

Universiti Teknologi MARA

**Tahsinul Quran Al-Ikrami
Management Information System**

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**A project submitted in fulfilment of the requirements for
Bachelor of Information System (Hons.) Business Computing
Faculty of Computer and Mathematical Sciences**

July 2022

ACKNOWLEDGEMENT

In the name of Allah, The Most Gracious and The Most Merciful.

Alhamdulillah, praises and thanks to Allah S.W.T. for His blessings, as I am able to complete this final year project successfully. Praise to Allah the Almighty God for all the chances, struggles, and opportunities that have enabled me to complete this project. Alhamdulillah, throughout this process, I have learned a lot of great things in life, and I have also experienced and discovered new things about myself, not just mentally but also on psychological level. Next, salutations to our beloved Prophet Muhammad (Peace be upon him), whose example of living has provided me with constant direction throughout this project completion process.

First and foremost, I would like to express my profound gratitude to the best supervisor in the world, Madam Siti Nurul Hayatie Binti Ishak, for her time, suggestion, understanding, and patience to me. But most importantly for her encouragement and warmth in helping me to complete this project in the best way possible. Having her as my supervisor has been a great joy and honour. Not to forget my CSP600 and CSP650 lecturer which is Ts. Dr. Mohd Talmizie Bin Amron for his guidance during both semesters. I am extremely grateful and thankful for that.

Next, I gave my sincere gratitude for my entire family members, especially my beloved parents, Haji Rafiz Bin Haji Abu and Norhaslinda Binti Hassan, who has always been my greatest supporters since the day I was born to this world. Thank you for all the prayers, motivation and for always encouraging me to be the better version of myself each day. Without their assistance, it would not have been possible to complete this project. Next, I want to thank my beloved little brothers that are not so little, Harraz Najmi Bin Haji Rafiz and Hariz Najhan Bin Haji Rafiz for being the best siblings ever that anyone could ever ask for. Thank you for your unconditional love and support.

Not to be forgotten, my friends who have always giving me a hand whenever I am stuck or in need for their help and assistance especially for my Siti Juju or better known as Nor Nazurah Binti Hassan, who has always been my mentor. Not to forget my lovely friends, Nur Fadillah Binti Amsa, Siti Nursyamimi Binti Mat Rifin, Ayuni Nazihah Binti Ayub, Nur Anis Azzahara Binti Mazlan and Farah Syafiqah Binti Fauzi that have always been there every time I have mental breakdown. For my “Sendunation” peeps, thank you for their encouragement and presence throughout my 3 years of studies. I genuinely appreciate all of them for always be by my side and keep supporting me no matter what. I really appreciate all of their existence so much.

May God grant the **individuals'** success, blessings and honour throughout their lives.

ABSTRACT

Tahsinul Quran Al-Ikrami Management Information System is a prototype of registration system for the Tahsinul Quran Al-Ikrami, a quran learning centre located in Kuang, Selangor where the customer which is the student can register for the class by using the system. Before the system was created, the customer face difficulties to register into the class because they need to go to the learning centre physically or by waiting for the staff of Tahsinul Quran Al-Ikrami to respond to the text messages that they send using the WhatsApp. This is also quite troublesome for the staff because they need to key in the data into the Microsoft Word and Microsoft Excel which is wasting their time and are expose to the missing data, data redundancy and inconsistencies of data because sometimes they just keep the customer data on the registration form. Thus, by using the Tahsinul Quran Al-Ikrami Management Information System, the registration process can be managed effectively and efficiently. The development of this system is using the adapted waterfall model which consists of analysis, design, implementation, testing and documentation. The system is implemented by using the usability heuristics theories by Jakob Nielsen because it is widely used in usability inspection and is suitable to be used in testing and evaluation phase because the principle is simple to examine the potential problem in the system. Not just that, it is to make sure that the system is able to follow the principle for system interaction design. The reason why this model is selected is because the size of this project is small, and all of the requirements are well defined at the beginning of the phase of development. The system has undergone three types of evaluation which is system testing, expert evaluation and usability evaluation. The system testings are conducted online using Google Meet and test case are used as a method of system testing to make sure that all of the 5 users' site are able to function well which consists of superadmin, admin, tutor, student and guardian. For this testing, it involves the manager of this learning center which is Mr Rafiz Bin Abu. Next is the expert evaluation which is conducted offline to verify the implementation of 10 usability heuristics in the system, to test in terms of functionalities and usability of the system and to identify the problem that need to be fixed. There are three expert evaluators involved in this process and all of them has the average of 15 years of experience in IT field. The evaluation consists of 10 usability heuristics principle and each question are rated on the severity rating using questionnaire. Lastly is usability evaluation that involves 30 respondents which is from mostly student. The evaluation is conducted online using Google Form. The usability evaluation consists of five constructs which is usability, ease of use, user interface, efficiency and consistency. Based on the result, the highest mean is the usability construct. It is hope that this system will be able to enhance the business process for all of the users at Tahsinul Quran Al-Ikrami.

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