Website Creation for Vision Care System

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Abstract: *This online website helps the people to do the eye testing online, which is absolutely free of cost. Initially users have to register or login to this application before the test begins. This eye testing can detect your problems easily by asking few questions through related pictures and provide you with instant results that help you do self-analysis about your vision. User can able to view the details such as anatomy of an eye, eye conditions, visual problems, eye exercises and eye tips for healthy eyes. It also notify you in email with proper eye camp details whenever it is updated in the website. This website provide options to user to choose what type of colour vision test if he/wants to do. After test has been performed user can send his/her feedback by filling in the feedback form. Later Admin can view the user registered, test results performed by the users, and read the feedback sent by the user.*

1. Introduction

1.1 About the project

This online website helps the people to do the eye testing online, which is absolutely free of cost. Initially users have to register or login to this application before the test begins. This eye testing can detect your problems easily by asking few questions through related pictures and provide you with instant results that help you do self-analysis about your vision. User can able to view the details such as anatomy of an eye, eye conditions, visual problems, eye exercises and eye tips for healthy eyes

It also notify you in email with proper eye camp details whenever it is updated in the website. This website provide options to user to choose what type of colour vision test if he/wants to do. After test has been performed user can send his/her feedback by filling in the feedback form. Later Admin can view the user registered, test results performed by the users, and read the feedback send by the user.

2. Analysis

System Analysis
System analysis describes about the analysis task performed for this project.

It is a method of collecting and decoding facts, distinctive it's way of secret writing.

System analysis is conducted for the aim of finding out of system so as to spot its objectives. It is a problem determination technique that improves the system and ensures that every one the elements of the system work efficiently to accomplish their purpose.

2.1.1 Functional requirements

Analysis specifies what the system a purposeful demand document defines practically of a system. It conjointly depends upon the kind of software package utilized.

There are three sub modules in this phase.

1) User module
2) Admin module
3) Eye testing module

2.1.3 Hardware requirements
- Pentium 4 processor,
- 4GB RAM,
- 40 GB Hard disk

2.1.4 Software requirements
- Xampp server,
- Visual code++,
- MySql database

2.1.5 Modular design
An application is always divided into several sub systems that makes it easier for the development. An application that is structured into many sub systems makes it straight forward for the development and testing.

The different modules are:

- Login
- Registration
- Services
- Eye Tests
- Admin

Login
The login module is the screen asking for the user's registered mail id to login to our website. An existing user can login providing their mail id and password that has been registered by that user earlier. If it is a new user, he can sign up and register.

Registration
In Register module the user must give his credentials necessary to login to the website. This module takes the mail id so that later it can send feedback either via mail id or our website.

Services

It consists of list of services which provided by this website

- Anatomy of an eye
- Vision problems
- Eye conditions

- Eye tests
- Eye tips
- Eye exercises

Anatomy of an eye
It displays the content subjected to anatomy of an eye.

Vision problems
It provides the basic vision problems with related video content and directs link to the individual pages for more information such as causes, treatments and effects

Eye conditions
It lists the eye conditions like cataracts, floaters, dry eye which are provided with causes symptoms and treatments in detail.

Eye tips
It displays common tips to maintain our eyes healthily.

Eye exercises
It shows eye exercises which are helpful to get rid of future vision problems. It displays with some gif or pictures so that user can easily know the steps to do exercises.

Eye tests
This is the module which performs eye test and provide result and it also can be send to the user via mail if user clicks the send button. Basically it provides two tests
1) Colour vision deficiency test
2) E- chart test
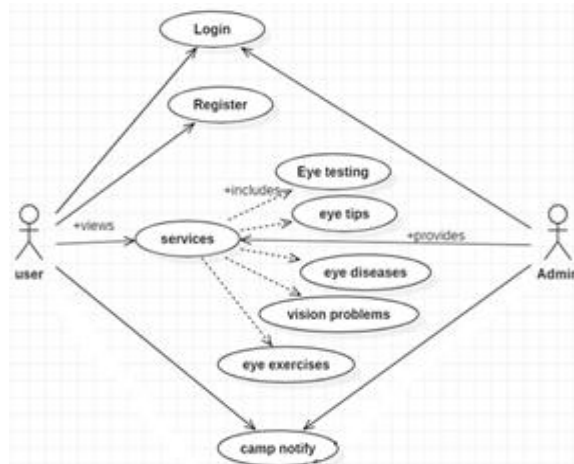
Colour vision deficiency test
In this test user can be provided with option button to choose their type of colour vision deficiency test. i.e. Shapes, alphabets and Numbers. After choosing the option corresponding type of tests will be start to the user. It consists of some pictures which user have to either enter what the user can able to see or simply selects the choices provided by the test
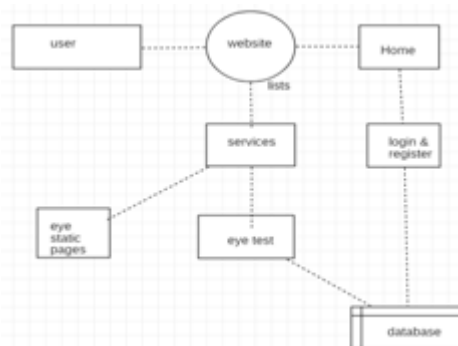
E-chart test
In this e chart test different orientations and sizes of alphabet 'E' will be continuously provided by the user. Users have to click the corresponding button from four sided button. At last it provides the user with results which are calculates with the actual values from the database. After the test completed.
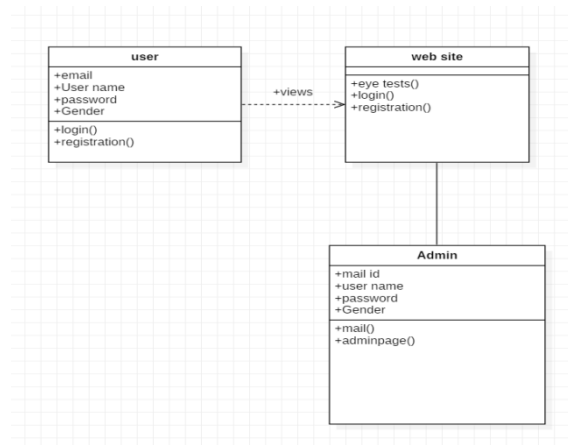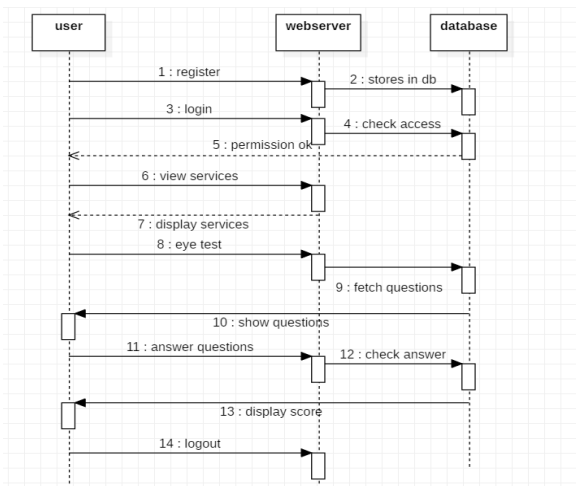
2.2 Data Flow Diagram (DFD)

2.3 UML diagrams

2.4 Class diagram

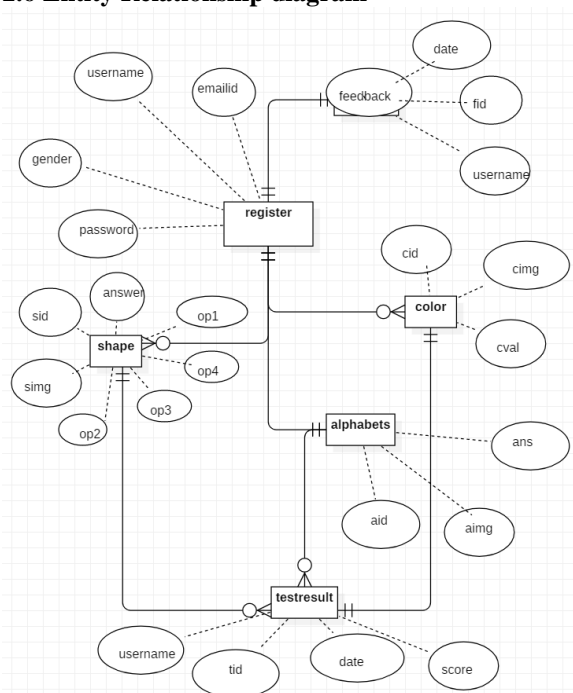## 2.5 Sequence diagram

2.6 Entity Relationship diagram

3. Result

Thus the online website helps the people to do the eye testing online, which is absolutely free of cost. After test has been performed user can send his/her feedback by filling in the feedback form. Later Admin can view the user registered, test results performed by the users, and read the feedback send by the user.

References

Books
[1] "PHP and MySQL Web Development" Book by Luke Brothers Welling
[2] "Bootstrap: Responsive Web Development" Book by Jake Surplice Web
[3] https://enchroma.com/pages/color-blindness-test
[4] https://www.essilor.com/en/
[5] https://www.prokerala.com/health/beauty/eye-care-tips.htm
[6] https://www.w3schools.com