relevant hadith based on the user's query. The results from the previous stage will be used to generate visualizations by using the D3.js library. Word cloud chart visualization is used to display the important word in a text. The more often it is stated within a given text and the more crucial it is. Implementation of sentence-based searching and the usage of the stemming algorithm would be considered to produce more meaningful results for future work.

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