

Tutor Finder System Using Web Technology

¹Syarilla Iryani A. Saany, ²Ahmad Nazari Mohd Rose, ³M. Hafiz Yusoff, ⁴Julaily Aida Jusoh, ^{*5}Yousef A.Baker El-Ebiary, ⁶Nor Atiqah Binti Hamzah

¹Assoc. Prof. Dr., Faculty of Informatics and Computing, UniSZA, Malaysia,
syarilla@unisza.edu.my

²Assoc. Prof. Dr. Dean, Faculty of Informatics and Computing, UniSZA University,
Malaysia,
anm@unisza.edu.my

³Assoc. Prof. Dato' Dr., Deputy Vice Chancellor for Student Affairs, UniSZA, Malaysia,
hafizyusoff@unisza.edu.my

⁴Dr., Faculty of Informatics and Computing, UniSZA, Malaysia,
julaily@unisza.edu.my

^{*5}Assoc. Prof. Ts. Dr., Faculty of Informatics and Computing, UniSZA University, Malaysia,
(Corresponding Author) yousefebiary@unisza.edu.my
<https://orcid.org/0000-0002-4392-8015>

²Student, Faculty of Informatics and Computing, UniSZA, Malaysia.

Abstract

Technologies are keep evolving and growing where almost all activities and services such as in the area of trading, commerce and education can be completed via online. However, searching tutors for teaching Quran has not yet widely online. Normally, when an individual want to search Quran tutor, they have to search through media advertisement who can recommend a highly qualified and expert tutor with affordable fees. This will take time for an individual to find qualified tutor. In order to make this process easier, this research propose a system for finding a Quran expert tutor through Quran Tutor Finder System. Anyone can search availability of the tutors based on rating and review that has been given by the other users. This system will provide user a platform for finding Quran tutor according to the qualification and needs specified by the users of the system. This system will be helpful for those who need immediate assistance on Quran expert tutor.

Keywords: Tutor Finder System, Quran, Web-Based System, Collaborative Filtering.

1.INTRODUCTION

Quran tutor finder system is a system that provides a platform to help and make it easier for users to find private Quran teachers to teach the Quran either face-to-face or online. but the system is not only to find private Quran teacher, but there is other section which is in this system also user can find private religious teachers to teach about religion at home. Besides than that, this system also provides a platform for people who are willing to be a tutor, they can apply to become a tutor by this system. This system will find and connect to all nearby

registered and qualified tutors in your city [1]. User will allow to rate and give their review about any tutor on their services.

The solution comes from the problems that arise. From that problems, there are ideas and plans to solve the problem. Nowadays, user face time constraint to study in mosque or other place that provide Quran learning due to work. Besides that, user also face problem to contact Quran teachers because of lack information such as user don't have tutor number or email to contact them. Users need to contact the tutor to ask for the availability of tutor, sometimes due to the time constraints of the tutors, it make it difficult for user to connect with each other [2].

As Covid-19 getting worse now, users are facing troubles in learning in the class that have large of student. So, using this system, user can use this platform to find tutors to teach them via online.

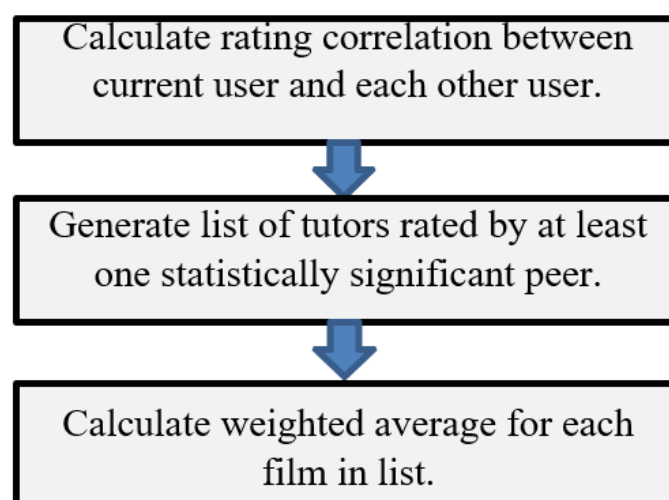
The Quran Tutor Finder System cannot be performed offline, this system required active internet connection to performs. Other than that, this system only supports English Language. The main objective of this research is that to develop a system can help and making it easier for user to find professional and qualified Quran teachers nearby so that can teach at home or online. With this system it's hoped will motivated all user to learn Quran.

II. TECHNOLOGY AND TECHNIQUES

Solution approach is about most possible approach for this system. So to find out about this, we need to identify the approaches whether is it capable of implement or not. Thus, the technique that will be use in this system is Collaborative Filtering.

Collaborative Filtering is a broad term for the process of recommending items to user based on similarities in user taste. Their performance will change based on the dataset that they operate on and the information they harness to compile a similarity model. Quran Tutor Finder System implement the collaborative filtering to filter out tutor that a user might like on the tutor based on user rating to the system, see Figure 1 [3].

Figure 1: Priority Scheduling Technique



$$w_t = \frac{\sum_{p \in P} v_{p,f} \times r_p}{n}$$

P = set of w_t significant = weighted peers mean of for the tutor current, t user

$v_{p,f}$ = rating given by peer p to tutor t .

r_p = correlation coefficient calculated for peer p .

n = current user name of significant peers.

Table 1: Table of Comparison for Each Technique

No	Author	Title	Method	Advantage	Output
1.	Vincent W. Zheng, Yu Zheng, Xing Xie, Qiang Yang. (2010) [4]	Collaborative Location and Activity recommendations with GPS History Data	Collaborative Filtering	1. Discover interesting locations and possible activities in that can be performed there for recommendations. 2. System can exploit the user location histories.	Collect user's data location history based on GPS logs.
2.	Robin van Meteren and Maarten van Someren [5]	Using Content-Based Filtering for Recommendation.	Content-Based Filtering	1. Easier for user to find interesting items. 2. Content-based filtering system will select items based on the correlation between the content of the items and the user's preference.	Find information by providing them with personalized suggestion
3.	Mohammed Kamal Rtili, Ali Dahmani, and Mohamed Khaldi.(2014) [6]	Recommendation system based on the Learners' Tracks in an Intelligent Tutoring System	Recommender System	1. Incorporate mechanisms which use learners' behavior and multi-agent technology. 2. Provide user with personalized recommendations of resources by exploiting the knowledge that the system has on the users.	An easier access to the information they require.

III.EXISTING ATTENDANCE SYSTEM

This part will focus on the research that is directly or indirectly to the research. The related journal and article about the various technique and approach was analysed to find the best implementation technique that can used in this research. Therefore, with this information, it can be used to develop new systems that can provides better functionality compared to existing systems.

i. CMN Academy

School tuition typically involves one or more of tutors coming to schools for teaching special techniques & tuition packages. Educator & Trainer Hub, see Figure 2 [7].

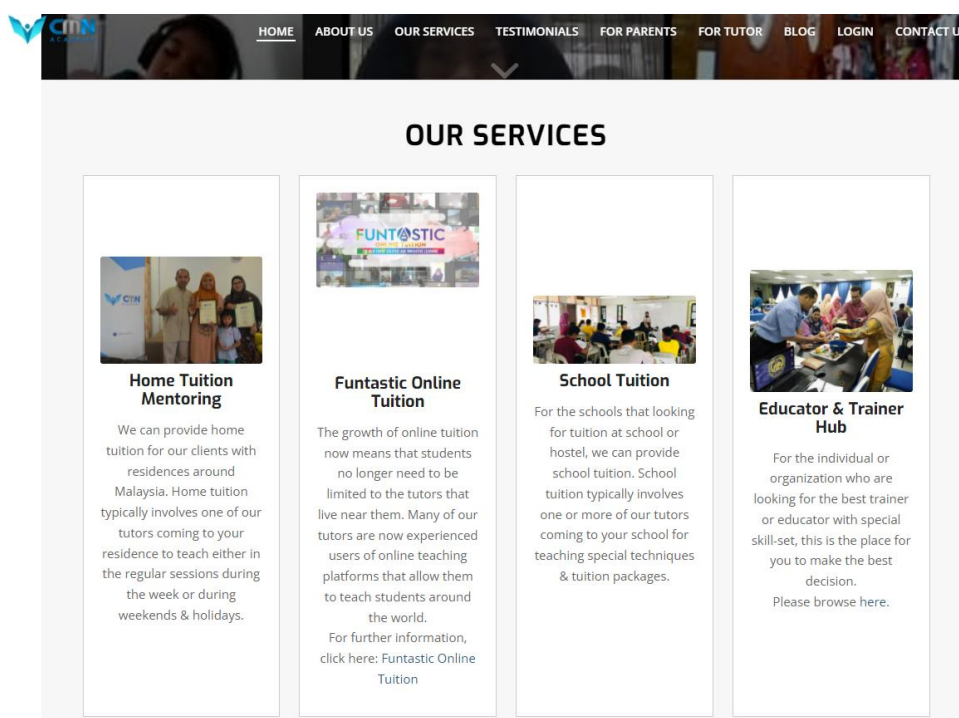


Figure 2: Print Screen of CMN Academy

CMN Academy has thousands of tutors in their database as an advantage. But CMN Academy website has no rating for tutors and not providing Quran tutor and that consider a disadvantage [8].

ii. Mengaji.my

Mengaji Program Successfully Helps Over 10000 Adults to Recite Al-Quran. Easy and Easy Quran Study Method by Certified Ustaz/Ustazah, see Figure 3 [9].



Figure 3: Print Screen of Mengaji Website

Mengaji website teaches the Quran face-to-face at home, also provides thousands of tutors as advantages [10]. But Mengaji website has no online classes also using only Malay language and these consider disadvantages [11].

IV.SYSTEM DESIGN AND IMPLEMENTATION

This topic is to implementation of Quran Tutor Management System design and modelling the have be done previously. The system consists of three users, which are Admin, Quran Tutor and Student is able to access and update user information, add and delete user. Each interfaces of the research described in details as if it is in user manual.

The interface design is the process of designing of the system. Functionality are being added in order for the system to work. There is admin interface, student interface and tutor interface.

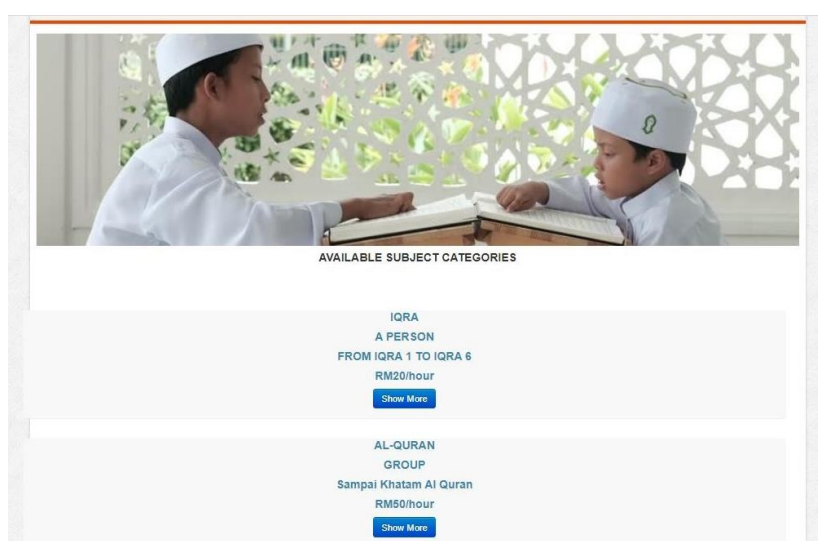


Figure 5: Homepage

Figure 5 shows the homepage of the system for all users. When users click on „Login“ button, it will directly go to login page.

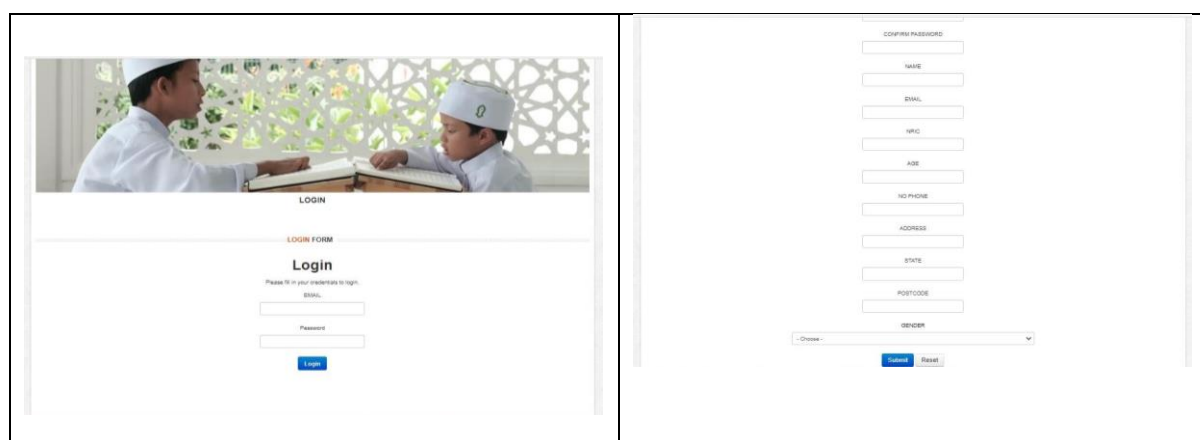


Figure 6: Login Page and User Register

Figure 6 shows the login page of the system for all users and User Register as well. When users enter the correct username and password and click on „Log in“ button, it will directly go to the homepage.

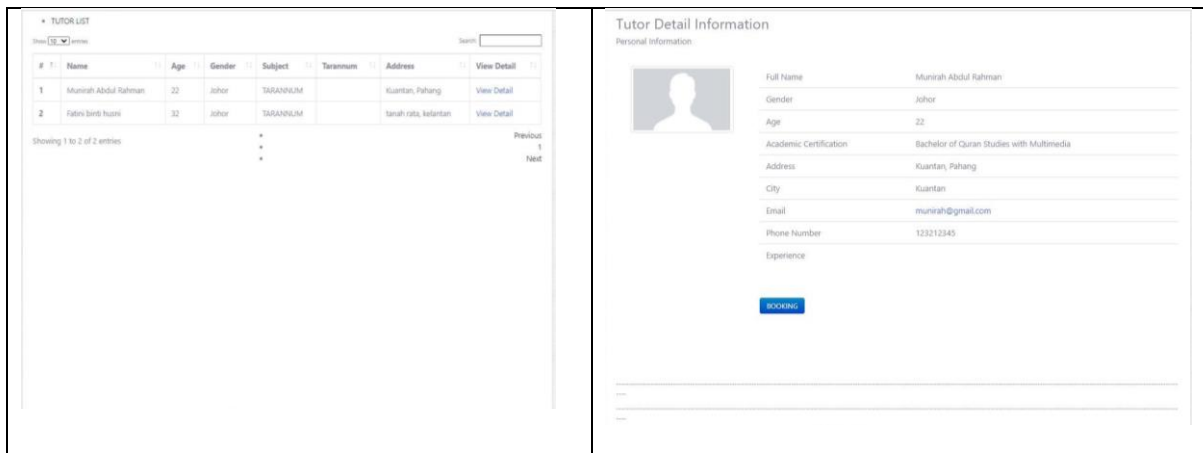


Figure 7: Tutor List and Their Details

Figure 7 shows the list of the tutors that available in the system database. It will show a table with the name of the tutors and their age, gender and address, also the user can click on the tutor for further information. After that the user can book a tutor.

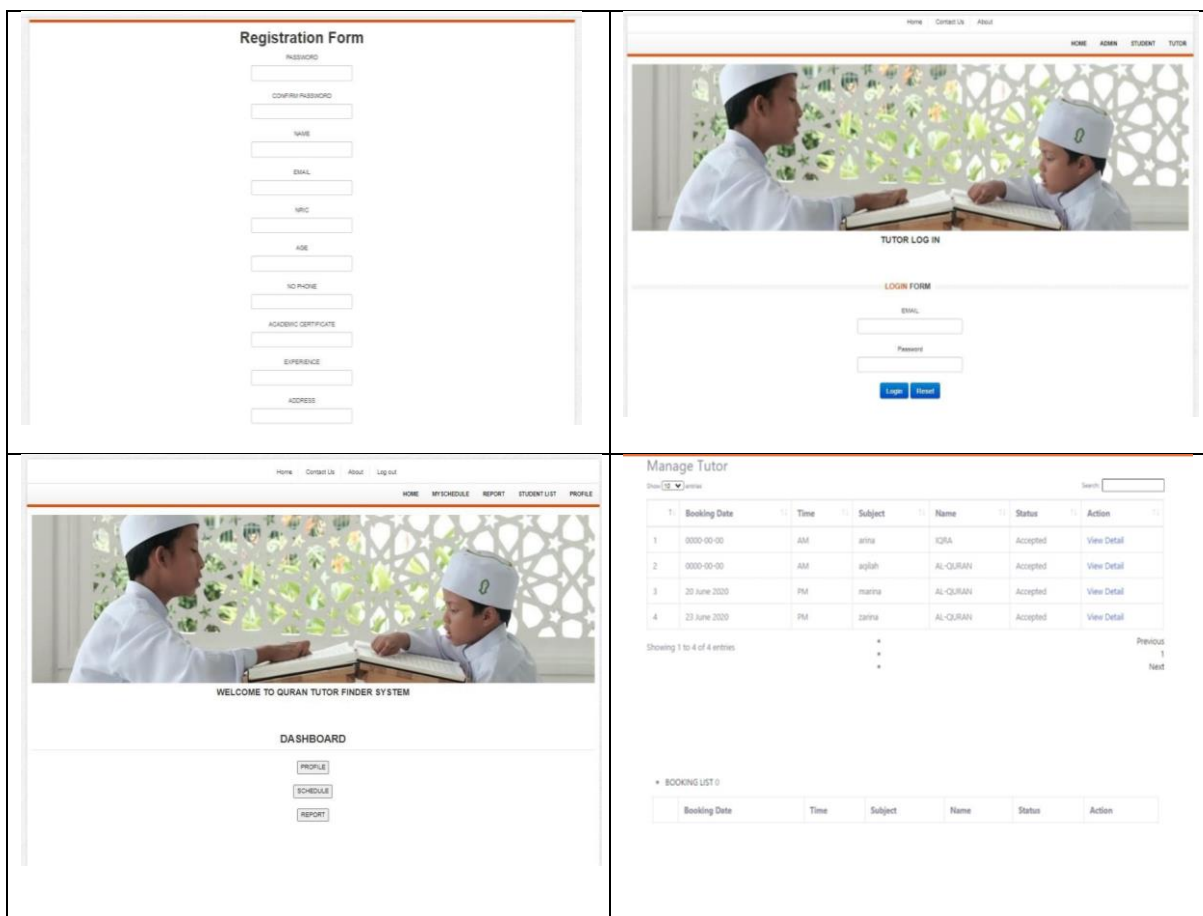


Figure 8: Tutor Interfaces

Figure 8 shows the screenshots of the tutor interface that include registration, login, profile and schedule.

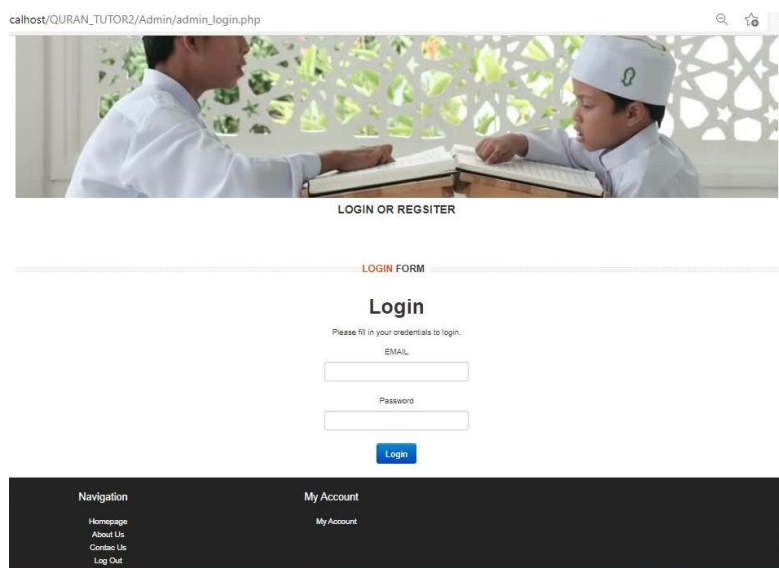


Figure 9: Admin Homepage

Figure 9 shows the homepage of the system for admin. It will show a welcome message with the name of the admin. Admin will have its own menu navigation that redirect to the designated pages.

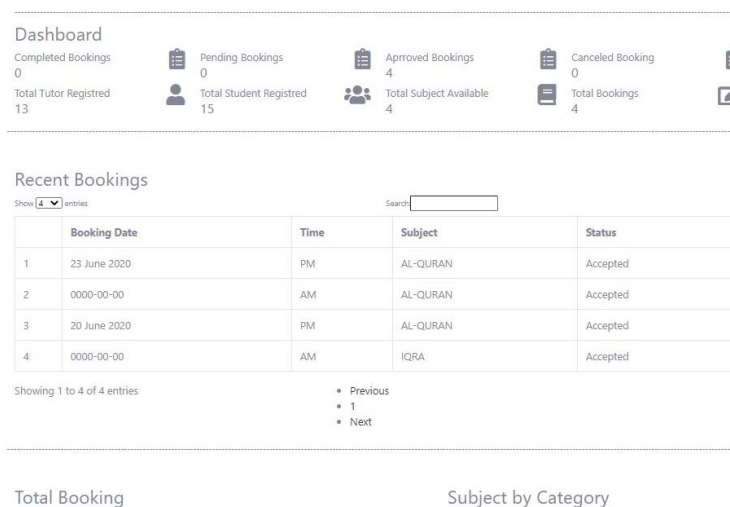


Figure 10: Manage Subject

Figure 10 shows the manage subject page of the system for admin. Admin can view then can redirect to pages for inserting, updating and deleting the subject data inside the database.

Manage Tutor

TUTOR LIST

Show 10 entries Search

#	Name	Mobile	Change
1	atiqah	-2212201	View Detail
2	aminah	-2121867	View Detail
3	amah	-3121867	View Detail
4	Mohd Aiman Bin Rahmzan	12	View Detail
5	Ahmad Hakim Bin Fikri	187654565	View Detail
6	mahirah zainuddin	190986676	View Detail
7	Roslinda Hamzah	156456543	View Detail
8	Farhana Zakaria	198989890	View Detail
9	Luqman Hakim	156456543	View Detail
10	Munirah Abdul Rahman	123212345	View Detail

Showing 1 to 10 of 13 entries Previous 1

Figure 11: Manage Tutor

Figure 11 shows manage tutor page of the system for admin. Admin will review the tutor details into each form and the data will be stored inside the database.

Personal Information

Student

0 Bookings

Student ID: 15

Email: student@gmail.com

Phone: 0129876543

+ Arif

Mama

0 Bookings

Student ID: 14

Email: mama@gmail.com

Phone: 0187654322

+ Anis

Munirah Abdul Rahman

0 Bookings

Student ID: 13

Email: munira@gmail.com

Phone: 0123212345

+ Miza

0 Bookings

Student ID: 12

Email: arif@gmail.com

Phone: 0123212328

+ Arif

0 Bookings

Student ID: 11

Email: anis@gmail.com

Phone: 0124321234

+ Anis

0 Bookings

Student ID: 10

Email: miza@gmail.com

Phone: 0128976543

+ Miza

[Show more](#)

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Figure 12 Manage Student

Figure 12 shows manage student page of the system for admin. Admin will review the student's details into each form and the data will be stored inside the database.

Booking Report

Generate Report Show 10 entries Search

#	Booking Date	Time	Subject	Status	Date Submitted
1	23 June 2020	PM	AL-QURAN	Accepted	0000-00-00 00:00:00
2	0000-00-00	AM	AL-QURAN	Accepted	0000-00-00 00:00:00
3	20 June 2020	PM	AL-QURAN	Accepted	0000-00-00 00:00:00
4	0000-00-00	AM	IQRA	Accepted	0000-00-00 00:00:00

Showing 1 to 4 of 4 entries Previous 1 Next

Tutor List Report

Generate Report Show 10 entries Search

Figure 13 Booking Report

Figure 13 shows the booking report page of the system for admin. Admin will review the booking list to confirm the schedule between the student and tutor.

V.CONCLUSION

The Quran Tutor Finder System using collaborative filtering is developed to help student to find the best tutor with their own need. It is also helps student to make an online booking order. The system has been achieved the objectives and all scopes had been fulfilled.

Quran Tutor Finder System with Collaborative Filtering Technique is a system that aim making it easier for tutors and students o instantly find and connect with thousands of professional and certified tutors at one place. Hopefully, this system will be an approach for people to overcome the problem more efficiently.

Quran Tutor Finder System have many improvements be added if any changes to be made. There are a few suggestions that can be made to upgrade the system to be more efficient in the future which is add more tutor information and use another technique for a better accuracy.

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