

**An INTERNSHIP PROJECT REPORT on
DYNAMIC DASHBOARD**

AND

REPORT CARD

Submitted in partial fulfilment of the requirements of the degree

Bachelor of Technology

In

COMPUTER SCIENCE AND ENGINEERING

By

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Under the supervision of

Ms. P. SINDHU



**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING,
RAJIV GANDHI UNIVERSITY OF KNOWLEDGE TECHNOLOGIES,
ONGOLE CAMPUS,
JANUARY 2023.**



BONAFIDE CERTIFICATE

This is to certify that the project report entitled **DYNAMIC DASHBOARD AND REPORT CARD** submitted by **SINGAMANENI SREENADH (O170997)** in partial fulfilment of the requirement for the award of Bachelor of Technology in Computer Science Engineering is a record of bonafide project work carried out under my supervision during the academic year 2022-23.

I am indebted to **Ms.P.SINDHU**, my project guide for conscientious guidance and encouragement to accomplish this project.

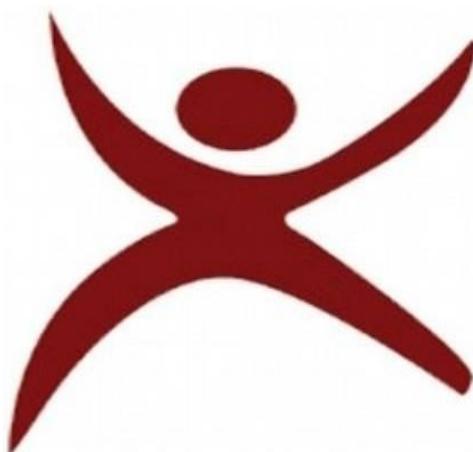
I am extremely thankful and pay my gratitude to **Mr. B. SAMPATH BABU,(I/C) HODCSE**, for his valuable guidance and support on the completion of this project.

The report hasn't been submitted previously in part or in full to this or any other university or institution for the award of any degree.

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**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING,
RAJIV GANDHI UNIVERSITY OF KNOWLEDGE TECHNOLOGIES,
ONGOLE CAMPUS, JANUARY 2023.**



CERTIFICATE

This is to certify that the project report entitled **DYNAMIC DASHBOARD AND REPORT CARD (INTERNSHIP REPORT)** submitted by **SINGAMANENI SREENADH (O170997)** in partial fulfilment of the requirement for the award of Bachelor of Technology in Computer Science and Engineering is a record of bonafide project work carried out under my supervision during the academic year 2022-23.

The report hasn't been submitted previously in part or in full to this or any other university or institution for the award of any degree.

Ms. P . SINDHU,
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APPROVAL SHEET

This report entitled DYNAMIC DASHBOARD AND REPORT CARD by **SINGAMANENI SREENADH (O170997)** is **Ms.P. SINDHU** approved for the degree of Bachelor of Technology in COMPUTER SCIENCE AND ENGINEERING

Examiner

Supervisor

Chairman

Date: _____

Place: _____

DECLARATION

I declare that this written submission represents my ideas in my own words and where others' ideas or words have been included, I have adequately cited and referenced the original sources. I also declare that I have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in my submission. I understand that any violation of the above will be cause for disciplinary action by the Institute and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed.

Signature

SINGAMANENI SREENADH

ID: O170997

Date: _____

ACKNOWLEDGEMENT

I am highly indebted to **Ms.P.SINDHU** for her guidance and constant supervision as well as for providing necessary information regarding the project and also for their kind cooperation, encouragement and their support in completing the project.

I would like to express my special gratitude and thanks to our COMPUTER SCIENCE ENGINEERING branch **H.O.D Mr. B .SAMPATH BABU** and **Director of RGUKT,ONGOLE Prof. B.JAYARAMI REDDY** for giving me such attention and time.

I have taken efforts in this project. However, it could not have been possible without the kind support and help of many individuals and RGUKT. We would like to extend my sincere thanks to all of them.

My thanks and appreciation also go to my colleagues in developing the project and people who have willingly helped me out with their abilities.

With Sincere Regards,
SINGAMANENI SREENADH

Date: _____

INTERNSHIP CERTIFICATE



**BLACKBUCK
ENGINEERS**

BLACKBUCK ENGINEERS PVT. LTD.

Internship Extension Letter

01-December-2022

Dear **Sreenadh Singamaneni**,

It truly has been a pleasure working with you the last four months. We're happy to see your growth as a developer Intern sharpening your skills at Resolve. So far, your work has primarily been with learning and developing the front end of the web application. We believe it would be valuable to your growth to gain more experience adding more . Accordingly, we would like to offer an extension of your internship until the end of the January . The end date of the internship will extend to January 31, 2022. This is not a new separate internship. This is an extension of the current internship and as such, all policies, procedures, and agreements from the initial offer apply going forward with the extension. The extension offer simply changes the end date of the internship from November 30, 2022 to 31st January 2022

For Blackbuck Engineers Pvt. Ltd.



Mounika Bezwada
HR
Blackbuck Engineers Pvt. Ltd.

BLACKBUCK ENGINEERS PVT LTD
Jubilee Square, 1128, 3rd floor, Rd Number 36, Jubilee Hills, Hyderabad, Telangana 500033

ABSTRACT

Education Plays a key role in one's life. It is the passport to the future, for tomorrow belongs to those who prepare it for today. Education is what differentiates us from other living beings on earth. It makes man the smartest creature on earth, empowers humans and gets them ready to face the challenges of life efficiently. With that being said, education remains a luxury and not a necessity in our country. It is the most significant tool in eliminating poverty and unemployment. Moreover, it enhances the commercial scenario and benefits the country overall. So, the higher the level of education in a country, the better the chances of development are. Along with constantly evolving in the field of education, it is important to keep a track of it for effective growth. Tracking progress is a powerful tool and not just for keeping us motivated and productive. keeping careful track of your work can help you stay focused on them and also helps in getting info about features like the things he has achieved, the need to focus, improvise ..etc.

Dashboard and report card portals were one of the ways to achieve that, These help in getting to know about the academic info along with some extra features of a user through a single window for upfront in career. These were designed using Front End Technologies like HTML, CSS, and Bootstrap which generally play a key role in the graphical user interface while Back End is designed using the technologies like PHP, and Mysql. These portals provide a hassle-free means of way to keep a track of one's info.

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CHAPTER 1

INTRODUCTION

Education is the best weapon to eradicate the darkness of illiteracy. It helps in people become better citizens, gets a better-paid job, shows the difference between good and bad and plays a prominent role in everyone's life. Keeping track helps in better navigation and improvisation. This can be done using a dynamic dashboard that generally displays the current progress and a report card that acts as a certificate for one's performance for a particular duration. The main motivation of the application is to learn and apply the full stack technologies in the field of web development and to provide users with a website that tracks the performance with easy and efficient maintenance. The wide variety of features that were offered are listed below

1.1 Features

- **Login**
- **Dashboard**
 - **Ambition** - Describe the ambition of the user based on the data entered
 - **Profile Score** - Describe the score of the user based on profile completion
 - **Employability Score** - Describes the total score of the user
 - **Score Band** - Describe the Band of the user based on various parameters
 - **Comments** - Describes the comments for that Band
 - **Suggestion** - Describes the steps that have to be taken for improvement
 - **Get report** - A button to generate a Report card
 - **No of Jobs applied** - Describes the no of jobs the user has applied

- **No of Badges gained** - Describes the no of Badges the user has gained
 - **No of quizzes taken** - Describes the no of quizzes the user has attempted
 - **Codevel Score** - Describes the Competitive coding challenges score
 - **State rank** - Describes the rank of user in the state
 - **College rank** - Describes the rank of user in the college
 - **Latest Quant score** - Describes the latest quantitative exam score
 - **Latest verbal** - Describes the latest verbal exam score
 - **Latest logical Score** - Describes the latest logical score
 - **Latest English score** - Describes the latest english score
 - **Personality score** - Describes the personality of a person based on his profile completion
- **Report card**
 - **Name**
 - **Phone number**
 - **College name**
 - **Monthly quant score** - Describes the average quantitative score of the user in a complete month
 - **Monthly verbal score** - Describes the average verbal score of the user in a complete month
 - **Monthly logical score** -Describes the average logical score of the user in a complete month
 - **Monthly Listening score** - Describes the average listening score of the

user in a complete month

- **Monthly Speaking score** - Describes the average speaking score of the user in a complete month
- **Monthly Reading score** - Describes the average reading score of the user in a complete month
- **Monthly Writing score** - Describes the average writing score of the user in a complete month
- **Monthly Technical MCQ score** - Describes the average technical MCQ score of the user in a complete month
- **Monthly Coding score** - Describes the average coding score of the user in a complete month
- **MAT score** - Describes the summation average of monthly quant,verbal,logical scores
- **BELT score** - Describes the summation average of monthly Listening,Speaking,Reading,Writing scores
- **BTS band** - Describes whether a user fits for product or service type based on the summation average of technical MCQ and coding
- **Badges** - Badges he gained in that particular month
- **Download Certificate**

CHAPTER 2

REQUIREMENT ANALYSIS

In order to run an application we need to have some basic configuration related to hardware and software. The following were the listed requirements to run the Dynamic dashboard and Report card smoothly.

2.1 Requirement Specification

2.1.1 Hardware Requirements

- Processor : Intel i3 or above
- Memory : 4 GB RAM or above

2.1.2 Software Requirements

- Operating System : Windows / Linux / Mac /Android
- Browser : Chrome /Safari/Mozilla firefox

2.2 Technologies Used

2.2.1 HTML

It is a markup language for formatting and displaying web documents and web pages. It gives basic structure to the web page without any styling. HTML elements tell the browser how to display the content. It can be assisted by technologies such as Cascading Style Sheets and scripting languages such as JavaScript for styling and functionality.

2.2.2 CSS

Cascading Style Sheets is a style sheet language used for describing the presentation of a document written in a markup language such as HTML or XML. CSS is a cornerstone technology of the World Wide Web, alongside HTML and JavaScript.

2.2.2.1 Types of CSS

- Inline CSS (Using styles as attributes in html elements)
- Internal CSS (Including a separate Style tag in html document)
- External CSS (Using external file for styling)

2.2.3 Bootstrap

Bootstrap is a free and open-source CSS framework directed at responsive, mobile-first front-end web development. It contains HTML, CSS and JavaScript-based design templates for typography, forms, buttons, navigation, and other interface components. It makes it possible for a web page or app to detect the visitor's screen size and orientation and automatically adapt the display accordingly.

2.2.4 JavaScript

JavaScript, often abbreviated as JS, is a programming language that is one of the core

technologies of the World Wide Web, alongside HTML and CSS. As of 2022, 98% of websites use JavaScript on the client side for webpage behavior, often incorporating third-party libraries. It is used by programmers across the world to create dynamic and interactive web content like applications and browser.

2.2.5 API - Application programming interface

Application Programming Interface (API) is a software interface that allows two applications to interact with each other without any user intervention. API is a collection of software functions and procedures. In simple terms, API means a software code that can be accessed or executed. It offers products or services to communicate with other products and services without having to know how they're implemented.

2.2.6 PHP

PHP is an open-source, interpreted, and object-oriented scripting language that can be executed at the server-side. PHP is well suited for web development. Therefore, it is used to develop web applications (an application that executes on the server and generates the dynamic page). It was originally created by Danish-Canadian programmer Rasmus Lerdorf in 1993 and released in 1995.

2.2.7 MySql

MySQL is an open-source relational database management system. As with other relational databases, MySQL stores data in tables made up of rows and columns. Users can define, manipulate, control, and query data using Structured Query Language, more commonly known as SQL. Its name is a combination of "My", the name of co-founder Michael Widenius's daughter My, and "SQL", the acronym for Structured Query Language.

CHAPTER 3

SYSTEM DESIGN

3.1 Use Case Diagram

The DFD is also called a bubble chart diagram. It is a simple graphical formalism that can be used to represent a system in terms of the input data to the system, various processing carried out on these data, and the output data is generated by the system.

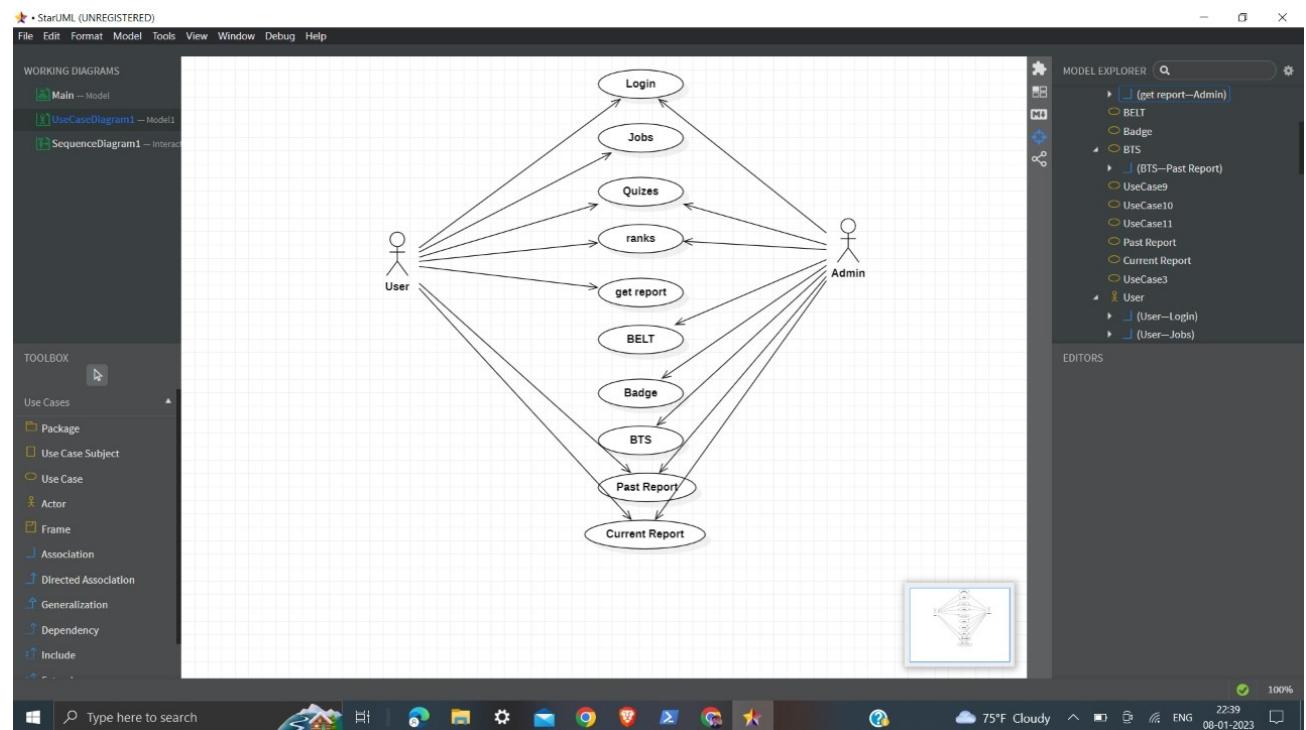


Figure 4.1 Use Case Diagram

3.2 Class Diagram

Class diagram is a static diagram. It represents the static view of an application. Class diagram is not only used for visualizing, describing, and documenting different aspects of a system but also for constructing executable code of the software application. Class diagrams are the only diagrams which can be directly mapped with object-oriented languages and thus widely used at the time of construction.

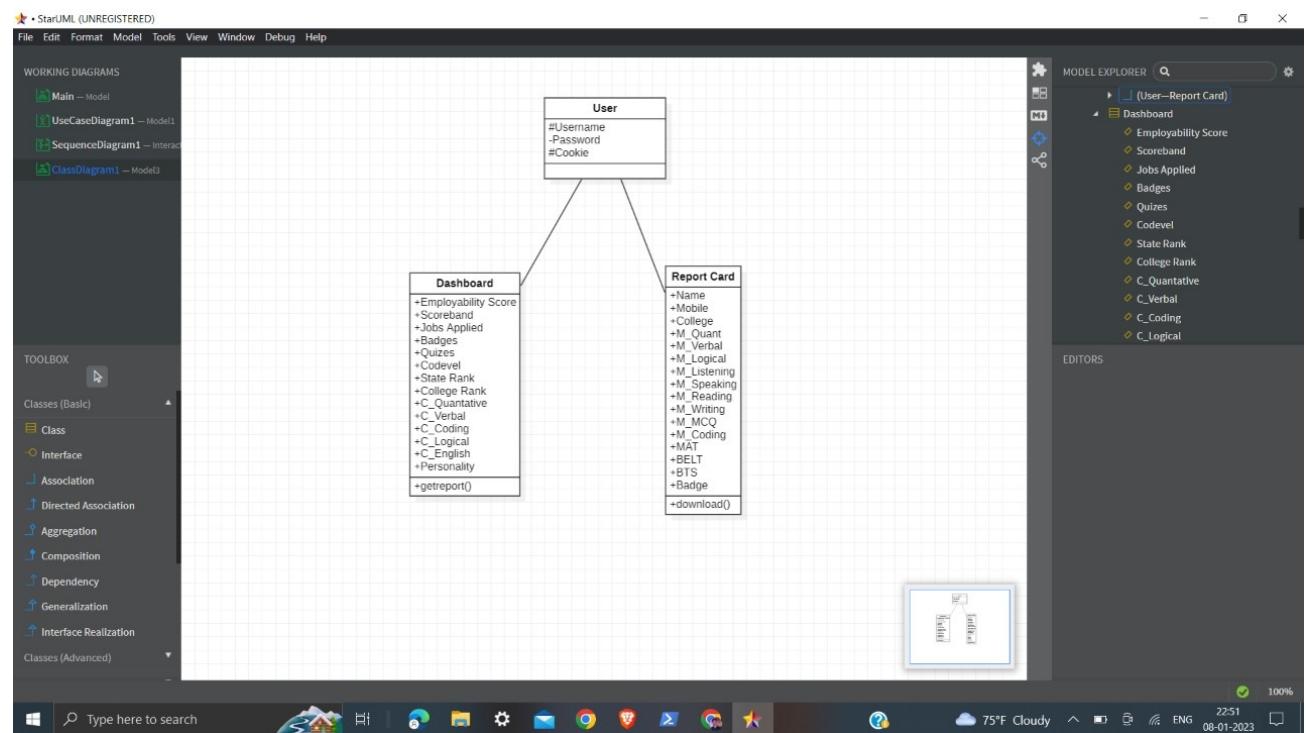


Figure 4.2 Class Diagram

3.3 Sequence Diagram

A sequence diagram simply depicts interaction between objects in a sequential order i.e. the order in which these interactions take place. We can also use the terms event diagrams or eventscenarios to refer to a sequence diagram. Sequence diagrams describe how and in what order the objects in a system function. These diagrams are widely used by businessmen and software developers to document and understand requirements for new and existing systems.

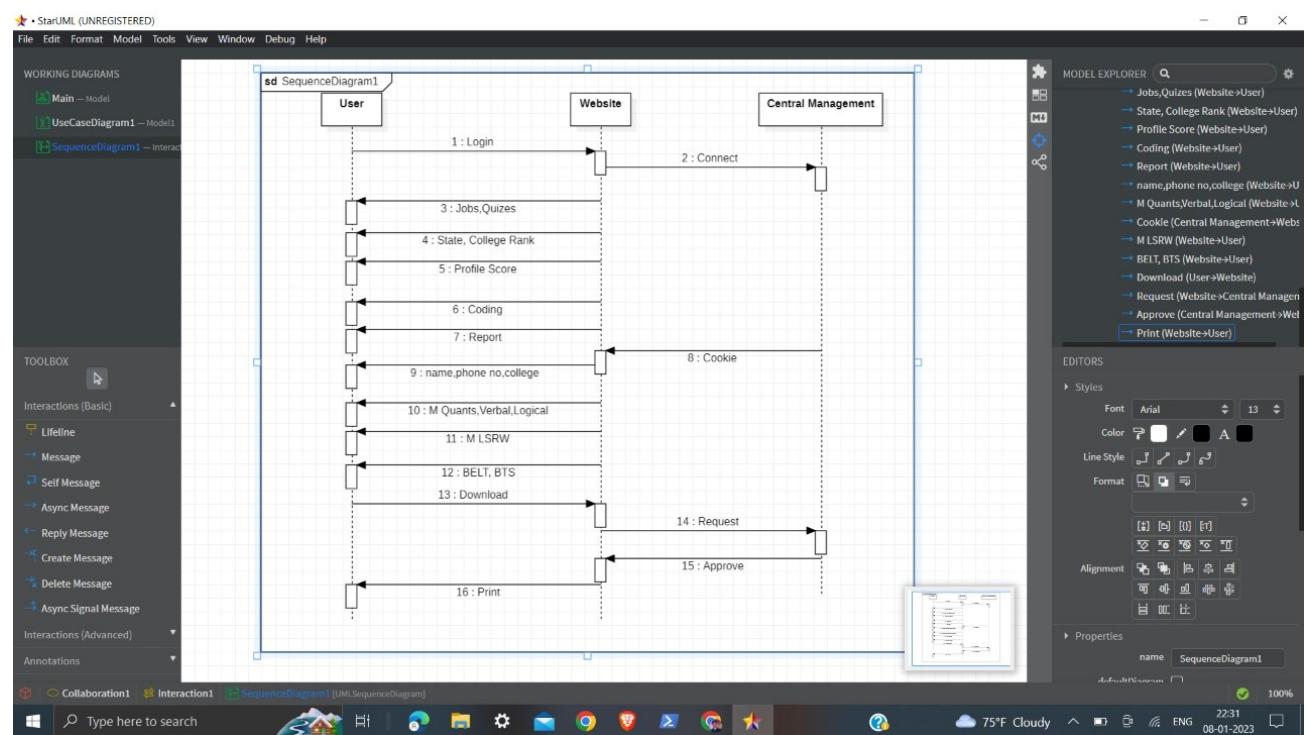


Figure 4.3 Sequence Diagram

CHAPTER 4

SOFTWARE ENVIRONMENT

4.1 Visual Studio Code (IDE)

Visual Studio Code, also commonly referred to as VS Code is a source-code editor made by Microsoft for Windows, Linux and macOS. Features include support for debugging, syntax highlighting, intelligent code completion, snippets, code refactoring, and embedded Git. Users can change the theme, keyboard shortcuts, preferences, and install extensions that add additional functionality.

4.2 cPanel

cPanel is a web hosting control panel software developed by cPanel, LLC. It provides a graphical interface and automation tools designed to simplify the process of hosting a web site to the website owner or the "end user". It enables administration through a standard web browser using a three-tier structure. The system operates similarly to a desktop application. With cPanel, one can perform actions from a user-friendly dashboard instead of running complex commands.

4.3 phpMyadmin

phpMyAdmin is a free and open source administration tool for MySQL and MariaDB. As a portable web application written primarily in PHP, it has become one of the most popular MySQL administration tools, especially for web hosting services . The current version of phpMyAdmin, at the time of this recording, supports MySQL 5.5 or later. If you're using MySQL 5.0-5.4, you need to use phpMyAdmin 4.0. The current version of phpMyAdmin also supports MariaDB 5.5 or later.

CHAPTER 5

IMPLEMENTATION

5.1 Working

A user enters his/her credentials for authentication on the login page. If credentials are incorrect it displays an error message else if it successfully logs in the user. After successful login, the user gets navigated to dashboard home pages where he can find various details about his performance like quant, verbal, logical, and coding scores along with some additional features like badges, jobs, ranks etc and track them.

The dashboard consists of a Get report button that generates the report card of the user in a new tab with the monthly averages of various parameters of the user and in addition to an assignment of badges, opting for a product or service role based on his scores. This is automatically deployed by the cookie that gets stored during the login of the dashboard in the browser that generally acts as input for the report card.

For any queries or errors, the user can call to helpline number provided on the login page, simply address his issues and tell his secret id that is being displayed on the top of the page and unique succeeding to the name of the user in the dashboard.

5.2 Navigations

Dashboard:

test1.blackbucks.me/local/abc/bb_dashboard/dashboard.php

Report card:

test1.blackbucks.me/local/abc/bb_dashboard/reportcard.php

C panel: (Static)

<http://3.109.217.35:7800/taptap>

Phpmymysql: (Dynamic - changes frequently)

<http://3.110.75.116/phpmyadmin/>

5.3 Sample Code

connection.php	Contains Connection details for the Database
Dashboard Files	
dashboard.php	Index page of Dashboard
dashboard_queries.php	Consists of queries that are responsible for displaying values in the dashboard.php
dashboard_pastqueries.	Consists of queries that are responsible for comparison of data in order to show the
dashboard_cookie.php	Consists of Code to store the cookie whenever a user logs in
ranks.php	Consists of code for fetching the State and College ranks of a user
band.php	Consists of Code to Display the Band, Suggestion, Comments to the user based on his
theme.css	Theme file for Dashboard
Report card Files	
reportcard.php	Index page of Report card
reportcard_queries.php	Consists of queries that are responsible for displaying values in the report card.php
design.css	Theme file for Report card

NOTE :

1. This project has 10 code files consisting of more than 2500+ lines of code, 200+ tables in the database , 16 svg images , 3 jpeg images
2. The Project is confidential and cannot be disclosed according to the terms of the company so here by im providing a series of images that stand as proof of my work .

DYNAMIC DASHBOARD AND REPORT CARD

The screenshot shows the aaPanel Linux panel interface. The left sidebar includes links for Home, Website, FTP, Databases, Docker, Monitor, Security, WAF, Files, Terminal, Cron, App Store, Settings, and Log out. The main content area displays a file list for the directory `3.109.217.35/www/wwwroot/test1.blackbucks.me/local/abc/bb_dashboard`. The table has columns for File name, PMSN/Owner, Size, Modification time, and Ps. The files listed are:

File name	PMSN/Owner	Size	Modification time	Ps
4.svg	644 / www	5.88 KB	2022/10/31 17:41:43	
5.svg	644 / www	5.78 KB	2022/10/31 17:41:43	
6.svg	644 / www	6.83 KB	2022/10/31 17:41:43	
7.svg	644 / www	5.81 KB	2022/10/31 17:41:44	
8.svg	644 / www	3.69 KB	2022/10/31 17:41:44	
allreport.php	644 / www	4.46 KB	2022/11/14 16:50:06	
band.php	644 / www	4.31 KB	2022/11/18 15:51:06	
connection.php	644 / www	243 B	2022/11/23 12:00:27	
dart.png	644 / www	40.98 KB	2022/11/12 12:11:33	
dasboard1.php	644 / www	20.33 KB	2022/11/29 17:11:36	
dashboard.php	644 / www	20.33 KB	2022/11/22 23:07:15	

Total 0 directory, 32file(s), size: [Click to calculate](#)

1 1/1 From1-32 Total 32 per page 100 item(s)

aaPanelLinux panel ©2014-2023 aaPanel (bt.cn) [For Support|Suggestions, please visit the aaPanel Forum](#) [Documentation](#)

Figure 5.3.1 C panel 1-2

The screenshot shows the aaPanel Linux panel interface. The left sidebar includes links for Home, Website, FTP, Databases, Docker, Monitor, Security, WAF, Files, Terminal, Cron, App Store, Settings, and Log out. The main content area displays a file list for the directory `3.109.217.35/www/wwwroot/test1.blackbucks.me/local/abc/bb_dashboard`. The table has columns for File name, PMSN/Owner, Size, Modification time, and Ps. The files listed are:

File name	PMSN/Owner	Size	Modification time	Ps
dashboard.php	644 / www	20.33 KB	2022/11/22 23:07:15	
dashboard_cookie.php	644 / www	323 B	2022/11/22 23:04:00	
dashboard_pastqueries.php	644 / www	13.67 KB	2022/11/12 17:51:04	
dashboard_queries.php	644 / www	16.61 KB	2022/11/23 11:58:33	
design.css	644 / www	664 B	2022/11/12 13:10:11	
floral.jpeg	644 / www	43.45 KB	2022/10/31 17:41:40	
palegreen.jpeg	644 / www	8.01 KB	2022/10/31 17:41:40	
ranks.php	644 / www	1.34 KB	2022/11/20 21:36:16	
reportcard.php	644 / www	16.06 KB	2022/11/29 15:45:51	
reportcard_queries.php	644 / www	10.53 KB	2022/11/18 21:54:28	
theme.css	644 / www	595 B	2022/11/12 12:11:33	

Total 0 directory, 32file(s), size: [Click to calculate](#)

1 1/1 From1-32 Total 32 per page 100 item(s)

aaPanelLinux panel ©2014-2023 aaPanel (bt.cn) [For Support|Suggestions, please visit the aaPanel Forum](#) [Documentation](#)

Figure 5.3.2 C Panel 2-2

DYNAMIC DASHBOARD AND REPORT CARD

Figure 5.3.3 Phpmyadmin database short pic

5.4 Sample Screenshots

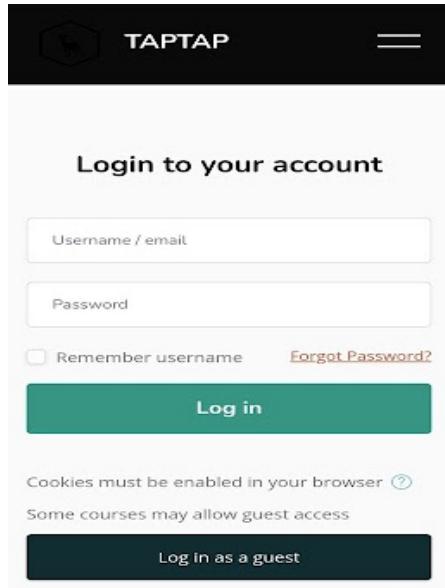


Figure 5.4.1 Login Page

DYNAMIC DASHBOARD AND REPORT CARD

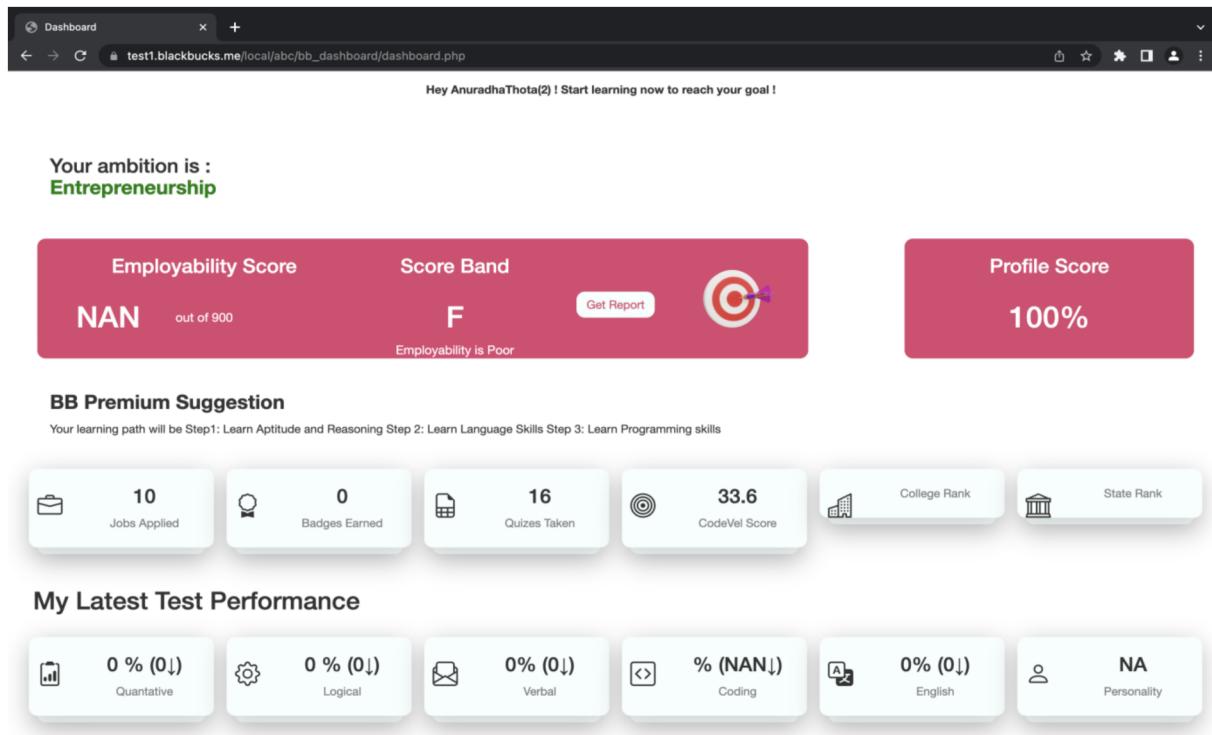


Figure 5.4.2 Dashboard

DYNAMIC DASHBOARD AND REPORT CARD

Dashboard Report Card +

test1.blackbucks.me/local/abc/bb_dashboard/reportcard.php



**BLACKBUCKS MONTHLY
EMPLOYABILITY TESTS**

REPORT CARD

NAME :

MOBILE NO :

COLLEGE NAME :

APTITUDE			ENGLISH				TECHNICAL	
QUANT	VERBAL	LOGICAL	LISTENING	SPEAKING	READING	WRITING	MCQ	CODING
0	0	0	0	0	0	0	0	0

Figure 5.4.3 Report card 1-2

Dashboard Report Card +

test1.blackbucks.me/local/abc/bb_dashboard/reportcard.php

0 0 0 0 0 0 0 0 0

MAT (Monthly Aptitude Test) Score :

BELT (Blackbucks English Language Test) Score :

BTS BAND : Product (This will be displayed after three MET's)
 Service



Gained 0 Out Of 8 Badges

(Try to attempt more tests to get a job in Product based company / Service based company)

[Download](#)

Figure 5.4.4 Report card 2-2



Figure 5.4.5 Unawarded Badges



Figure 5.4.6 Awarded Badges

DYNAMIC DASHBOARD AND REPORT CARD

Figure 5.4.7 Sample codes of two random files

CHAPTER 6

TESTING

Software testing is the process of evaluating and verifying that a software product or application does what it is supposed to do. The benefits of testing include preventing bugs, reducing development costs and improving performance. The main purpose of testing is to ensure that the details of the users and their statistics are getting displayed correctly or not.

Wrong display of results may lead to a negative impact and decline in the business of the website. so it is necessary to make sure that all the features are working properly in any condition

6.1 Dashboard Testing :

There were several features in the dashboard that needs to be tested effectively , for an error-free and efficient performance, which were listed below

6.1.1 Ambition

In order to test whether Ambition is being displayed correctly or not there were two ways that can be followed . one method is to create a new login and ambition is given at the edit profile that generally displays during the process of signup and checking whether the same is displayed in the dashboard or not after successful signup and login and the other method is to compare the ambition of the user that is saved in the database with the ambition that is being displayed on the dashboard. The said approach is followed and found that there were no errors in Ambition.

6.1.2 Profile Score

Profile score is tested by manually listing out of no of fields that were present in the profile page and no of fields that one has filled and performing a mathematical calculation to extract the

percentage of fill and checking whether the value we got and the value that is being displayed on the dashboard are identical or not. The said approach is followed and found that there were no errors in the profile score

6.1.3 Employability Score

The employability score represents the total score of the user obtained in a particular period. It can be tested by summing up the marks that one obtained in all the sections and checking if the value is identical to the values in the database and the value that is being displayed on the dashboard. The said approach is followed by creating a new user and an existing user and found that there were no errors in the Employability score

6.1.4 Score Band

The score band is tested by tracing the code to check what condition the user has met in terms of scores he obtained in the process of getting a band and checked with the band that was obtained when traced with the one being displayed. This said approach is followed by creating a new user and attempting different exams to get scores, band and then evaluated and finally found that there were no errors for a Score band

6.1.5 Comments

Comments are one's that are displayed following the score band. comments contested by tracing the code to check what condition the user has met in terms of scores he obtained in the process of getting a comment and checked with the comment that was obtained when traced with the one being displayed. This said approach is followed by creating a new user and attempting different exams to get comments based on scores and then evaluating and finally finding that there were no errors for the Comments

6.1.6 Suggestions

Suggestions are given for the improvement of the performance of a user. It is important to give the correct suggestion to the use for an effective upfront. Suggestions play a key role and

should be error-free. Suggestions can be tested by tracing the code to check what condition the user has met in terms of scores he obtained in the process of getting a suggestion and checked with the suggestion that was obtained when traced with the one being displayed. This said approach is followed by creating a new user and attempting different exams to get suggestions based on scores and then evaluating and finally finding that there were no errors in Suggestions.

6.1.7 Get report

Get report is a button to generate the report card. To check the functionality of the button it is tested by using both the new user and existing using user by clicking on it and checking if it is generating a report card or not. The said approach is followed and found that the Get report has no errors

6.1.8 No of Jobs applied

No of Jobs is the total no of jobs that a user applied for. This can be tested by logging into the jobs portal using one credential and navigating to the jobs sections and checking the no of jobs he/she applied for and tallying with the one that is being displayed in the dashboard and whether the value that is present in the database are identical or not. The said approach is followed with a new user and existing user id and found that there were no errors for No of Jobs applied

6.1.9 No of Badges gained

No Badges gained are badges that were gained by a user in his previous month's report card. This can be tested by comparing the badges he obtained in the report card via generating a report card with the one that is being displayed on the dashboard. The said approach is followed with a new user and existing user and found that there were no errors for No of Badges gained

6.1.10 No of quizzes taken

The no of quizzes that the user has attempted is displayed in place of no of quizzes taken. This can be tested by using the quiz tables that were presented in the database. writing a query to get the no of quizzes a user has attempted or manually going through the quiz-related tables in the database and searching for a particular id and getting the list of quizzes he committed and manually

noting down the count and comparing that value with the one that is being displayed. The said approach is followed with a new user and existing user and found that there were no errors for No of quizzes taken

6.1.11 State rank

The state rank represents the rank of the user in a particular state. This can be tested with the table in the database that is maintaining the state ranks of users. The said approach is followed with the new user and existing user and found that there were no errors for the state rank

6.1.12 College rank

College rank represents the rank of the user in a particular college. This can be tested with the table in the database that is maintaining the college ranks of users separately. The said approach is followed with the new user and existing user and found that there were no errors for the state rank

6.1.13 Latest quant score

The latest quant score represents the quantitative score of a user. This can be tested by using two approaches. one is creating a new user and attempting the quantitative exams and checking the score obtained with the one that is being displayed and another approach is to check the score of the existing user that is being displayed in the dashboard with the latest score among multiple scores that were present in the database. The said approach is followed and found that there were no errors in the latest quant score

6.1.14 Latest verbal score

The latest verbal score represents the verbal score of a user. This can be tested by using two approaches. one is creating a new user and attempting the verbal exams and checking the score obtained with the one that is being displayed and another approach is to check the score of the

existing user that is being displayed in the dashboard with the latest score among multiple scores that were present in the database. The said approach is followed and found that there were no errors in the latest verbal score

6.1.15 Latest logical score

The latest logical score represents the logical score of a user. This can be tested by using two approaches. one is creating a new user and attempting the logical exams and checking the score obtained with the one that is being displayed and another approach is to check the score of the existing user that is being displayed in the dashboard with the latest score among multiple scores that were present in the database. The said approach is followed and found that there were no errors in the latest logical score

6.1.16 Latest Coding score

The latest coding score represents the summation and average of the technical MCQ and coding score of a user. This can be tested by using two approaches. one is creating a new user and attempting the coding exams and checking the scores obtained in technical and coding by summing and averaging the with the one that is being displayed other approaches is to check the score of the existing user that is being displayed in the dashboard with the latest score among multiple scores of technical MCQ and coding that were present in the database by summing and averaging them. The said approach is followed and found that there were no errors in the latest logical score

6.1.17 Latest english score

The latest coding score represents the summation and average of the listening, speaking, reading and writing scores of a user. This can be tested by using two approaches. one is creating a new user and attempting the English exams and checking the scores obtained in four fields in technical by summing and averaging the with the one that is being displayed other approaches is to check the score of the existing user that is being displayed in the dashboard with the latest score among multiple scores of the four fields that were present in the database by summing and averaging them. The said approach is followed and found that there were no errors in the latest English score

6.2 Report card Testing

There were several features in a Report card that needs to be tested effectively , for an error-free and efficient performance, which were listed below

6.2.1 Name

The name can be tested by checking the name of the user in the profile and the one present in the database with the one that is generated in the dashboard such that all are identical or not. The said approach is followed and found that there were no errors in the Name

6.2.2 Phone number

Phone numbers can be tested by checking the phone number of the particular user in the profile and the one present in the database with the one that is generated in the dashboard such that all are identical or not. The said approach is followed and found that there were no errors in the Phone number

6.2.3 College name

College name can be tested by checking the name of the college of the particular user in the profile and the one present in the database with the one that is generated in the report card such that all are identical or not. The said approach is followed and found that there were no errors in the college name

6.2.4 Monthly quantitative score

The monthly quantitative score represents the average quantitative score of a user for a particular month. This can be tested by checking the score of the user that is being displayed on the report card with the average score of multiple scores that were present in the database. The said approach is followed and found that there were no errors in the monthly quantitative score

6.2.5 Monthly verbal score

The monthly verbal score represents the average quantitative score of a user for a particular month. This can be tested by checking the score of the user that is being displayed on the report card with the average score of multiple scores that were present in the database. The said approach is followed and found that there were no errors in the monthly verbal score

6.2.6 Monthly logical score

The monthly logical score represents the average quantitative score of a user for a particular month. This can be tested by checking the score of the user that is being displayed on the report card with the average score of multiple scores that were present in the database. The said approach is followed and found that there were no errors in the monthly logical score

6.2.7 Monthly listening score

The monthly listening score represents the average quantitative score of a user for a particular month. This can be tested by checking the score of the user that is being displayed on the report card with the average score of multiple scores that were present in the database. The said approach is followed and found that there were no errors in the monthly listening score

6.2.8 Monthly speaking score

The monthly speaking score represents the average quantitative score of a user for a particular month. This can be tested by checking the score of the user that is being displayed on the report card with the average score of multiple scores that were present in the database. The said approach is followed and found that there were no errors in the monthly speaking score

6.2.9 Monthly reading score

The monthly reading score represents the average quantitative score of a user for a particular month. This can be tested by checking the score of the user that is being displayed on the report card

with the average score of multiple scores that were present in the database. The said approach is followed and found that there were no errors in the monthly reading score

6.2.10 Monthly writing score

The monthly writing score represents the average quantitative score of a user for a particular month. This can be tested by checking the score of the user that is being displayed on the report card with the average score of multiple scores that were present in the database. The said approach is followed and found that there were no errors in the monthly writing score

6.2.11 Monthly technical mcq score

To test whether Ambition is being displayed correctly or not two ways can be followed . one method is to create a new login and ambition is given at the edit profile that generally displays during the process of signup and checking whether the same is displayed in the dashboard or not after successful signup and login and the other method is to compare the ambition of the user that is saved in the database with the ambition that is being displayed on the dashboard.

6.2.12 Monthly coding score

The monthly coding score represents the average quantitative score of a user for a particular month. This can be tested by checking the score of the user that is being displayed on the report card with the average score of multiple scores that were present in the database. The said approach is followed and found that there were no errors in the monthly coding score

6.2.13 MAT score

MAT score represents the summation average of quantitative, verbal, and logical scores of a user for a particular month. This can be tested by checking the score of the user that is being displayed in the report card with the score that is obtained by summing and averaging the monthly quantitative, verbal, and logical scores. The said approach is followed and found that there were no errors in the MAT score

6.2.14 BELT score

BELT score represents the summation average of listening, speaking, reading and writing scores of a user for a particular month. This can be tested by checking the score of the user that is being displayed in the report card with the score that is obtained by summing and averaging the monthly listening, speaking, reading and writing scores. The said approach is followed and found that there were no errors in the BELT score

6.2.15 BTS band

BTS band represents the suitable role of the user for a particular month using 2 parameters i.e product and service. If the summation average of technical MCQ and coding is >80 the product has opted for else service has opted. This can be tested by checking the opted role that is being displayed in the report card with the role that is obtained by summing and averaging the technical MCQ and coding scores. The said approach is followed and found that there were no errors in the BTS band.

6.2.16 Badges

Badges represent the awards for that particular month and can be obtained upon attempting the respective exams. This can be tested using a new user and an existing user. A new user can be one who has not written a single exam and an existing user is one who has at least written one exam. Reports cards of both were generated to check whether the badges are being generated correctly or not. The said approach is followed and found that there were no errors in the Badges

6.2.17 Download

The download is a button to download the report card. To check the functionality of the button it is tested by using both the new user and existing using user by clicking on it and checking if it is downloading the report card or not. The said approach is followed and found that the Download has no errors

6.3 Cookie Testing

Cookie plays a prominent role in the generation of the report card. It consists of a value that acts as an input to all the queries that were responsible for resulting in the values of respective fields in the report card. A cookie can be tested by evaluating the value of the cookie with the primary key value of the user in the database. This can be done by inspecting the page, thereby selecting the application tab and thereby selecting the cookie tab that consists of various cookies thereby choosing the required cookie and evaluating the value of the cookie with the primary key value of the user in the database. The said approach is followed and found that there were no errors in the cookies

CHAPTER 7

CONCLUSION & FUTURE SCOPE

7.1 Conclusion

The Dynamic Dashboard is designed to keep a track of one's current progress through a graphical user interface window . It helps in keeping track of various features that helps in growth along with some additional features while the Report card provides a Certificate that helps in figuring out his/her performance in the complete month with 8 different badges that were being awarded for one's performance and also can be downloaded via a new graphics user interface that is completely different from the previous dashboard window .

7.2 Future Scope

The following things can be done in future.

- The current system is confined only to displaying the results of present and preceding month . It can be extended to have display the results for more than two months using graphs.
- A separate block that depicts the list of courses , skills and links for them for easy navigation that one has to improve for improvising performance
- A Dynamic User interface can be further developed such that it automatically changes the theme based on the factors like time/weather..etc ,introducing a chat bot based on the requirements following the HCI principles

CHAPTER 8

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