WEB DEVELOPMENT INTERNSHIP RESUME BUILDER

PRACTICAL SUMMER INTERNSHIP REPORT

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR Summer Industrial Training at

<u>PEPCODING, NOIDA</u> (From June 2022 to December 2023)

SUBMITTED BY

Student Name – Branch – College Roll No. – Univ.Reg.No.-



DEPT: COMPUTER SCIENCE ENGINEERING

St. ANDREWS INSTITUTE OF TECHNOLOGY AND MANAGEMENT

GURGAON, HARYANA SESSION 2023-2024

CERTIFICATE

PEPCODING EDUCATION (OPC) PRIVATE LTD.

1st Floor, B-4, Sec-63, Noida, Uttar Pradesh-201301

Website: www.pencoding.com Phone: +911 4019 4461

Soone cooling

DATE: 4th October, 2021

To.

The Training and Internship Officer,

St. Andrews Institute. of Tech. and Mgmt,

Haryana,

TO WHOM IT MAY CONCERN

Esteemed Sir/Ma'am

It is our immense pleasure to confirm for you that Mr. Yogesh Kumar, B.Tech (CS) student at your prestigious college, would be working under our organization as a Web Developer Intern for a total period of 3 months from 5th October 2021 to 5th January 2022 which would enable the student to be industry ready.

During his training tenure with us, we hereby assure you of the highest standards of professional training with all support facilities in optimal working environment.

For Pepcoding Education Pvt. Ltd.

Sumeet

Sumeet Malik

Director

NOTE: The declaration made in the letterhead is valid only after it has been signed by the director.

ST. ANDREWS INSTITUTE OF TECHNOLOGY & MANAGEMENTGURUGRAM

TO WHOM IT MAY CONCERN

I hereby certify that "xyz" Roll No 123456 of St. Andrew's Institute of Technology and management, Gurgaon, has undergone ninety days month industrial training from October to January at ourorganization to fulfill the requirements for the award of degree of B.Tech. (Branch).He works on web development INTERNSHIP during the training under the supervision of SUMMET MALIK. During his tenure with us we found him sincereand hard working.

Signature of the Student	
Signature of the Director (S)	Signature of the HOD (S)

Wishing him a great success in the future.

ACKNOWLEDGEMENT

The authors are highly grateful to the, Director, St. Andrew's Institute of Technology and Management, Gurgaon, for providing this opportunity to carry out the Summer Internship training at Pepcoding.
The constant guidance and encouragement received from Dean T&P, SAITM, Gurgaon, has been of great help in carrying out the INTERNSHIP work and is acknowledged withreverential thanks.
The authors would like to express a deep sense of gratitude and thanks profusely to Summet Malik Director/CEO of Company, Without the wise counsel and able guidance,it would have been impossible to complete the report in this manner.
The help rendered by [Faculty In charge of INTERNSHIP], Supervisor() for experimentation is greatly acknowledged.
The author express gratitude to other faculty members of Computer Science Engineering departmen of SAITM for their intellectual support throughout the course of this work.
Finally, the authors are indebted to all whosoever have contributed in this report work and friendly stay .
[YOGESH KUMAR]

ST. ANDREWS INSTITUTE OF TECHNOLOGY & MANAGEMENT, GURUGRAM JULY- DEC, 2023

BONAFIDE CERTIFICATE

This is to certify that the project entitled Resume Builder is work done by Mr. Yogesh Kumar URN:1912190213 .of	
Signature of the DIRECTOR.	Signature of HOD.
Submitted for the Project Viva-Voce examination held o	n

DECLARATION

I affirm that the project work titled **Resume Builder** being submitted in partial fulfillment for the award of the degree of BTECH is the original work carried out by me. It has not formed the part of any other project work submitted for award of any degree or diploma, either in this or any other University.

Signature of the Candidate

Yogesh Kumar 1912190213

I certify that the declaration made above by the candidate is true.

Signature of the Guide

Signature of HOD

List Of Figures

Figures	Page No.
Fig 1	1
Fig 2	9
Fig 3	10
Fig 4	11
Fig 5	12
Fig 6	12
Fig 7	13
Fig 8	13
Fig 9	14
Fig 10	15

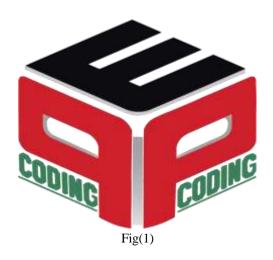
Tables Of Context

S No.	<u>Title</u>	Page No.
1	Introduction to Company	1
1.1	Executive Summary	1
1.2	Company Profile	2 3
1.3	Company Details	3
2	Feasibility Study	3
3	Software Requirements Specifications	6
4	Introduction to INTERNSHIP	6
4.1	Description	6
4.2	Objective	7
4.3	Used Technology	7
5	Design of Solution	9
5.1	Zero level DFD	9
5.2	First level DFD	10
5.3	Database Description	10
5.3.1	Resume Collections	11
5.3.2	Users Collections	12
5.4	Frontend Screen Layout	
6	Technology Overview	
6.1	Hardware Requirements	
6.2	Software Requirements	
7	Testing & Maintenance.	
7.1	Testing	
7.2	Maintenance Description	

8 9 9.1 9.2	Methodology Enhancement User Authentication User Authorization
10	Learning From the
11	INTERNSHIP
12	Result
13	Scope of the INTERNSHIP
14	Conclusion
14	Bibliography

1. INTRODUCTION TO ORGANIZATION

1.1 EXECUTIVE SUMMARY (Pepcoding, Noida)



Pepcoding, founded in 2017 with the vision to bring in "The Great Indian Coding Renaissance". Pepcoding specialize in teaching Data Structure & Algorithms, Web Development, Data Science, CORE, CBSE, GATE & Business Analytics and getting the best results out of these courses with more than 1000 placements in the top MNC's in the past 2 years.

Pepcoding build bridge the knowledge gap between colleges and industry. Pepcoding boasts of world-class teaching faculty and a state-of-art learning platform for Coding education with faculty alumni of IIT, Stanford, IIIT and Facebook. Pepcoding teaches 17+ Programming courses in Foundation,

Advanced, Data & Development courses such as Machine Learning, Data Science, Web Development, Android and more. Today, Pepcoding ecosystem comprises of 40,000+ students and alumni, 1000+ Campus Ambassadors, 2000+ Teaching Assistants, and 150+ employees.

Pepcoding is one of the most premia and trusted institutes that offer certified courses in all the top demanding skills of the 21st century. They also offer various courses for placement and DSA courses, you can opt for their free trial and you will know whether you want to continue or

not. Pepcoding offers world-class teaching faculty and a state-of-art learning platform for Coding education. Pepcoding teaches courses in Programming fundamentals as well as advanced courses such as Machine Learning, Data Science, Web Development, etc. The courses are completely online and are available in both English and Hindi language. Pepcoding is the most preferred technical course platform for students in India and currently has a monopoly position across the college market in India. With the vision to reach millions in a scalable way, pepcoding has pioneered a proprietary online teaching platform, which completely mirrors the offline classroom experience into online, and thus delivers a world-class learning experience to students.

1.2 Company Profile

Pepcoding Education (Opc) Private Limited is an unlisted private (company incorporated on 08 November, 2017. It is classified as a one-person company and is located in North West, Delhi. Its authorized share capital is INR 5.00 lac and the total paid-up capital is INR 5.00 lac.

Pepcoding Education (Opc)'s **operating revenues range is Under INR 1 cr** for the financial year ending on 31 March, 2019. It's **EBITDA has increased by 571.54** % over the previous year. At the same time, it's book networth has increased by 19.97 %.

The current status of Pepcoding Education (Opc) Private Limited is - Active.

The last reported AGM (Annual General Meeting) of Pepcoding Education (Opc) Private Limited, per our records, was held on 30 September, 2019. Also, as per our records, its last balance sheet was prepared for the period ending on 31 March, 2019.

Pepcoding Education (Opc) Private Limited has one director – Sumeet-Malik

The Corporate Identification Number (CIN) of Pepcoding Education (Opc) Private Limited is

U80900DL2017OPC325752. The registered office of Pepcoding Education (Opc) Private Limited

is at B-4/5, 1st Floor, B Block, Sector 63, Noida, Uttar Pradesh 201301.

Revenue / turnover of PEPCODING EDUCATION (OPC) PRIVATE LIMITED is Under INR 1 cr

Net worth of the company has increased by 19.97 %

EBITDA of the company has increased by 571.54 %

Total assets of the company has increased by 44.55 %

Liabilities of the company has increased by 54.80 %

1.3 Company Details:

Addresss: PepCoding, B-4/5, 1st Floor, B Block, Sector 63, Noida, Uttar Pradesh 201301.

Contact Number: +91 7048971481

> Email: contact@pepcoding.com

2. FEASIBILITY STUDY

Feasibility is the determination whether or not a INTERNSHIP is worth doing. The process followed in making this determination is called feasibility study. Since the feasibility study may lead to commitment of large resources, it becomes necessary that it should be conducted competently and that no fundamental errors of judgment are made. Preliminary investigation examine INTERNSHIP feasibility, the likelihood the system will be useful to the organization. Three important tests of feasibility are described below:-

<u>Technical Feasibility</u>

This is concerned with specifying equipment and software that will successfully satisfy the user requirement. During the analysis of the technical feasibility of the system, it is considered that

- It should produce outputs in a given time.
- It should give quick response under certain condition.
- The hardware should be able to process certain volume of transactions at faster speed.

Since the INTERNSHIP comes under the category of database management system, so here NoSQL is used as database. The reason for choosing NoSQL is that it is easy to use. NoSQL with the above configuration of hardware system and aforesaid software, the system will be entirely technically feasible.

• Operational Feasibility

The INTERNSHIP has been designed considering all future scopes that can come into the consideration in the near future and also considering that the organization can make some changes in its working environment or operational structure, or it can add some new skill that can be

essential in near

future. At this level the INTERNSHIP is almost operationally feasible because the system has been designed so efficiently that a person having little knowledge of computers can handle the system very well. The user may not know every little part of the system but the INTERNSHIP should support him in the way that he can easily understand information's and may respond according to that.

<u>Economic Feasibility</u>

Economic analysis is the most frequently used technique for evaluating the effectiveness of proposed system. The proposed system just needs to install the new software system into to the system; a web site is to be registered on the net. Global Mailing System can carry on with the current hardware status. For employees as well as the company, it is in full condition to pay for the benefit of employee and company as. As communication can be made without internet, so it reduces the cost of internet Thus, INTERNSHIP is economically feasible.

3. SOFTWARE REQUIREMENT SPECIFICATION

Introduction

A software requirements specification (SRS) is a requirements specification for a software system which is a complete description of the behavior of a system to be developed and may include a set of use cases. These use cases describe interactions the user and the software. It also contains non-functional requirements which impose constraints on the design or implementation modules. Such constrains are quality standards, design and performance engineering requirements.

PURPOSE

The purpose of designing the "Resume Builder" is to give the users a platform for storing and sharing the resumes on cloud basis by creating their account.

4. INTRODUCTION TO INTERNSHIP

RESUME BUILDER WEBSITE

4.1 Description

Resume builders are interactive online resume templates website that allows you to plug in information and build a cohesive resume.

Resume Builder features step-by-step tips and advice for each section so that you can perfect your resume, every time. Once you input your unique history, Resume Builder auto-formats your resume to a professional standard so you can move forward with the best layout possible.

4.2 Objective

Resume Builder is to develop web-based application and using this platform, people in need of basic necessities for their resumes. People can post their requirements and can professional, elegant, creative, or modern resume templates. Resume builder offers templates. You can easily choose and adapt the layout to any resume format you choose.

4.3 Technologies

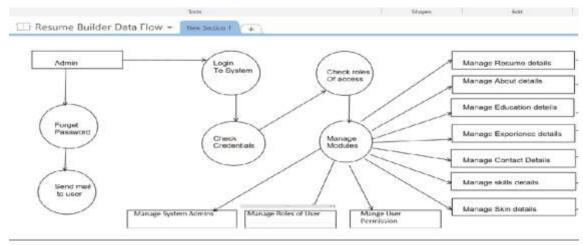
- **HTML**: It stands for Hyper Text Markup Language. It is used to design the front-end portion of web pages using markup language. HTML is the combination of Hypertext and Markup language. Hypertext defines the link between the web pages. The markup language is used to define the text documentation within tag which defines the structure of web pages.
- **CSS**: Cascading Style Sheets, fondly referred to as CSS, is a simply designed language intended to simplify the process of making web pages presentable. CSS allows you to apply styles to web pages. More importantly, CSS enables you to do this independent of the HTML that makes up each web page.

- **JavaScript**: JavaScript is a famous scripting language used to create the magic on the sites to make the site interactive for the user. It is used to enhancing the functionality of a website to running cool games and web-based software.
- **Bootstrap**: Bootstrap is a free and open-source tool collection for creating responsive websites and web applications. It is the most popular HTML, CSS, and JavaScript framework for developing responsive, mobile-first web sites
- Google authentication: Google Authenticator is a software-based authenticator by Google that implements two-step verification services using the Time-based One-time Password Algorithm and HMAC-based One-time Password algorithm, for authenticating users of software applications.
- **React Framework:** React is a free and open-source front-end JavaScript library for building user interfaces based on UI components. It is maintained by Meta and a community of individual developers and companies.
- **Google Firebase**: Firebase is a platform developed by Google for creating mobile and web applications. It was originally an independent company founded in 2011.

5. Design of Solution

5.1 Zero Level Data Flow Diagram

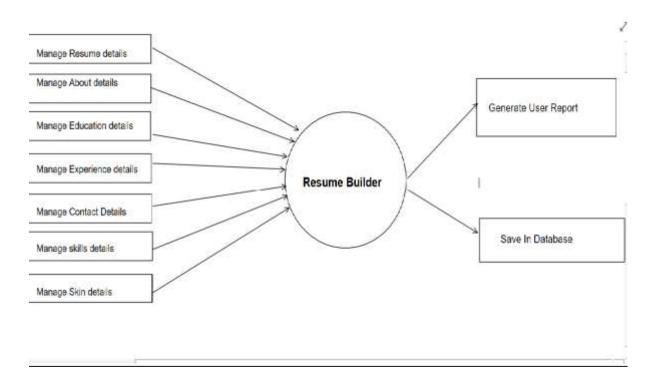
- 1. Check user login information and generate the report of user credentials.
- <u>2.</u> Processing Resume records and generate report of all Resume.
- <u>3.</u> Processing about records and generate report of all about.
- 4. Processing education records and generate report of all educations.
- 5. Processing contact records and generate report of all contact.
- 6. Processing experience records and generate report of all experience.
- 7. Processing skills records and generate report of all skills.
- 8. Processing skin records and generate report of all skin.
- 9. Admin logins to the system and manage all the functionalities of Online Resume Builder
- 10. Admin can add, edit, delete and view the records of Resume.
- 11. Admin can manage all the details of resume.
- 12. Admin can apply choose different templates for resume.
- 13. Admins can track the detailed information of their resumes.



Fig(2)

5.2 First level Data Flow Diagram

- 1. Take the all information from the user.
- 2. Generate the resume for the user.
- 3. Save the all data in database.



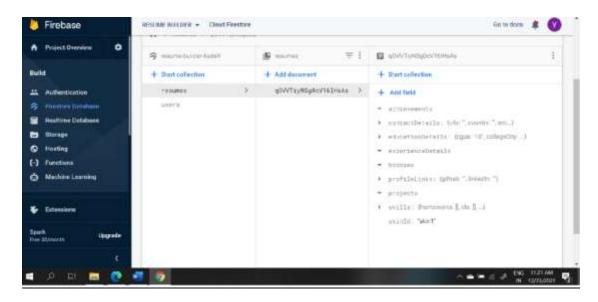
<u>Fig(3)</u>

5.3 Database Description

Google Firebase is a Google-backed application development software that enables developers to develop iOS, Android and Web apps. Firebase provides tools for tracking analytics, reporting and fixing app crashes, creating marketing and product experiment. Firebase is categorized as a NoSQL database program, which stores data in JSON-like documents.

5.3.1 Resume Collection

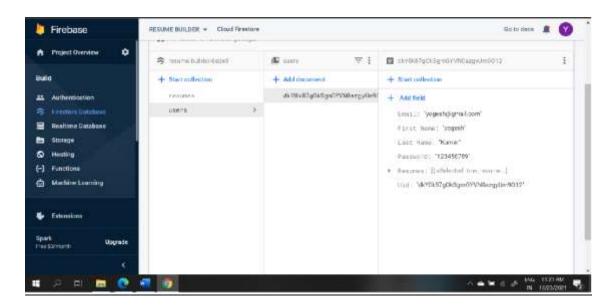
In this collection we store the resume id and user information and selected templates by the user.



Fig(3)

5.3.2 User Collection

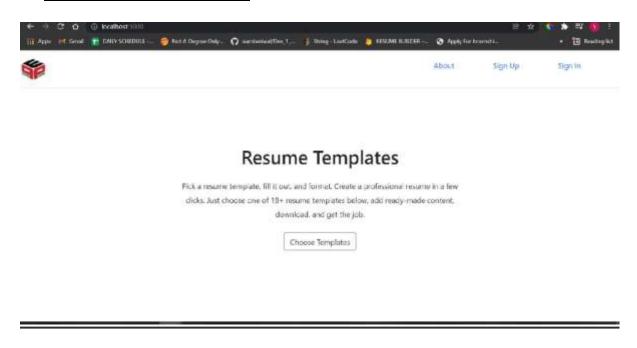
In this collection we store the user and their resume id.



<u>Fig(4)</u>

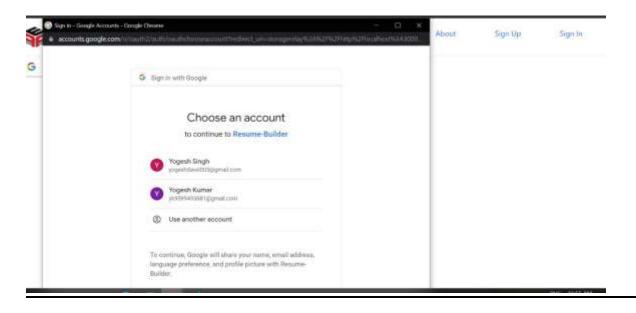
5.4 Frontend Screen Layout

• Home Page without Login



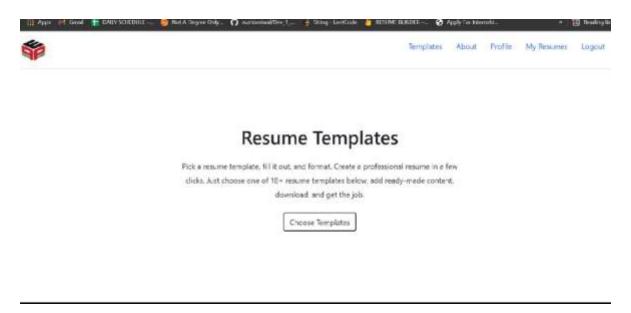
Fig(5)

Google Auth Login



<u>Fig(6)</u>

• Home Page After Login



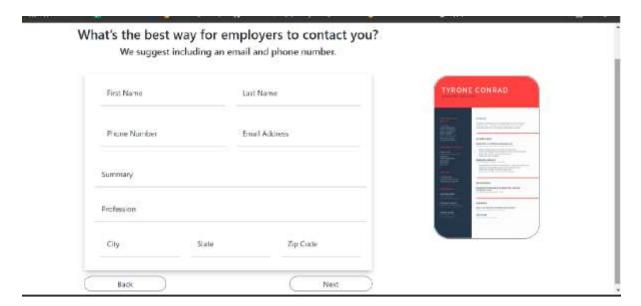
Fig(7)

Choose Template Page



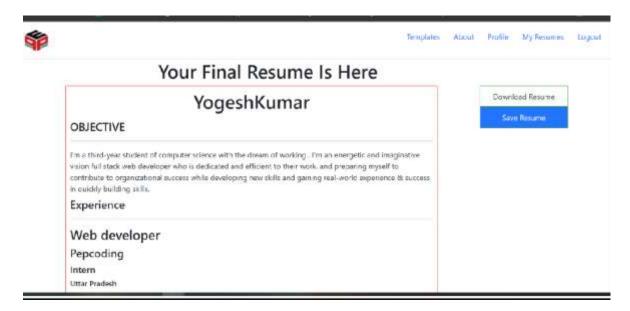
<u>Fig(8)</u>

• Fill Details Page



Fig(9)

• Download and Save Resume Page



Fig(10)

<u>6.</u> Technology Overview

6.1 HARDWARE REQUIREMENTS:

- ➤ <u>USER'S:</u>
- PROCESSOR: 2.0 GHZ AND ABOVE.
- MEMORY: 2 GB RAM.
- HARD DISK: 100 GB HDD.
- > DEVELOPER'S:
- PROCESSOR: 2.0 GHZ AND ABOVE
- MEMORY: 2 GB RAM
- HARD DISK: 100 GB HDD
- NETWORK: ACTIVE INTERNET CONNECTION
- FRONT END: React, HTML, CSS, IDE(Vs Code).
- ➤ BACK END: POSTMAN, FIREBASE, CHROME.

6.2 SOFTWARE REQUIREMENTS:

- **DEVELOPER'S**: FIREBASE, CHROME.
- ➤ <u>USER'S INTERNET BROWSER</u>: (CROSPLATFORM), CHROME

7. TESTING AND MAINTENANCE

7.1 TESTING

Software testing is a critical element of software quality assurance and represents the ultimate review of specification, design and coding. The purpose of product testing is to verify and validate the various work product viz. units, integrated unit, final product to ensure that they meet their respective requirements.

7.1.1 TESTING OBJECTIVES:

- Testing is a process of executing a program with the intent of finding an error.
- A good test case is one that has a high probability of finding an as-yet undiscovered error.
- A successful test is one that uncovers an as-yet undiscovered error.
- Live data is the actual data to be used in the proposed system.
- Test data is previously designed sample input to achieve predictable results.

This process has two parts:

- 1) **PLANNING:** This involves writing and reviewing unit, integration, functional, validation and acceptance test plans.
- 2) **EXECUTION**: This involves executing these plans, measuring, collecting data and verifying if it meets the quality criteria. Data collected is used to make appropriate changes in the plans related to development and testing. The quality of a product or item can be achieved by ensuring that the product meets the requirements by planning and conducting the following tests at various stages.

1) BLACK-BOX TESTING

- All the software functions are operational
- Input is properly accepted, Output is correctly produced,
- The integrity of external information (e.g.: a database) is maintained.

2) WHITE-BOX TESTING

_It is predicated on close examination of procedural details. Providing test cases that exercise specific sets of conditions and / or loops tests logical paths through the software. The "state of the program" may be examined at various points to determine if the expected of asserted status corresponding to the actual status.

Control Structure Testing

- Boolean operator error
- Boolean variable error
- Boolean parenthesis error
- Relational operator error
- Arithmetic expression error

1) **Loop Testing:**

Loops are the corner stone for the vast majority of all algorithms implemented in software.

Loop testing is a white-box testing technique that focuses exclusively on the validity of loop constructs.

Four different classes of loops:

- Nested Loops
- Concatenated Loops
- Unstructured Loops

2) **Dataflow Testing:**

The dataflow testing method selects test paths of a program according to the location of definitions and uses of variables in the program.

7.1.2 TESTING STRATEGIES:

A strategy for software testing integrates software test case design methods into a well-planned series of steps that result in the successful construction of software. A software testing strategy should be flexible enough to promote a customized testing approach.

- <u>UNIT TESTING</u>: Unit testing begins at the vertex of the spiral and concentrates on each unit of the software as implemented in the source code. The individual modules were tested during the development. Unit test cases and their results are submitted periodically during the development stage.
- <u>INTEGRATION TESTING</u>: Integration testing focuses on design and construction of the software architecture. After two or more product units are constructed, the development team, to test the interface between the integrated units, conducts integration testing.
- <u>FUNCTIONAL TESTING</u>: Functions are invariably related to one another & interact in the total system. Each function is tested to see whether it conforms to related functions in the system. Each portion of the system is tested against the entire module both test & live data are used before the entire system test was conducted.
- <u>ACCEPTANCE TESTS:</u> During this test we determine how users will use the system when processing data or preparing reports.
- <u>VALIDATION TESTING:</u> This is where requirements established as part of software requirements analysis is validated against the software that has been constructed. _
- **SYSTEM TESTING**: It is here the software and other system elements are tested as a whole. Proper procedures are forced in the software for recovery as the software may fail in a variety of ways. Proper security attempts to verify that protection mechanisms built into a system will, in fact protect it from improper penetration.

7.2 APPROACH FOR TESTING:

For unit testing, the modules are tested for correctness of logic applied and should detect errors in coding. Valid and invalid data should be created and the programs should be made to process this data to catch errors.

For Example, in the Distance Learning System

- In the registration module while entering the data for user, one cannot go for password less than eight characters., so one should ensure that it should result in an error message.
- All dates that are entered should be validated. No program should accept invalid dates. For system testing, when unit tests are satisfactorily concluded, the system as a complete entity must be tested. At this stage, end-users and operators become actively involved in testing. While testing one should also test to find discrepancies between the system and its original objective, current specification and systems documentation.

5.2 MAINTENANCE DESCRIPTION

This is an ongoing exercise after the system has been implemented. The real life would be never static. It is necessary to eliminate errors in the working system during its working life and to tune the system to any variations in its working environment. System planners must always plan for resource availability to carry out these maintenance functions. Its requirements and objectives keep changing. So shall be the system, which has been designed primarily to meet those objectives. Thus, the system analyst has to keep on carrying out changes and modification into the system, a stage called normally as system maintenance.

CORRECTIVE MAINTENANCE: This pertains to the changes the software to correct defects.

ADAPTIVE MAINTENANCE: Overtime, the original environment for which the web application was developed is likely to change. This maintenance results in modification to the software to accommodate changes to its external environment.

8. Methodology:

This INTERNSHIP is to provide classifieds information. The website will provide different kinds of facilities to the user like build their resume, select different templates. The user should register to utilize the site. Each user will be given UserId and password. Using that Id and password user can enter in to the site and can build resume. This INTERNSHIP is implemented using react as the front-end and firebase as back-end.

9. Enhancement

Security means different things to different people depending upon their perspective. In the context of our application it means security of the data from unauthorized access and modification i.e. only authorized user should be able to view presented information according to their access permissions.

9.1 User Authentication

Every registered user will have a login ID and password. The system administrator, using the functionality provided by login control module, will create folder and upload data in the folder. Whenever a new user is registered, a new login ID and password will be created. Users can change own profile picture and address. The passwords will not be displayed on the screen but we can remembered by security field in the database.

9.2 User Authorization

For data entry and modification, permissions will be defined for the entry screens. Administrator and Users will be having same screens and different access rights. Administrator would be able to manage different operations and functions whereas a registered user would be able to access all the features available on the website

- 1) Most important future scope is to integrate Share Point with several social networking sites like Facebook, Twitter etc. from where a user can also share Post with their friends.
- 2) The future scope of this INTERNSHIP would be an addition feature of CHAT where in the real time conversation would be enabled.
- 3) It could also include a module through which outside users can access to some specific levels.

10. My learning from the INTERNSHIP:

From the INTERNSHIP of pepcoding Group I have learnt a lot of things which are:

- 1. How to communicate with the team.
- 2. What manners should follow when communicate with a owner.
- 3. How a website helps an organization in the long run.
- 4. How to beat the competitors.
- 5. How to fix the bugs.
- 6. Strategical development of website.

<u>11. Result</u>

-17	and the second	1500-700-01			
	TEST	INPUT	EXPECTED RESULT	ACTUAL RESULT	
	CASE				
	Success	Login for User			
	1.	mailId=email id at time of registration	WELCOME Name	Welcome UserName	
		Password=Required same as at time of registration			
	Unsucc	essful Login for User			
	2.	User id =xyz Password=zyz	You are not registered	Mailed or password is incorrect	
	Suggess	ful new registration			
	Buccess	itui new registration			
	3.	Z	You are successfully registered!!!		
	TEST	INPUT	EXPECTED RESULT	ACTUAL RESULT	
	CASE				
1 J:	Unsucc	essful new registration,			

4.	First Name=abhishek mailId=bablu@gmail.com Not Available password=abhishek please enter alphabet and numeric combination Security Question=who is your best friend Answer=aa	You are not registered!!!	Welcome User
TEST CASE	INPUT	Expected Result	Actual Result

Forgot Password/Change Password

- 5. mailId=bablu@gmail.com Success
- 6. Security question=What is name of your first school?

Ans= D.A.V

12. SCOPE OF THE INTERNSHIP

Since this system has been developed using object oriented programming, there are every chances of reusability of the codes in other environments and even different platforms. Also its present features can be enhanced by some simple modifications in the code so as to use it in the changing scenario. Apart from reusability, the other features are—

- Extensibility
- Robustness
- Understandability
- Cost Effectiveness

In future our plan is to integrate this Resume Builder with one's Gmail, Facebook, twitter and several social networking sites which may help user to share or download files and document from using a single account that is CloudBox.

13. Conclusions

System was developed and fasted in steps. Once the design was finalized, the format of the output reports was set one by one after approval from the user department. System was first tested on the test data and then real data. Minor programming errors were identified and rectified. After rectifying the system was implemented successfully and accuracy was found. The system, after testing, was found accurate to be implemented. After testing certain limitations were found. Those limitations were upgraded as per the user's requirements. As the system is developed using "Express Technology" further enhancements can easily be done. After testing, our system "Resume Builder is web-based platform that facilitates building alot of_resumes dedicated to bringing a positive change in the Society.

14. BIBLIOGRAPHY

Websites:

- > www.google.com
- https://reactjs.org/
- https://firebase.google.com/
- https://www.w3schools.com/
- ➤ https://developer.mozilla.org/en-US/docs/Web/JavaScript
- https://devdocs.io/javascript/

BOOKS:

- ➤ Software Engineering By: "Roger S. Pressman"
- Bootstrap By: "Jake Spurlock"
- ➤ JavaScript: The Good Parts