Quiz Challenger
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ABSTRACT

The idea behind Quiz Challenger was to create knowledgeable environment in which user can share and enhance knowledge by giving and accepting challenge. The Quiz challenger is developed on JavaScript used for front-end and node JS used for back-end development. To dealt with database we use MongoDB.

Keywords: JS,NodeJS,Quiz Challenger,MongoDB

1. INTRODUCTION

We often have a craze to check the knowledge of the people living in our surroundings so taking this an idea we develop a web application in which a user create a quiz for their friends.

Two types of users can interact with our system, Registered users and anonymous users. Anonymous user can only take the quiz that are already available in database. A user can register himself with a valid email id in the system. After successful registration he will be able to create quiz and also can give quiz to check his knowledge as well.

When quiz creation is completed, then user can challenge his friends with valid email id's. An email will be sent to the friend with a link of the quiz and challenger name. When a user click on the link or paste the link in the browser, quiz will be started. When a user done with the last question of the quiz and proceed further then the result will be shown to user and an automated email will be sent to the challenger which contains the result of the friend.

The aim of the application is to facilitate the users to check the knowledge of the his friends and himself also.In that case he will be able to create a quiz of his own choice or can pick the quiz from the system database and challenge his friends.

The rest of report is organized as the Development, result, responsibility matrix and conclusion.

2. DEVELOPMENT

2.1 User's and Characteristic's

These are the following entities that interact with the system.

- **User** will give request to create quiz to system .

- **DataBase** is going to fulfill the query and give back the quiz formatted.

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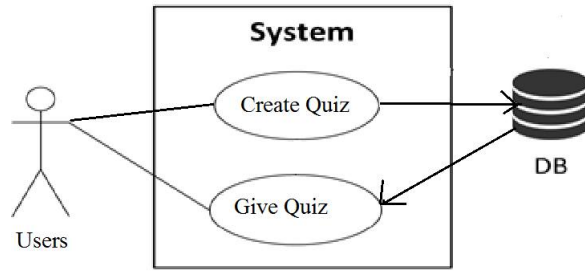
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Figure 1. Users and Characteristics

2.2 Software Dependencies

- Jquery

- Node JS

- MongoDB

- Android 4.0+
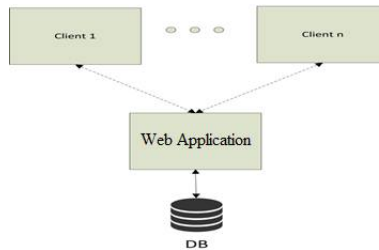
2.3 System Flow

Figure 2. System Flow Diagram

2.3.1 Quiz Challenger – Web application

The main task of this application is to facilitate the user to connect with our system through Internet. Thorough this portal user can register himself in the system and can create or give the quiz to check the knowledge of his friend and himself as well. He can also contact the administration of this application by posting his query on the contact form and email will be sent to both parties.

2.3.2 Database - MongoDB

MongoDB (from "humongous") is a cross-platform document-oriented database. Classified as a NoSQL database, MongoDB eschews the traditional table-based relational database structure in favor of JSON-like documents with dynamic schemas (MongoDB calls the format BSON), making the integration of data in certain types of applications easier and faster. Released under a combination of the GNU Affero General Public License and the Apache License, MongoDB is free and open-source software.

2.4 Process Flow

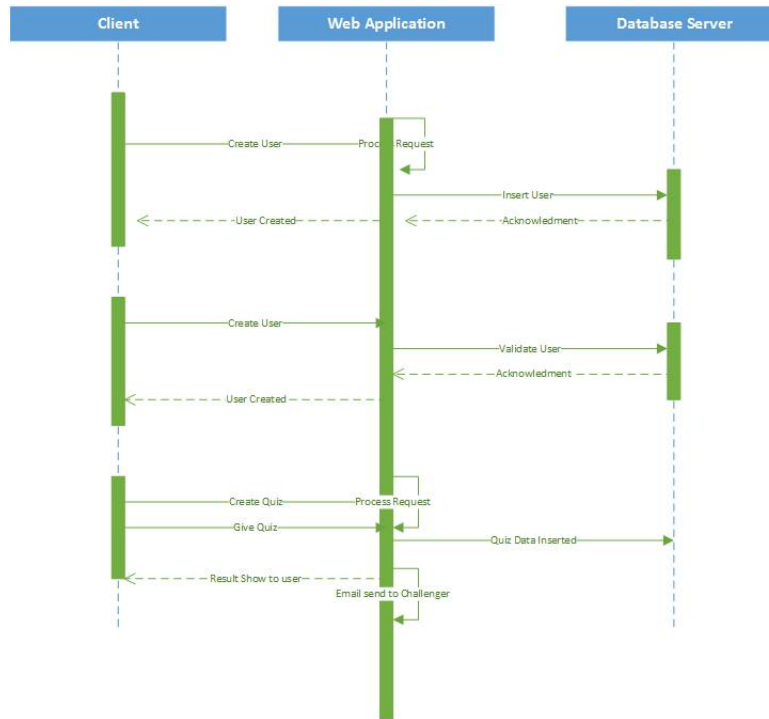To understand the process flow between the components in detail, take a look at following figures:

Figure 3. Process flow

The user will registered himself with a valid information into the system to access all the content of the system like quiz creation and challenge to his friends.System validate user credential and send an email to user that user successfully registered. After successful login, user can create quiz with different type of questions and challenge to his friend.

Quiz will be saved into the database for anonymous user to give the quiz in the future.User enter the email address of the friend to challenge the quiz.An email will be sent to the user with the link of the quiz and challenger name.User click on the link and quiz will be start. After last question , when user click on the next button, result will be shown to user and an automated email will be generated with quiz giver and total score obtained by the user to the challenger.

2.5 Project Matrix

Figure4 is the quick view of what responsibilities were distributed among the team for the development of Quiz Challenger.

Project Plan/Team Member	Muhammad Adil Khushi	Waqas Ahmed	Haseeb Ghaffar	Raza Abbas	Upendra Dewadi
Team Leader	X				
Software Setup	X	X			
Frontend Development	X	X	X		
Backend Development	X	X	X		
Idea Refinement			X	X	X
Testing				X	X
Documentation	X	X	X		

Figure 4. Project Matrix

3. OUTLOOK

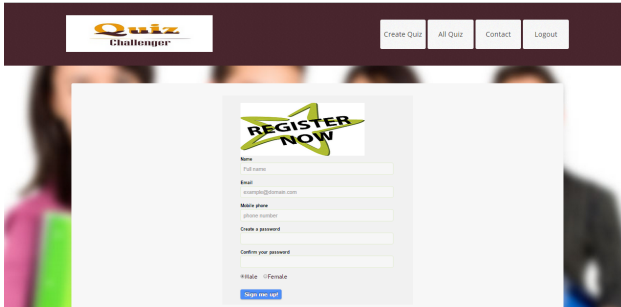The following figures show an outlook of our sign-up and login page:

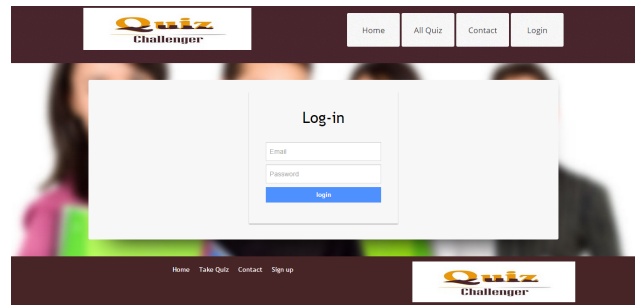Figure 5. Sign-up for being registered User

Figure 6. Logging in as registered user

To create a quiz after doing these two steps can be easy process . The following figure shows an image of Quiz in our web application.

Figure 7. creating a quiz

4. CONCLUSION AND FUTURE ENHANCEMENT

Although we started on abstract level but first step always help to reach the threshold. In this project we created an application that friends can play and share knowledge with each other.

The **Quiz Challenger** team is willingly interested to make this web application more interacting in future and some other things that related to it, here are some plans which we are willing to implement in future:

- Different types of Questions can be added like check boxes,Fill in the blanks etc .Currently we are catering two types of question, i.e Multiple Choice and True False.

- Time Slot, A time frame is given to the user that after a particular time automatically quiz will be finished and result will be shown to the user of attempted questions.

- Competition between different Users. There can be a competition between the user that are online.

- Facility to share quiz on Social Media i.e Facebook

- Make quiz for an organization to check the knowledge of their employees.

- Real Time feature like chat and video calls between the users.

5. ACKNOWLEDGMENTS

REFERENCES

[1] *http://nodejs.org/.*
[2] *http://www.mongodb.org/.*
[3] *http://stackoverflow.com/.*
[4] *http://jquery.com/*

6. SOURCE CODE

- The Project source code is available at https://github.com/adilkhushi/Quiz-Challenger/tree/master/Project