ONLINE IELTS TEST EXAM PRACTICE –ONLINE IELTS EXAM

BY

Md. Mahmudur Rahman

ID: 142-15-3720

This Report Presented in Partial Fulfillment of the Requirements for the Degree of Bachelor of Science in Computer Science and Engineering

Supervised By

Fahmida Afrin
Lecturer
Department of CSE
DaffodilInternationalUniversity

DAFFODIL INTERNATIONAL UNIVERSITY

DHAKA, BANGLADESH

APRIL 2019

APPROVAL

This Project titled **"Online IELTS Counselling & Test"** submitted by Md. Mahmudur Rahman, ID No: 142-15-3720 to the Department of Computer Science and Engineering, Daffodil International University has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc. in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on 02 May, 2019.

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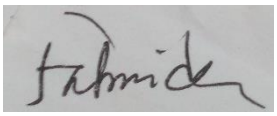
Department of Computer Science and Engineering
United International University

DECLARATION

I hereby declare that, this project has been done by us under the supervision of **Fahmida Afrin, Lecturer, Department of CSE** Daffodil International University. I also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

Supervised by:



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Fahmida Afrin
Lecturer
Department of CSE
Daffodil International University

Submitted by:

_____

Md. Mahmudur Rahman
ID: 142-15-3720
Department of CSE
DaffodilInternationalUniversity

Acknowledgement

First we express our heartiest thanks and gratefulness to almighty God for His divine blessing makes us possible to complete the final year project/internship successfully.

We really grateful and wish our profound our indebtedness to to **Fahmida Afrin**, **Lecturer**, Department of CSE Daffodil International University, Dhaka. Deep Knowledge & keen interest of our supervisor in the field of "ONLINE IELTS TEST EXAM" to carry out this project. His endless patience ,scholarly guidance, continual encouragement , constant and energetic supervision, constructive criticism , valuable advice ,reading many inferior draft and correcting them at all stage have made it possible to complete this project.

We would like to express our heartiest gratitude to the **Prof. Dr.Syed Akhter Hossain**, Head**,** Department of CSE, for his kind help to finish our project and also to other faculty member and the staff of CSE department of Daffodil International University.

I would like to thank our entire course mate in Daffodil International University, who took part in this discuss while completing the course work.Finally, we must acknowledge with due respect the constant support and patients of our parents.

ABSTRACT

Online examination project could be a web portal which is developed or implemented in PHP domain or platform. IELTS interested student can practice. This project will help students to get practiced to online examination method by taking mock tests from this web portal. This website must have some main section. Such as activities, notes, videos /audios. In **Activities** section student can practice some model question of previous IELTS exam. After finishing any model question, they can see his/her score and the correct answer. In **video/audio** section contains some file that are related with the model question. So that, it can be easy to solve the model question. Our next section is **Note**. Speech of video/audio section will be documented here.To develop this project, the various tools are used. Such as-MySQL Database,HTML5 ,CSS3, Bootstrap, JQuery ,Java Script. In this project, I have used PHP Strom as an editor.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

This chapter contains in formation on understanding the fundamental concepts of Online IELTS Practice. In this Chapter, Online IELTS Practice is defined and the advantages and disadvantages of use are discussed.This chapter also describes the impact of Online IELTS Practice of Bangladesh.

1.2 Motivation

IELTS is an International language test. Every year many student is given to IELTS exam. But many student cannot make achieve good score for proper practice. Due to poor score many student cannot go study abroad.

1.3 Objectives

To make a platform where student can practice the standard IELTS exam. To archive the previous question that is not available now. Student can realize the timing of standard IELTS exam. All of the people can learn English without any cost. It will save time and reduce the boringness of carrying books.

1.4 Expected Outcome

This project is make for online IELTS TEST practice. If any one use this portal he or she get help.This project is completely free anybody can use.This project is completely good solution for learning English.

CHAPTER 2

BACKGROUND STUDY

2.1 Related Works

A successful projects depends on how the project timeline has been followed what is the necessary design and resource that will be needed before implementation phase this chapter deals with the fundamental states, programming language, database design, all functions and the time line of this project. At Present in my project, there are information of all kinds of IELTS Exam Preparation. There will be some feature like online exam, practice video tutorial more in Information About IELTS Exam.

2.2 Comparative Studies

- **IELTS Academy Visiting**

  Before building this projectI have visit the IELTS Academy to know about what is the present system are running for ILETS practice. There has some IELTS practice web application But there are not much easy to use and lack of some features that can help to learn English/Test himself/herself.

- **Feedback from IELTS Trainer & Trainee**

  I collect the feedback from the **Trainers** who are train up the students. I collect feedback from the trainee who are interested to learn English and IELTS. Which feature will help them to learn & practicing IELTS.

- **Internet Browsing**

  We have taken internet help for getting concept of IELTS practice web application. We have visit some of demo project and also collect information from internet.

2.3 Scope of the Problem

- Cyber security
- Bug problem

- Functional Requirement
- Hardware Problem
- Server problem

2.4 Challenges

Reliability

When a user or called the system, the system should response correctly and deliver the service as expected by the user.

Availability

When a user used or called the system, the system should be available all time. The system should be up and running and able to deliver useful service to the user.

Maintainability

When a user or called the system, new requirements may emerge. When these new requirements are emerged, the system should be changeable to accommodate these requirements.

CHAPTER 3

REQUIREMENT SPECIFICATION

3.1 Business Process Modeling

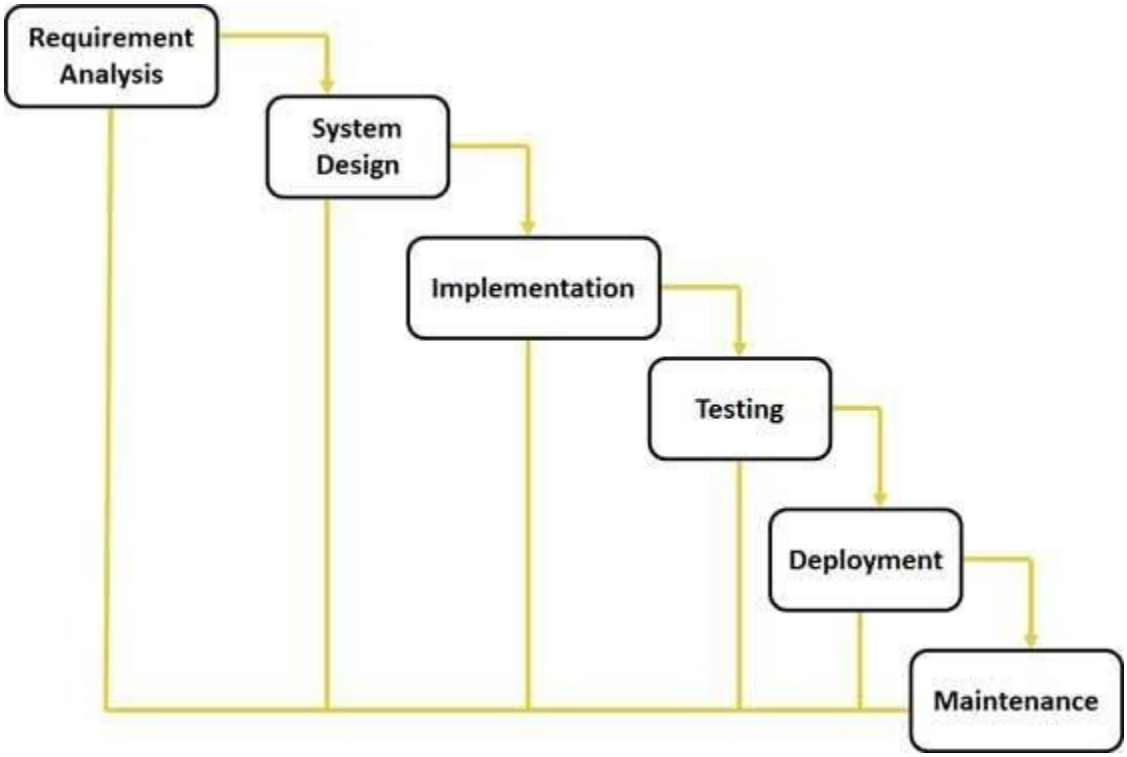

Fig 3.1 Business Process Model

3.3. Analysis Model

A process model is an abstract representation of a software process. Each process model represents a process from a particular perspective, and thus provides only partial information about that process. Some common process models are

- The waterfall model
- Evolutionary development
- Component-based software engineering
- development process
- Iterative development proc ...

3.4 Logical Data model

This takes the fundamental process activities of specification, development, validation and evolution and represents as separate phases such as requirement analysis and specification, software design, implementation, testing and Operation and maintenance.

The proposed software is designed using Logical Data model but, allows minimal overlapping between phases. As the proposed system is developed using waterfall model, during the development I moved phases that are following:

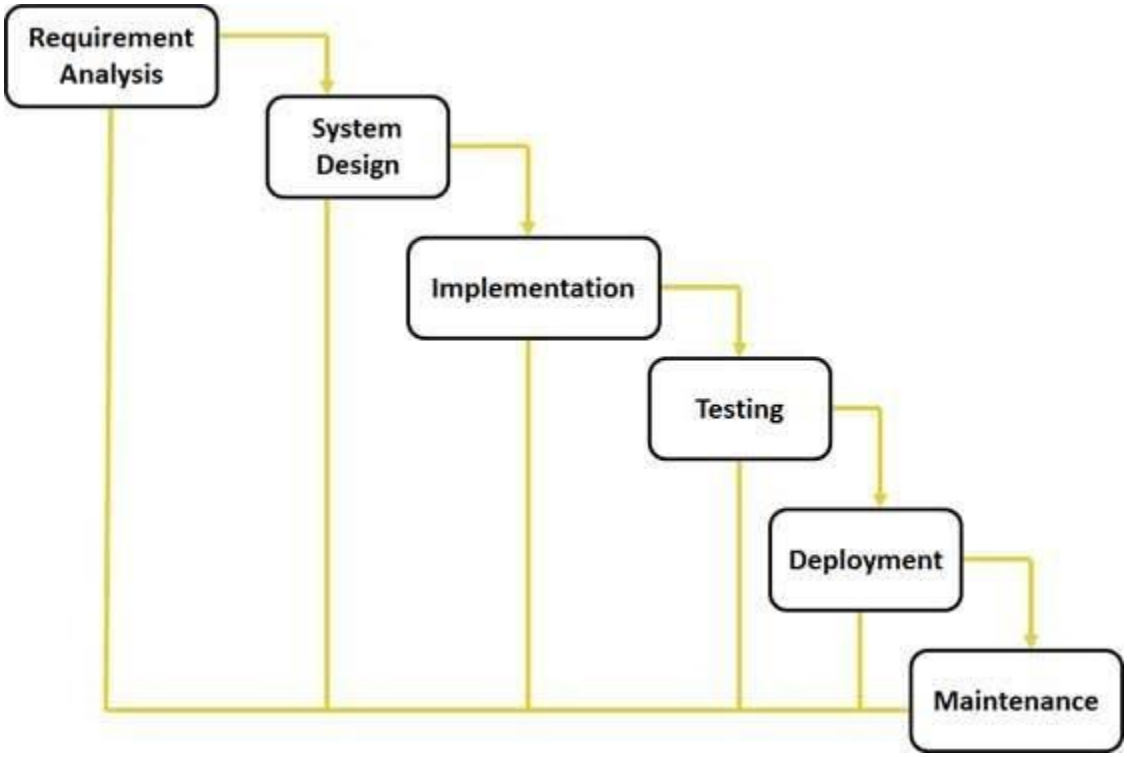

Figure 3.4 : Logical Data model

Entity relationship diagram (ERD)

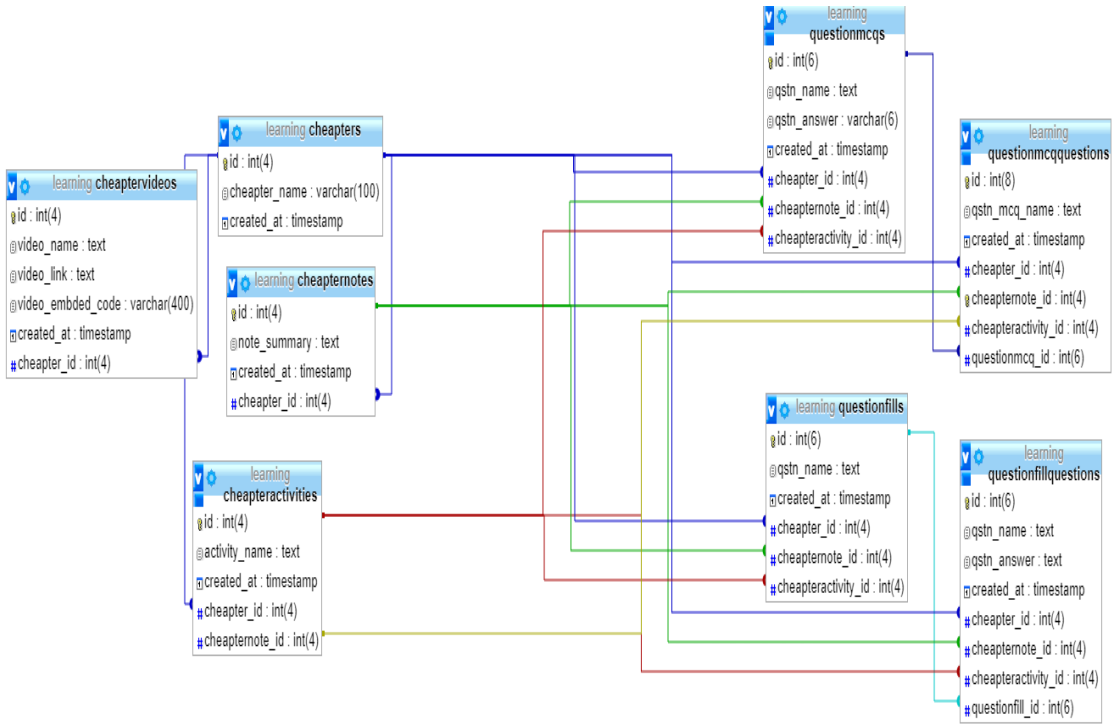

Figure 3.7: Entity relationship diagram (ERD)

CHAPTER 4

DESIGN SPECIFICATION

4.1 Front-end design

The front-end is everything involved with what the user sees, including design and some languages like HTML 5 and BOOTSTRAP css. A user Interface (UI) Designer is generally a visual designer and is generally focused on design.

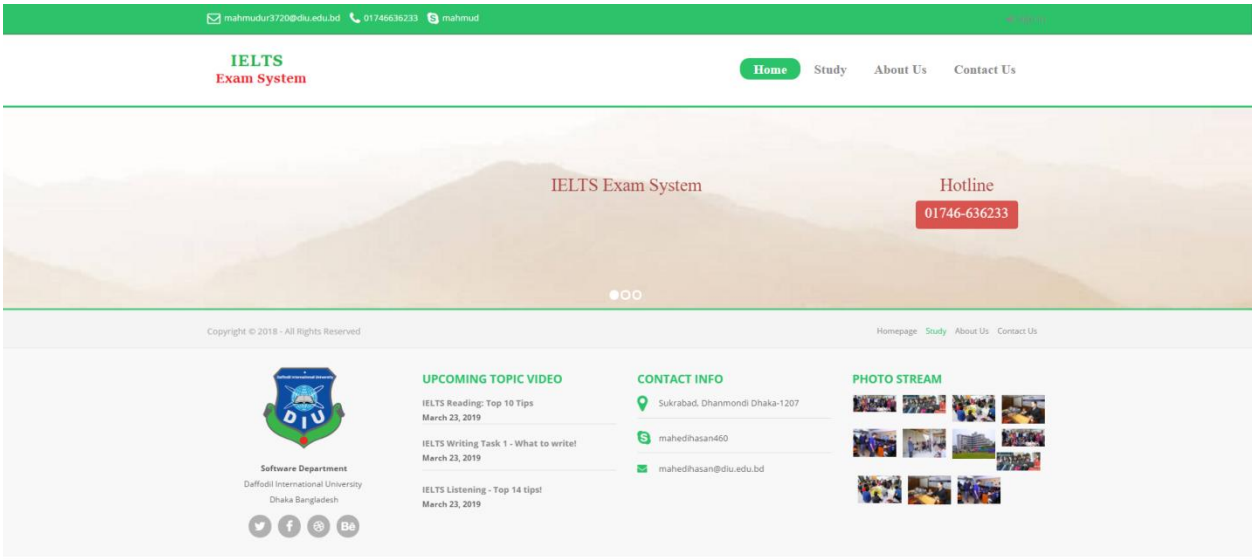

Fig 4.1:Home Page

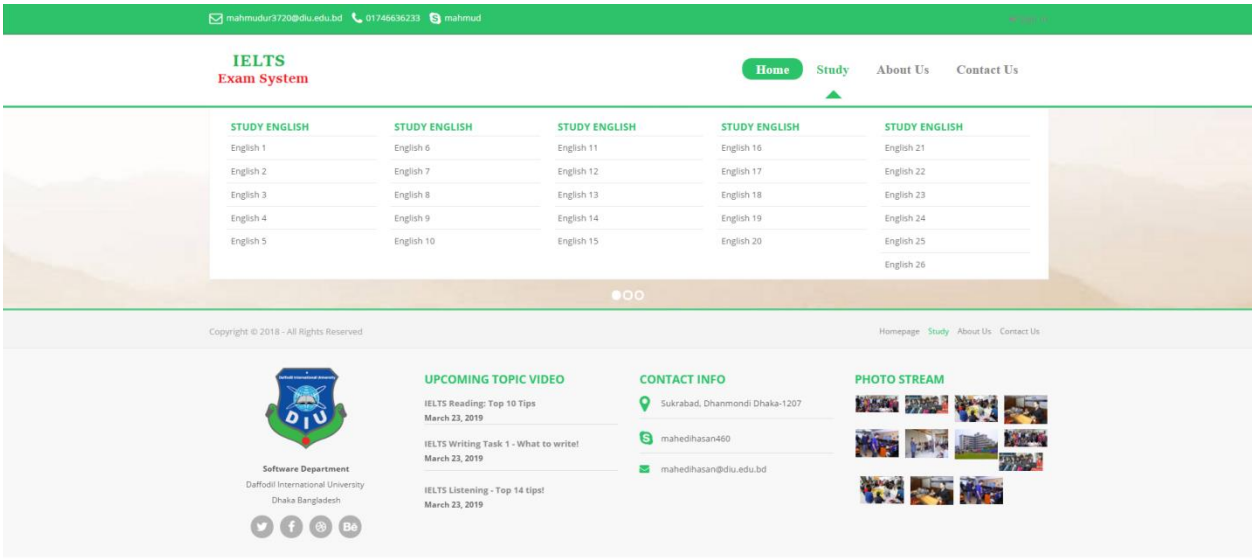

Fig 4.1.2:Study

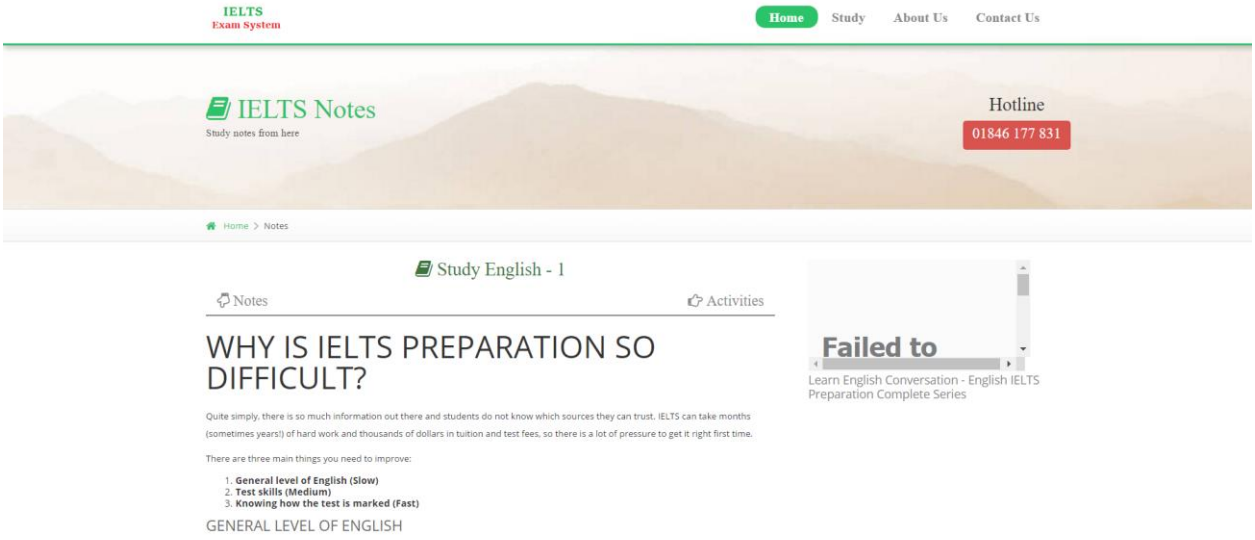

Fig 4.1.3:Notes

4.2 Back-end Design

The back-end, or the “server-side”, is basically how the site works, updates and edits. This Application I use in Laravel for Backend. Usually who make back-end people called developer.

CHAPTER 5

IMPLEMENTION AND TESTING

5.1 Implementation of Database

To complete this project we maintain some steps. These are:

- ✓ Concept Development and Analysis
- ✓ Database Design
- ✓ User Interface Design
- ✓ MySQL
- ✓ Testing

The Database Design Description describes the design of a database, that is, a collection of related data stored in one or more computerized files in a manner that can be accessed by users or computer programs via a database management system (DBMS).

5.2 User Interface

A user interface designer is a university graduate of technical communication, graphic design, human computer interaction, information technology or visual arts. In this line of work, creative talent is a must to make the user interface visually appealing.

5.3 Testing

After completing the project, we start testing. For testing purpose we test each module of our project and software. When we got any error then we work on this error to fix it. In this way we completed the project. Now this software are completely ready for use in Bangladesh prison for store information efficiently.

5.3.1 Introduction

This is aimed at identifying and correcting errors. The major objective of the activity is to ensure that the processing done by the application is correct and meets the objectives of the organization. Test plan aids in effective and systematic testing and it aims at checking the errors of omission and commission that the realization of the objectives, It takes the bottom up testing up testing approach.

5.3.2 Importance of testing

1. Testing is to find program errors on the system.
2. It is used to find undercover errors in a program through the use of defect testing.
3. Testing is also used to uncover new types of errors associated with new inventions and technology.
4. Testing aims at assuring quality by enforcing consistency and reliability.
5. It is used for both validation and verification to develop a product that meets user requirement.
6. It is used to identify the both component combination for effective error identification.

5.3 .3 Test Plan Strategy

The importance of the test plan is to also how the system is to be tested and also gives precise procedures to be followed during the test plan. The test data is identified, what is being tested and the expected output as well as the actual input. Test plan is one of the standard documents that should be produced in most software engineering project. If the project does not have any test plan this means that the software produced is low quality. This may not be acceptable to the user since it will not satisfy their needs. The test plan should be written as soon as you have identified the requirements.

- Unit testing
- Module testing

- System testing
- Integration testing

5.3 .4 Unit Testing

A unit is the smallest testable part of an application like functions, classes, procedures, interfaces. Unit testing is a method by which individual units of source code are tested to determine if they are fit for use. Unit tests are created and executed by software developer during the development process. This also applies to the operating system and the software applications.

Unit Testing Case Module:

Table 5.1: Testing

Test Case ID.1	Module Name: Registration
Module: Owner Registration page value check	Test Designed: Mahmud
Test Priority: (Low/Medium/High): **High**	Test Date: 12.2.2018
Test Title: User Registration and valid user	Test Executed By: Mahmud
Description: Test the system user Registration page.	Test Executed Date: 20.2.2018
Test Case ID.2	Module Name: Question search
Module: Mock Question search	Test Designed: Mahmud
Test Priority: (Low/Medium/High): **Medium**	Test Date: 14.2.2018
Test Title: User search	Test Executed By: Mahmud
Description: Users search Mock Question.	Test Executed Date: 22.2.2018
Test Case ID.3	Module Name: : Notes search

Module: Notes search for individual lesson	Test Designed: Mahmud
Test Priority: (Low/Medium/High): **Medium**	Test Date: 16.2.2018
Test Title: User search	Test Executed By: Mahmud
Description: Notes search	Test Executed Date:23.2.2018
Test Case ID.4	Module Name: Tutorial search
Module: Tutorial search	Test Designed: Mahmud
Test Priority: (Low/Medium/High): **Medium**	Test Date: 17.2.2018
Test Title: User search	Test Executed By: Mahmud
Description: Tutorial search(Audio/Video)	Test Executed Date: 24.2.2018
Test Case ID.5	Module Name: Give exam
Module: Examination	Test Designed: Mahmud
Test Priority: (Low/Medium/High): **High**	Test Date: 18.2.2018
Test Title: Give exam	Test Executed By: Mahmud
Description: Input all Question's Answer	Test Executed Date: 26.2.2018
Test Case ID.6	Module Name: Exam time
Module: Exam time	Test Designed: Mahmud
Test Priority: (Low/Medium/High): **Medium**	Test Date: 19.2.2018
Test Title: User search	Test Executed By: Mahmud
Description: Exam time set up	Test Executed Date: 27.2.2018

5.4.5 Integration Testing

This is where two or more related programs are tested. The test will involve two types of approaches, i.e the bottom-up approach that beings with the simplest task to most

complex part . From users information table to the database and top-down approach that tests the system from the complex task to the simplest unit of all. We seek to verify that all the hardware functions together without conflicting.

All the forms linked to the database should be connected well without any issue. Ensure that all the programs work well to avoid interruption and there is no issue whatsoever affecting database update.

Integration Testing Case Module:

Table 2: Login Testing

Test Case ID.7	Module Name: Login
Module: User Login Module	Test Designed: Md. Mahmudur Rahman
Test Priority: (Low/Medium/High): **High**	Test Date: 1.7.2018
Test Title: Login validation	Test Executed By: Md. Mahmudur Rahman
Description: Test the system user Registration page.	Test Executed Date: 01.7.2018

5.4.6 System Testing

I think of testing, we shall test the entire system for functionality to ensure that the system can process and handle large volumes of data quickly and efficiently. The test will be done with a sample of some users who will use the system under test in its actual capability environment. Possible problems are corrected before really conversing.

5.4.7Acceptance Testing

This test will complete the formal testing process where all the users and the administrator will use the system so as they get familiar with it. The users test the system before it is rolled out to be fully used.

- **Beta testing**-Carried out at Owner company premise. This involves delivering the system to number the potential clients to use the system and report back to developer key malfunction with and understanding that the product is still being tested.
- **Alpha testing**-It takes place at the developer site. It is the final testing before the software is about to be released to the hospital for used.

Acceptance Testing:

Listing 4: Keywords for accepting and rejecting passwords

```
** Keywords **
Accepts Password ${valid_password}
Create Account arbitraryUserName ${valid_password}
Status Should Be Account Created
Rejects Password ${invalid_password}
Create Account arbitraryUserName ${invalid_password}
Status Should Be Invalid Password
```

Test Case AcceptanceTesting:

Listing 5: Test rewritten to reduce duplication

```
** Test Cases **
The create command validates passwords
Rejects Password 1234!@$^
Rejects Password abcd!@$^
Rejects Password abcd1234
Rejects Password !2c45
Accepts Password !2c456
Accepts Password !2c4567890123456
Rejects Password !2c45678901234567
```

5.4.8 Recovery testing

Recovery testing will force the system to fail in various ways and try to verify that the recovery is efficiently done. It is vital that all the data is recovered after the system failure and corruption of data.

5.4.10 User Registration Module Test Case

Test Case Unit Test

Table 3: User Registration Testing

UTC ID	UTC_01
UTC Name	Owner Registration page value check
Code Module	AddRegistration.php design page
UTC Description	1. Enter User name with format (X uer), 2. Enter Password (**********)
Input values	Input 1: user name: Mahmud Input 2: Email: mahmud@gmail.com Input 3: password: ******** Input 4: user name: Mahmud Input 5: Email: mahmudur3720@diu.edu.bd Input 6: password: ********
Expected Output	Input 1: true, Input 2: true, Input 3: true, Input 4: false, Input 5: false , Input 6: false
Actual Output First Iteration	Input 1: true, Input 2: true, Input 3: true, Input 4: true, Input 5: true, Input 6: false

Actual Output Second Iteration	Input 1: true, Input 2: true, Input 3: true, Input 4: false, Input 5: false, Input 6: false
Pass/Fail	First Iteration: 1 Failed in 2, Passed Percent: 50% Second Iteration: 2 Passed in 2, Passed Percent: 100%

UTC ID	UTC_02
UTC Name	Test Input Values of Owner Login page
Code Module	Login.php design page, class owner{}, Login(),
UTC Description	1. The password textbox must hide input value as ****** 2. Enter Invalid user name, and then the system displays an error message. 3. Enter Invalid Email, and then the system displays an error message. 4. Enter Invalid password, then the system displays an error message 5. Enter valid user name, email and valid password, it should lead the user to the respect page
Input values	Input 1: someone@email.com [Invalid email] Input 2: xUser [Invalid user] Input 3: 1234 (****)[Invalid password] Input 4: xyzUser [Invalid User] Input 5: mahmud@gmail.com [valid email] Input 6: 12345678 (********) [valid password]
Expected Output	Input 1: false, Input 2: false, Input 3: false, Input 4: true, Input 5: true, Input 6: true and redirect to respect page

Actual Output Iteration 1	Input 1: ✕, Input 2: ✕, Input 3: ✕, Input 4: ✓, Input 5: ✓, Input 6: ✓ and lead to respected page
Pass/Fail	Pass: Complete 6 of 6. Total percent: 100%

UTC ID	UTC_03
UTC Name	Test Input Values of Dashboard Login page
Code Module	View.php design page in Dashboard Namespace
UTC Description	1. Enter shop name , 2. Enter Email with format (example@domain.com),
Input values	Input 1: Email: mahmud@gmail.com Input 2: Password: 1234 Input 3: Email: mahmud@gmail.com Input 4: Password: 12345678
Expected Output	Input 1: true, Input 2: true, Input 3: false, Input 4: false
Actual Output Iteration 1	Input 1: ✓, Input 2: ✓, Input 3: ✕, Input 4: ✕
Pass/Fail Pass: Complete 4 of 4. Total passed percent: 100%	Pass: Complete 4 of 4. Total passed percent: 100%

5.4.11 Unit Test Report

Generally, this is a communication send out to establish transparency to the QA team's activities of the day during the test cycle.

Total unit test case sample of 4. The succession percent are shown in following table:

Table 4: Testing Result

Iteration	Number of Unit Test Case	100% Success in first iteration	Less than 100%	Total Succession %
Cycle-1	Total : 4	4	2	(50+100+100)=192.66 (75)/4=81.25%
Cycle-1	Total : 4	4	0	100%

The succession percent are shown in following table:

Conclusion:

All testing was done carefully and each test was up to the required standards of the user's. Error tests may be suggested but the above mentioned are just sufficient to test.

Maintenance:

We provide the best services for all people for provide medical information and trying to remove users sufferings. And we are ready for lifetime maintenance at the time variation.

CHAPTER 6

CONCLUSION AND FUTURE SCOPE

6.1 Conclusion

The Online IELTS Practice System developed by html, css, bootstrap, javascripts, jquery & MySQL etc. IELTS interested student can practice. That website must have some main section. Such as activities, notes, videos /audios. In **Activities** section student can practice some model question of previous IELTS exam. After finishing any model question, they can see his/her score and the correct answer. In **video/audio** section contains some file that are related with the model question. So that, it can be easy to solve the model question. Our next section is **Note**. Speech of video/audio section will be documented here. By using this web application the people of our country can learn and practice English with less effort and money. So learning interest will be increase day by day.

6.2 Limitations

We cannot collect expected information from authority of prison for their security purpose. That's why we cannot task with some of site of prison.

- Can't collect all of the IELTS question.
- Any hardware don't work.
- Proper Bandwidth.
- Lack of Eligible Networking System.
- Perfect tutorials.

• Now it connect with local network. In the next version we will connect by real IP. So all of privileges person could access this software from anywhere of the world.

6.3 Future Works

This project is not a full version so it has some limited features. In near future we will add many features to this project. The main features which can be included are given below-

•Collect more IELTS question.

• Face recognizing system for authorization.

• Make more appropriate timing and marking system.

REFERENCE

[1] Test, "Online Ielts Test", Sites.google.com, 2019. [Online]. Available: https://sites.google.com/diu.edu.bd/onlineieltstest/home. [Accessed: 04- Apr- 2019].

APPENDICES

APPENDIX A:PROJECT REFLECTION

HTML AND CSS BASED CODE:

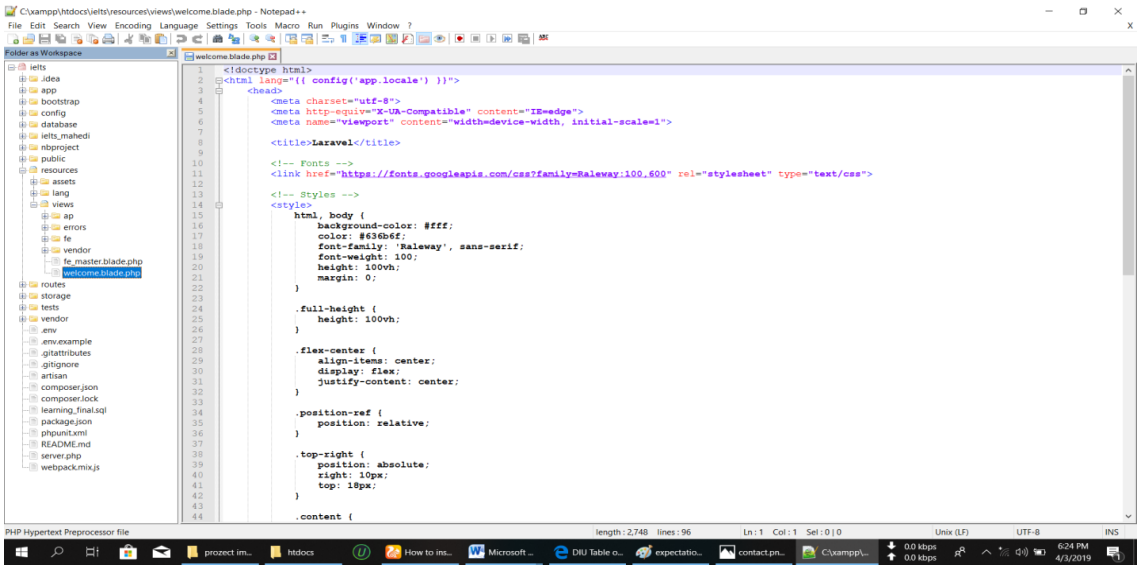

Fig 1:Welcome Page code

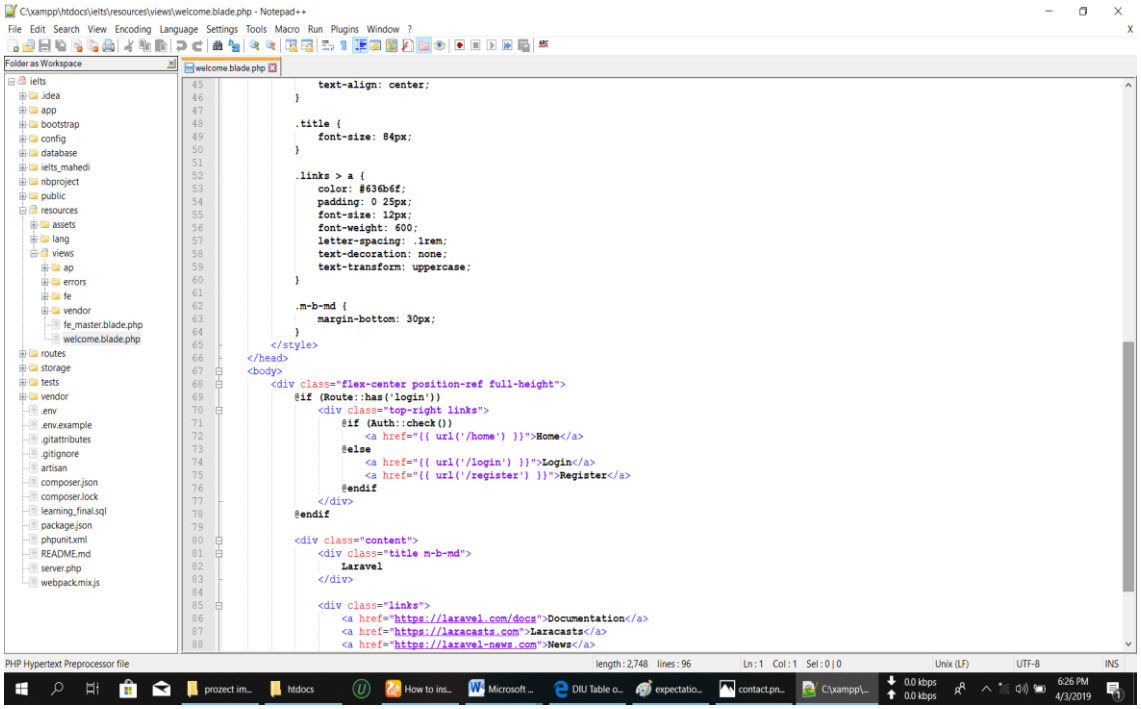

Fig2:Welcome Page Code

APPENDIX B: RELATED DIAGRAM

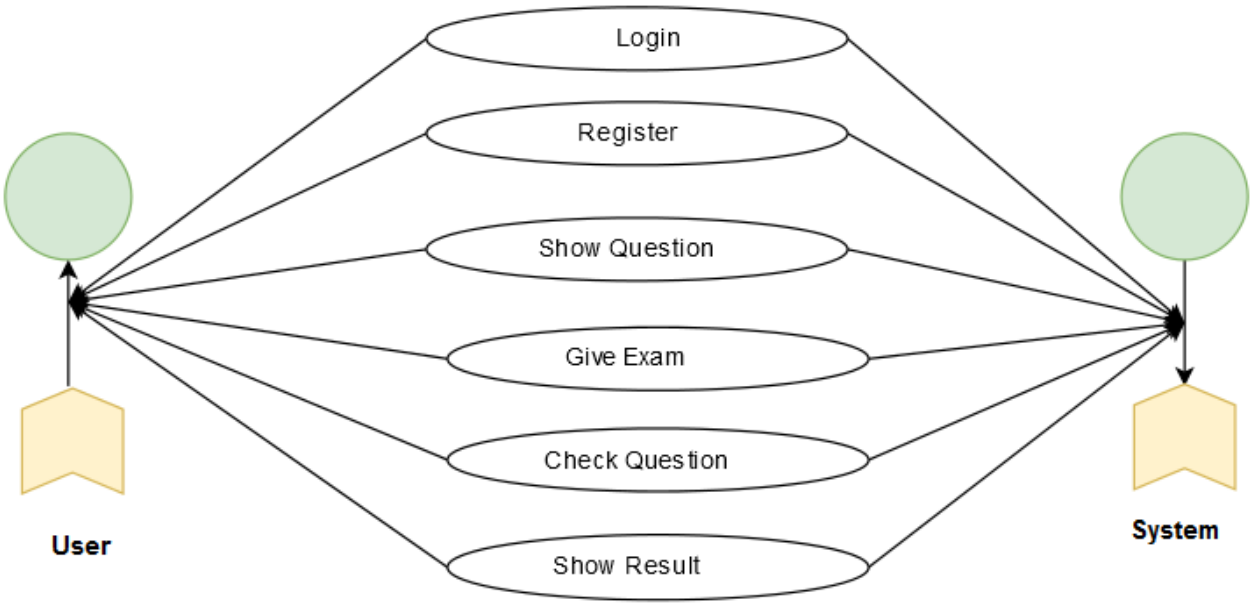

Figure: Online Examination

Fig 1:Use Case Diagram

IELTS Test

ORIGINALITY REPORT

22%	%	%	22%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	Submitted to Rivier University Student Paper	3%
2	Submitted to Middlesex University Student Paper	2%
3	Submitted to University of Edinburgh Student Paper	2%
4	Submitted to University of Derby Student Paper	2%
5	Submitted to University of Ulster Student Paper	1%
6	Submitted to American Intercontinental University Online Student Paper	1%
7	Submitted to University of Cumbria Student Paper	1%
8	Submitted to Kensington College of Business - Brunei Student Paper	1%