Resume Builder for skilled Fresher

A Major Project Report

submitted in partial fulfillment of requirement of the degree

of

Master of Computer Applications

by

Akshat Dwivedi
EN21CA501013

under the guidance of

Prof. Ritu Sodhi

Department of Computer Applications
Faculty of Engineering
MEDI-CAPS UNIVERSITY, INDORE- 453331
Jan-June 2023

Report Approval

The project work **"Resume Builder for skilled Fresher"** is hereby approved as a creditable study of an engineering/computer application subject carried out and presented in a manner satisfactory to warrant its acceptance as prerequisite for the Degree for which it has been submitted.

It is to be understood that by this approval the undersigned do not endorse or approval any statement made, opinion expressed or conclusion drawn there in; but approve the "Project Report" only for the purpose for which it has been submitted.

Examiner(s)

Name(s)	Signature(s)
1. …….	…….
2. …….	…….
3. …….	…….
4. …….	…….
5. …….	…….

Date: …….

Declaration

I hereby declare that the project entitled "**Resume Builder for skilled Fresher**" submitted in partial fulfillment for the award of the degree of Master of Computer Applications in "Department of Computer Applications" completed under the supervision of **Prof. Ritu Sodhi Major Project Guide, Department of Computer Applications,** Faculty of Engineering, Medi-Caps University Indore is an authentic work.

Further, I declare that the content of this Project work, in full or in parts, have neither been taken from any other source nor have been submitted to any other Institute or University for the award of any degree or diploma.

Signature

Akshat Dwivedi

04/05/2023

Certificate

I, **Prof. Ritu Sodhi** certify that the project entitled "**Resume Builder for skilled Fresher**" submitted in partial fulfillment for the award of the degree of Master of Computer Applications by **Akshat Dwivedi** is the record carried out by him under my guidance.

Prof. Ritu Sodhi

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Dear **Akshat Dwivedi,** M.C.A 4th Semester Medicaps University, Indore

On behalf of **Annova Solutions,** I am pleased to inform your acceptance of an internship position as **Intern NodeJS Backend Developer** . Your first day of joining is **25-Jan-2023**. In addition to your duties outlined in the interview, you will report to your internship manager **Mr. Hemant Vijayvargiya (Contact 9669562594)**

As an intern, you are not the company's employee; and therefore, will not receive any regular employee benefits. This is an unpaid internship program. You understand that participating in the internship program is not an offer of employment. This internship will end on **25-May-2023.**

During your internship, you will have an access to company's clients and confidential information. You agree that you will keep all this information and client information strictly confidential and will not share it with anyone outside the company. You will not use it for your own benefits and on completion of the internship; you will return documents, equipment, and all property of the company.

Congratulations on the Internship.

Best Regards,

ANNOVA SOLUTIONS PVT. LTD. INDORE

Nandini
HR Manager,
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Date :10-May-2023

TO WHOM IT MAY CONCERN

This is to certify that **Akshat Dwivedi, Student of Medi-caps University, Indore, MCA 4th Semester** has successfully completed internship program from 25-Jan-23 to 10-May-23 at Annova Solutions, Indore. He has worked as a full time **Intern Node Backend Developer** and designed various creatives also, He dedicated her full efforts in growing online presence of Annova Solutions.

During the Internship he demonstrated good design skills with a self- motivated attitude to learn new things.

We wish him all the best for his future endeavour.

Warm Regards

ANNOVA SOLUTIONS PVT. LTD. INDORE

Nandini
HR Manager,
Annova Solutions, Indore
https://annovasolution.com/

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Acknowledgement

I would like to express my deepest gratitude to our Honorable Chancellor, **Shri R. C. Mittal,** who has provided me with every facility to successfully carry out this project, and my profound indebtedness to **Prof. (Dr.) D. K. Patnaik,** Vice-Chancellor, Medi-Caps University, whose unfailing support and enthusiasm has always boosted up my morale. I also thank **Prof. (Dr.) Pramod S Nair,** Dean, Faculty of Engineering, Medi-Caps University, for giving me a chance to work on this project. I would also like to thank my Head of the Department **Prof. Anil Patidar** for his continuous encouragement for betterment of the project.

I express my heartfelt gratitude to my **External Guide, Mr. Hemant Vijayvargiya, Annova Solutions Private Limited** as well as to my Internal Guide, **Prof. Ritu Sodhi, Major Project Guide, Department of Computer Applications,** for continuous help and support which helped me to complete this project.

I would also like to thank to my team at Tata Consultancy Services Limited who extended their kind support and help towards the completion of this project. It is their help and support, due to which I/we am/are able to complete the design and technical report. Without their support this report would not have been possible.

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Abstract

The "Resume Builder for skilled Fresher" project is aimed at providing a user-friendly application that enables job seekers to quickly and easily create professional resumes. The application allows users to input their personal information, work experience, education, and other relevant details, and offers a range of templates to choose from.

The project is designed to provide a high-quality resume generator that can be used by fresher job seekers who are looking to make a strong impression in the job market. The resume generator will be built using a programming language such as Python, Java, or JavaScript, and will be user-friendly with an intuitive interface.

The generated resumes will be in a professional format that is suitable for job applications. The project also focuses on ensuring the privacy and security of user data.

The "Resume Builder for skilled Fresher" project aims to provide an effective and efficient tool for job seekers to create resumes that stand out in the competitive job market. By leveraging technology, the project aims to simplify and streamline the resume creation process, helping job seekers to better showcase their skills and qualifications.

1. Simplify the resume creation process: The project aims to provide a user-friendly interface that simplifies the process of creating a resume, making it easy for even inexperienced job seekers to create a professional-looking resume.

2. Save time: By providing customizable templates and pre-populated fields, the project aims to save job seekers time in creating a resume, allowing them to focus on other aspects of their job search.

3. Increase visibility: The project aims to create resumes that are visually appealing and stand out from the competition, increasing the visibility of job seekers in a crowded job market.

4. Showcase skills and qualifications: The project aims to provide a platform for job seekers to showcase their skills and qualifications in a clear and concise manner, making it easier for potential employers to identify suitable candidates.

5. Improve job search success: By providing job seekers with a professional-looking resume that effectively showcases their skills and qualifications, the project aims to improve their chances of success in their job search.

Overall, the objective of the "Resume Builder for skilled Fresher" project is to provide a user-friendly and efficient tool that helps fresher job seekers create professional-looking resumes that effectively showcase their skills and qualifications, improving their chances of success in their job search.

The Resume Builder Project is a web-based tool designed to help job seekers create professional resumes quickly and easily. The project aims to simplify the process of resume creation by providing users with a user-friendly interface and customizable templates to suit different job roles and industries. The tool allows users to input their personal information, work experience, education, and skills, and then generates a visually appealing and professional resume. The project also includes features such as real-time feedback and suggestions, resume sharing, and a preview feature to help users see how their resumes will look before downloading. Overall, the Resume Builder Project provides a simple and effective solution to the challenge of creating a resume that stands out to potential employers.

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Abbreviations

- IT- Information technology
- RAM- Random Access Memory
- MHz-Mega Hertz
- IFR-Information Flow Representation
- ERD- Entity Relationship Diagram

Notations and Symbols/Nomenclatures

Process

External Entity

Data Flow

Multiplicity *

Association

Chapter 1: Introduction

1.1 Annova Solutions

At Annova Solutions, we believe in solving problems and overcoming challenges for our clients. Our leaders have extensive knowledge across various verticals across the globe. Our teams are powered with innovation, new-techniques, and adaptability which makes working with us flexible yet efficient. Annova sets up Knowledge Service Units (KSUs) which are nothing but an extension of your team – except that Annova does most of the heavy lifting, ideation, execution, so that you can sit back, relax and focus on most strategic areas of your business. We are the pioneers and masters of AI & Machine Learning Services, Computer Vision Services, Healthcare Operations, and shared service partners in India. We work for clients from across the globe, 90% of them being from the USA.

Annova Solutions specializes in building custom software applications, data analytics solutions, and providing technology consulting services to help businesses optimize their operations and achieve their goals. The company has a team of experienced developers, data scientists, and technology experts who work closely with clients to understand their unique needs and develop tailored solutions that deliver measurable results.

Some of the key services offered by Annova Solutions include custom software development, data analytics and business intelligence, cloud computing solutions, mobile application development, and IT consulting. The company has worked with a range of clients, from small startups to large enterprises, and has delivered solutions across various industries, including finance, healthcare, retail, and logistics.

Annova Solutions is known for its expertise in emerging technologies such as artificial intelligence, machine learning, blockchain, and the Internet of Things (IoT), and has been recognized for its innovative solutions and exceptional client service.

Headquarters of The Company

Indore, Madhya Pradesh, India

Products & Services Provided

Annova Solutions provides a wide range of information technology-related products and services including application development, business process outsourcing, capacity planning, consulting, enterprise software, hardware sizing, payment processing, software management, and technology education services

1.2 Description of Project

The "Resume Builder for skilled Fresher" project is aimed at providing a web-based application that allows fresher job seekers to create professional resumes easily and quickly. The application will have an intuitive user interface that will guide the user through the process of creating a resume by providing step-by-step instructions.

The application will offer a range of resume templates that users can choose from, with different sections and formatting options. The templates will be designed to showcase the user's skills and qualifications effectively, helping them stand out in the competitive job market.

The application will allow users to input their personal information, work experience, education, and other relevant details. The user can then preview and customize the templates according to their preferences. Once the user is satisfied with the resume, they can download or print it in a professional format suitable for job applications.

The project will focus on providing a user-friendly and seamless experience for the users while ensuring the security and privacy of their data.

The application will be tested extensively to ensure that it meets all the requirements and functions correctly. The "Resume Builder for skilled Fresher" project aims to provide a valuable tool for fresher job seekers to create high-quality resumes that will help them stand out in the job market and increase their chances of getting hired.

1.3 Significance of Resume Builder for skilled Fresher

The "Resume Builder for skilled Fresher" project is significant because it addresses a common challenge faced by many fresher job seekers – creating a professional resume that effectively showcases their skills and qualifications. A well-crafted resume can make all the difference in securing a job interview, and this project aims to provide a tool that simplifies the process of creating a high-quality resume.

By providing a range of customizable templates and an easy-to-use interface, the "Resume Builder for skilled Fresher" project aims to help users create resumes that stand out in the competitive job market. The project's significance lies in its ability to provide an efficient and effective tool for fresher job seekers to create professional resumes that are tailored to their specific needs and qualifications.

Additionally, the project leverages technology to streamline the resume creation process, saving users time and effort in creating a resume from scratch. The project's web-based application allows users to access the resume builder from anywhere, making it a convenient solution for those on the go.

1.4 Importance of Resume Builder for skilled Fresher

The "Resume Builder for skilled Fresher" project is important for several reasons. Firstly, it addresses the need for a tool that helps fresher job seekers create professional resumes that effectively showcase their skills and qualifications. This is important because a well-crafted resume can make all the difference in securing a job interview, especially in a competitive job market.

Secondly, the project is important because it leverages technology to streamline the resume creation process. By providing a web-based application that offers customizable templates and an easy-to-use interface, the project saves users time and effort in creating a resume from scratch. This is particularly important for fresher job seekers who may not have the experience or knowledge to create a professional-looking resume on their own.

Thirdly, the project's emphasis on privacy and security is important. Job seekers often have to provide personal information when creating a resume, and the project's focus on ensuring the privacy and security of user data is crucial in building trust with users.

Finally, the "Resume Builder for skilled Fresher" project is important because it provides a valuable tool for fresher job seekers to achieve their career goals. By simplifying the process of creating a high-quality resume, the project helps job seekers to stand out in the job market and increases their chances of success in securing a job interview and ultimately landing their desired job.

Overall, the "Resume Builder for skilled Fresher" project is important because it provides a user-friendly, efficient, and effective tool that addresses a common challenge faced by fresher job seekers and helps them achieve their career goals.

Chapter 2: Background

2.1 Description of the existing system

The traditional way of making a resume involved using a word processor such as Microsoft Word or Google Docs to create a document from scratch. The user would start with a blank page and manually input their personal information, work experience, education, skills, and other relevant details.

The user would then format the document by selecting fonts, font sizes, and styles, and adjusting the margins and spacing to create a professional-looking layout. The user would often have to refer to various resources such as online guides or templates to ensure that their resume was structured and presented correctly.

Creating a resume in the traditional way was often a time-consuming and daunting task, especially for fresher job seekers who may not have a lot of work experience or knowledge of resume formatting. Additionally, the traditional approach often resulted in resumes that were less visually appealing and less likely to stand out in a competitive job market.

Overall, while the traditional approach to creating a resume may have worked in the past, it is becoming increasingly outdated in today's digital age, where technology can streamline and simplify the resume creation process. Tools such as the "Resume Builder for skilled Fresher" project can provide a more efficient and effective way for job seekers to create professional-looking resumes that effectively showcase their skills and qualifications.

2.2 Circumstances leading to the current new system

The current system of making resumes in the traditional form has its roots in the pre-digital era when job seekers would submit printed copies of their resumes to potential employers. This system relied on the use of typewriters and printers, with job seekers manually typing their resumes and then printing them out on paper.

As technology evolved, word processing software such as Microsoft Word and Google Docs became widely available, making it easier for job seekers to create and format their resumes. However, the process of creating a resume in the traditional form remained largely unchanged, with users manually inputting their personal information and formatting the document themselves.

The traditional approach to creating a resume was also influenced by the prevailing job market conditions. In the past, many jobs were advertised in newspapers or through word of mouth, and job seekers had to submit their resumes in person or by mail. This made it necessary for resumes to be presented in a printed format, and for job seekers to have a physical copy of their resume to hand out to potential employers.

Today, however, the job market has shifted towards digital channels, with many job postings and applications taking place online. This has led to the development of new tools and technologies for creating resumes, such as the "Resume Builder for skilled Fresher" project, which leverages web-based technologies to provide a more efficient and effective way of creating resumes.

Overall, the circumstances leading to the current system of resume making in the traditional form were influenced by the technology and prevailing job market conditions of the time. However, as technology continues to evolve and the job market shifts towards digital channels, there is a need for more streamlined and efficient approaches to resume creation, such as the use of web-based resume builders.

2.3 Work already carried out in the project domain

There has been significant work carried out in the domain of resume builders for job seekers. Some of the notable examples include:

1. Canva: Canva is a graphic design platform that offers a range of templates for creating resumes, including ones designed specifically for fresher job seekers. The platform provides an easy-to-use interface and customization options, making it popular among job seekers.

2. Zety: Zety is a web-based resume builder that offers a range of templates and customization options for creating professional-looking resumes. The platform also provides resume writing tips and a resume-checking service to help users optimize their resumes for job applications.

3. Novoresume: Novoresume is another web-based resume builder that offers customizable templates and an easy-to-use interface for creating resumes. The platform also provides a range of features, including a cover letter builder and a resume tracking system.

4. LinkedIn: LinkedIn is a social networking platform that also offers a range of tools for job seekers, including a resume builder. The platform allows users to import their existing resumes and offers customization options for formatting and design.

5. Google Docs: Google Docs is a popular word processing software that offers a range of templates for creating resumes. The platform also allows for collaboration and sharing, making it easy for job seekers to work on their resumes with others.

2.4 Objective of the project

As placement season of most of the colleges is going to start, making Resume is a very hectic work for all the students. Also, many companies judge the candidature of a student just by his/her Resume. So it is necessary for the student to think beyond the third dimension while making the Resume.

- "Resume Builder for skilled Fresher" is the Web Application which helps students to get their resume in hand just by filling up a simple form where important credentials need to be filled.
- The resume is downloadable in PDF format. Also, the user can log in again to access the previous resume that he had made.
- The resume is of Standard Format as stated by most of the Engineering Colleges of India.

Overall, the objective of the "Resume Builder for skilled Fresher" project is to provide a user-friendly and efficient tool that helps fresher job seekers create professional-looking resumes that effectively showcase their skills and qualifications, improving their chances of success in their job search.

2.5 What is to be achieved and method of measuring the extent of that achievement

To measure the achievement of the "Resume Builder for skilled Fresher" project is to provide a user-friendly and efficient tool that helps fresher job seekers create professional-looking resumes that effectively showcase their skills and qualifications, improving their chances of success in their job search.

The achievement of this goal can be measured in several ways, including:

1. User feedback: User feedback is one of the most important measures of the success of the project. Feedback can be gathered through surveys, focus groups, and user testing sessions. This feedback will help the development team identify any areas that need improvement and make adjustments accordingly.

2. Adoption rate: The adoption rate of the tool is another measure of success. This can be measured by tracking the number of users who sign up for the tool and use it to create their resumes.

3. User satisfaction: User satisfaction is another important measure of success. This can be measured by tracking user engagement with the tool and analyzing user feedback to determine how satisfied they are with the tool's features and functionality.

4. Job placement rate: The ultimate measure of success is the job placement rate of the job seekers who use the tool. This can be tracked by analyzing data on the number of job applications submitted by users and the number of job offers received.

By measuring these metrics, the project team can determine the extent of the achievement of the project goals and make any necessary adjustments to improve the tool's effectiveness in helping fresher job seekers create professional-looking resumes and improve their chances of success in their job search.

Chapter 3: Analysis

3.1 System Requirement Analysis

System Requirement Analysis is a critical step in the software development lifecycle, which involves identifying, analyzing, and documenting the functional and non-functional requirements of a software system. Here are some of the system requirements for the "Resume Builder for skilled Fresher" project:

1. Functional Requirements:

- The system should allow users to create a new account or log in to an existing account.
- The system should provide users with a user-friendly interface to create a resume.
-
- The system should allow users to input their personal information, education, work experience, skills, and qualifications.
- The system should allow users to preview their resume and make changes before finalizing it.
- The system should allow users to save their resume in various formats such as PDF, Word, or HTML.
- The system should provide users with the option to share their resume on social media platforms or with potential employers.

2. Non-functional Requirements:

- The system should be responsive and load quickly on all devices.
- The system should be secure and protect users' personal information.
- The system should be scalable and able to handle a large number of users.

By identifying and documenting these requirements, the development team can ensure that the "Resume Builder for skilled Fresher" project meets the needs of the users and is successful in achieving its objectives.

Hardware Requirements:

233 MHz Pentium processor or another compatible IntelChipset Motherboard
512 MB SD-RAM
4 GB hard disk

Software Requirements:

Operating System -Windows 98 onwardsApplication Software –Spring Tool SuiteDatabase Tool – PostgreSQL

3.2 System Analysis

System analysis is the process of understanding and defining the requirements of a software system, and designing a solution that meets those requirements. Here is a brief overview of the system analysis process for the "Resume Builder for skilled Fresher" project:

1. Requirements Gathering: In this phase, the development team will gather information about the requirements of the system by interviewing stakeholders, reviewing existing documentation, and researching industry best practices. The team will identify the functional and non-functional requirements of the system.

2. System Design: Based on the requirements gathered in the previous phase, the development team will design the system architecture, including the user interface, data model, and software components. The team will also create wireframes and prototypes to demonstrate the functionality of the system.

3. System Development: In this phase, the development team will write the code for the system components, including the front-end user interface, back-end database, and application programming interfaces (APIs) that allow different components to communicate with each other.

4. Testing: Once the system components are developed, the development team will conduct a variety of tests to ensure that the system meets the requirements and functions as intended. These tests may include functional testing, performance testing, security testing, and user acceptance testing.

5. Deployment: Once the system passes all tests, the development team will deploy the system to a production environment and make it available to users.

6. Maintenance: After deployment, the development team will monitor the system and provide ongoing maintenance and support to ensure that it continues to function properly and meet the needs of users.

By following this system analysis process, the development team can ensure that the "Resume Builder for skilled Fresher" project meets the requirements of users and achieves its objectives.

➢ Use Case Diagram

Use-case diagrams describe the high-level functions and scope of a system. These diagrams also identify the interactions between the system and its actors. The use cases and actors in use-case diagrams describe what the system does and how the user use it, but not how the system operates internally.

Use Case Diagram

➢ Sequence Diagram

A sequence diagram or system sequence diagram (SSD) shows object interactions arranged in time sequence in the field of software engineering. It depicts the objects involved in the scenario and the sequence of messagesexchanged between the objects needed to carry out the functionality of scenario. Sequence diagrams are typically associated with use case realizations in the logical view of the system under development. Sequencediagrams are sometimes called event diagrams or event scenarios.

Sequence Diagram

➢ Activity Diagram

An activity diagram is a behavioral diagram i.e. it depicts the behavior of a system. An activity diagram portrays the control flow from a start point to afinish point showing the various decision paths that exist while the activity is being executed.

➢ ER Diagram

ER Diagram stands for Entity Relationship Diagram, also known as ERD isa diagram that displays the relationship of entity sets stored in a database. Inother words, ER diagrams help to explain the logical structure of databases. ER diagrams are created based on three basic concepts: entities, attributes and relationships.

ER Diagram

We have analyzed the feasibility of the system in terms of following spans:

- Technical Feasibility
- Operational Feasibility
- Economical Feasibility

3.3 Technical Feasibility

Technical feasibility is an assessment of whether the proposed project can be developed with the existing technology and resources. In the case of the "Resume Builder for skilled Fresher" project, the following technical feasibility factors need to be considered:

1. Platform and tools: The project needs to be developed using programming languages, frameworks, and libraries that are compatible with the intended platform. The project may require tools such as text editors, integrated development environments (IDEs), databases, and hosting services. It is important to ensure that these tools are available and compatible with each other.

2. Data storage: The project will require a database to store user information, resumes, and other data. The type of database, such as relational or non-relational, and the storage capacity required must be determined.

3. Security: The project will store sensitive information, such as user login credentials and personal information. It is essential to implement security measures to protect this information from unauthorized access or data breaches.

4. User interface design: The project must have an intuitive user interface that is easy to navigate and use. The user interface should be designed to work across different devices and platforms.

5. Performance and scalability: The project should be designed to perform well under varying user loads and be scalable to accommodate increasing numbers of users.

Based on the above factors, it is technically feasible to develop the "Resume Builder for skilled Fresher" project using existing technologies and resources. However, it will require careful planning, design, and implementation to ensure that the project is successful and meets the requirements of users.

3.4 Operational Feasibility

Operational feasibility refers to whether the proposed project can be integrated into the existing operations of an organization or business. In the case of the "Resume Builder for skilled Fresher" project, the following operational feasibility factors need to be considered:

1. User acceptance: The project should meet the needs of the intended users, i.e., skilled freshers looking to create a professional resume. The user interface and features must be easy to understand and use. User feedback should be gathered during the development process to ensure that the project meets their needs.

2. Cost: The cost of developing and implementing the project should be reasonable and within the budget of the organization or business. The project should also generate revenue or add value to the organization or business to justify its costs.

3. Integration with existing systems: The project should be compatible with existing systems and processes. For example, the project should integrate with job portals, social media platforms, or applicant tracking systems (ATS).

4. Training and support: The project should be accompanied by training and support resources to help users understand how to use the system. Technical support should also be available to address any issues or bugs that may arise.

5. Legal and regulatory compliance: The project must comply with relevant laws and regulations, such as data protection laws, intellectual property laws, and anti-discrimination laws.

Based on the above factors, it is operationally feasible to develop and implement the "Resume Builder for skilled Fresher" project. However, it will require careful planning, user testing, and ongoing support to ensure that the project is successfully integrated into the operations of organizations and businesses.

3.5 Economic Feasibility

The economic feasibility of a resume builder for skilled freshers depends on several factors such as the target market, pricing strategy, marketing efforts, and operational costs.

Target Market:
The success of a resume builder for skilled freshers largely depends on the size and demand of the target market. A resume builder aimed at a small niche market may not be economically viable, while one targeted at a large market may generate significant revenue.

Pricing Strategy:
The pricing strategy plays a critical role in determining the economic feasibility of a resume builder. The pricing should be competitive enough to attract customers while also generating sufficient revenue to cover operational costs and generate profits. The pricing model could be subscription-based, pay-per-use, or a combination of both.

Marketing Efforts:
The marketing efforts can greatly impact the economic feasibility of a resume builder. A well-planned marketing strategy can help reach a wider audience and attract potential customers. Social media, SEO, content marketing, and paid advertising are some of the marketing channels that can be used to promote a resume builder.

Operational Costs:
The operational costs of a resume builder include expenses such as website hosting, software development, customer support, and salaries of employees. Keeping operational costs low is important to ensure that the revenue generated from the product can cover all expenses and leave room for profits.

In conclusion, the economic feasibility of a resume builder for skilled freshers depends on several factors, including the target market, pricing strategy, marketing efforts, and operational costs. If the product is targeted at a large market, with a competitive pricing strategy and effective marketing efforts, it has the potential to be economically feasibility.

3.6 Data Flow Diagram

An information flow diagram (IFD) is a diagram that shows how information is communicated (or "flows") from a source to a receiver or target (e.g. A→C), through some medium. The medium acts as a bridge, a means of transmitting the information.

Level 0-

Level 1

User
Login
Check
Forgot password
check credentials
manage modules
Resume_Details
User_Profiles
send email to user

Level 2

Admin
Login to System
Check Roles of Access
Forgot Password
Check Credentials
Manage Modules
Send Email to User
Manage Resume Details
Manage Job Details
Manage Skills Details
Manage Jobskeer Details
Manage Salary Details
Manage User Profiles
Manage Report
Manage System Admins
Manage Roles of User
Manage User Permission

3.7 Method/Technology to be used

Programming Language

JavaScript is a programming language that is widely used for creating dynamic and interactive websites. It was first introduced in 1995 by Netscape Communications, and has since become one of the most popular programming languages in the world.

JavaScript allows developers to add interactive elements to their websites, such as pop-up windows, animations, and drop-down menus. It can also be used to create more complex applications, such as web-based games and mobile apps.

One of the key features of JavaScript is its ability to manipulate the Document Object Model (DOM) of a webpage. The DOM is a hierarchical structure that represents the elements of a webpage, such as images, text, and links. By using JavaScript to manipulate the DOM, developers can dynamically update the content of a webpage without having to reload the entire page.

JavaScript is a client-side language, which means that it is executed by the user's web browser, rather than on the server. This makes it a powerful tool for creating interactive web applications that respond to user input in real time.

In recent years, JavaScript has also become increasingly popular for server-side programming, with the introduction of frameworks such as Node.js. These frameworks allow developers to use JavaScript to create back-end web applications, as well as front-end applications.

Framework

React.js, commonly known as React, is a popular open-source JavaScript library for building user interfaces. It was developed by Facebook and released in 2013.

React allows developers to build reusable UI components and efficiently manage the state of those components, making it easier to create complex user interfaces with minimal code. React uses a declarative programming style, meaning that developers can describe what they want their UI to look like and React will take care of rendering it in the browser.

One of the key features of React is its virtual DOM (Document Object Model), which allows React to update only the parts of the UI that have changed rather than updating the entire page. This makes React highly efficient and fast, even when dealing with large and complex applications.

React is often used in conjunction with other libraries and frameworks such as Redux, React Router, and Next.js. It can be used to build a wide range of applications, including single-page applications (SPAs), mobile applications, and even desktop applications using technologies such as Electron.

Overall, React has become a popular choice for building modern, dynamic user interfaces due to its performance, flexibility, and ease of use.

Node.js is an open-source, cross-platform, back-end JavaScript runtime environment that enables developers to run JavaScript code outside of a web browser. It was developed by Ryan Dahl in 2009 and has since become a popular platform for building server-side applications.

One of the key advantages of Node.js is that it uses an event-driven, non-blocking I/O model, which makes it particularly well-suited for building real-time applications that require a lot of data to be processed quickly. It is also built on top of the Google V8 JavaScript engine, which provides fast performance and scalability.

Node.js is often used in conjunction with popular web frameworks such as Express.js, Hapi, and Koa, and it can be used to build a wide range of applications, from simple command-line tools to complex web applications and APIs.

HTML stands for HyperText Markup Language. It is the standard markup language used to create web pages and other web-based documents. HTML provides a way to structure content on the web using a series of tags and attributes, which define how different elements of a web page should be displayed.

HTML is a declarative language, meaning that it describes the structure and content of a web page, rather than specifying how it should be displayed. Web browsers then use this information to render the web page and display it to users.

HTML documents are made up of a series of tags, which are enclosed in angle brackets (< >). Tags are used to define the structure and content of different elements on a web page, such as headings, paragraphs, links, images, and forms.

HTML also supports the use of attributes, which provide additional information about an element. For example, the "href" attribute is used to specify the destination of a link, and the "src" attribute is used to specify the source of an image.

Overall, HTML is a fundamental technology for building websites and other web-based applications. By learning HTML, developers can create rich, dynamic, and interactive web pages that can be accessed by users all around the world.

Visual Studio Code (often referred to as VS Code) is a free and open-source code editor developed
by Microsoft. It was first released in 2015 and has since become one of the most popular code editors in the developer community

VS Code, short for Visual Studio Code, is a free and open-source source code editor developed by Microsoft. It is available for Windows, macOS, and Linux, and is one of the most popular code editors used by developers today.

VS Code is designed to be highly customizable and flexible, with a wide range of features and extensions that allow developers to work with a variety of programming languages and frameworks. Some of the key features of VS Code include:

- Intelligent code completion and error highlighting
- Integrated debugging and testing tools
- Git integration and support for version control
- Built-in terminal and command line interface
- Support for multiple programming languages and file types
- Wide range of extensions and plugins for additional functionality

One of the main advantages of VS Code is its performance and responsiveness, even when working with large and complex codebases. It also has a large and active community of developers, who have contributed to the development of many useful extensions and plugins.

Overall, VS Code is a powerful and versatile code editor that has become a popular choice for developers due to its flexibility, performance, and ease of use.

Vs code Snapshot

- **Testing Tools**

Postman: Postman is an application used for API testing. It is an HTTP client thattests HTTP requests, utilizing a graphical user interface, through which we obtain different types of responses that need to be subsequently validated.

Postman Snapshot

Chapter 4: Design

4.1 System Architecture

A system architecture is the conceptual model that defines the structure, behavior, and more views of a system. An architecture description is a formal description and representation of a system, organized in a way that supports reasoning about the structuresand behaviors of the system.

4.2 Data Design

Database design is the organization of data according to a database model. The designerdetermines what data must be stored and how the data elements interrelate. With this information, they can begin to fit the data to the database model. Database management system manages the data accordingly.

We created four entities, Company, Department, Employee and Salary slip. In each of these we created variables as information of respective entities.

4.3 Interface Design

#While adding Information like experience

#While adding Information like education

#While adding Information like skills

#Database Screenshot

#While adding Information like Achievements

Chapter 5: Testing

5.1 Scope of testing

Software testing is a process of checking software applications and products for bugs anderrors to ensure their performance is efficient. Testing in software engineering is a fundamental process of creating reliable – and usable – software products.

That's what makes it necessary in guiding effective software development. Understanding the different types of software testing is what the need for Quality Assurance in software development stems from.

Usually, companies that attempt to create software have dedicated software testers – an in- house means of software testing help. By detecting errors and mistakes that affect the quality of software, these testers can ensure that software products are worthy of being sold in the market. Thus, they guarantee a software's usefulness, and help turning software applications into end-products that perform the way their designers intended them to.

5.2 Test plan

A Test Plan refers to a detailed document that catalogs the test strategy, objectives, schedule, estimations, deadlines, and the resources required for completing that particularproject. Think of it as a blueprint for running the tests needed to ensure the software is working properly – controlled by test managers.

A well-crafted test plan is a dynamic document that changes according to progressions in the project and stays current at all times. It is the point of reference, based on which testingactivities are executed and coordinated among a QA team.

5.3 Test case design

A good test case design technique is crucial to improving the quality of the software testing process. This helps to improve the overall quality and effectiveness of the released software.
The test case design techniques are broadly classified into three major categories.

5.4 Specification-Based techniques
5.5 Structure-Based techniques
5.6 Experience-Based techniques

➢ Specification-Based or Black-Box techniques

This technique leverages the external description of the software such as technical specifications, design, and client's requirements to design test cases. The technique enablestesters to develop test cases that provide full test coverage. The Specification-based or black box test case design techniques are divided further into 5 categories. Thesecategories are as follows:

Boundary Value Analysis (BVA)

This technique is applied to explore errors at the boundary of the input domain. BVA catches any input errors that might interrupt with the proper functioning of the program.

Equivalence Partitioning (EP)

In Equivalence Partitioning, the test input data is partitioned into a number of classes having an equivalent number of data. The test cases are then designed for each class or partition. This helps to reduce the number of test cases.

Decision Table Testing

In this technique, test cases are designed on the basis of the decision tables that are formulated using different combinations of inputs and their corresponding outputs based onvarious conditions and scenarios adhering to different business rules.

State Transition Diagrams

In this technique, the software under test is perceived as a system having a finite number ofstates of different types. The transition from one state to another is guided by a set of rules. The rules define the response to different inputs. This technique can be implemented on thesystems which have certain workflows within them.

Use Case Testing

A use case is a description of a particular use of the software by a user. In this technique, the test cases are designed to execute different business scenarios and end-user functionalities. Use case testing helps to identify test cases that cover the entire system.

➢ Structure-Based or White-Box techniques

The structure-based or white-box technique design test cases based on the internal structureof the software. This technique exhaustively tests the developed code. Developers who have complete information of the software code, its internal structure, and design help to design the test cases. This technique is further divided into five categories.

Statement Testing & Coverage

This technique involves execution of all the executable statements in the source code atleast once. The percentage of the executable statements is calculated as per the given requirement. This is the least preferred metric for checking test coverage.

Decision Testing Coverage

This technique is also known as branch coverage is a testing method in which each one of the possible branches from each decision point is executed at least once to ensure all reachable code is executed. This helps to validate all the branches in the code. This helpsto ensure that no branch leads to unexpected behavior of the application.

Condition Testing

Condition testing also is known as Predicate coverage testing, each Boolean expression is predicted as TRUE or FALSE. All the testing outcomes are at least tested once. This typeof testing involves 100% coverage of the code. The test cases are designed as such that the condition outcomes are easily executed.

Multiple Condition Testing

The purpose of Multiple condition testing is to test the different combination of conditionsto get 100% coverage. To ensure complete coverage, two or more test scripts are requiredwhich requires more efforts.

All Path Testing

In this technique, the source code of a program is leveraged to find every executable path. This helps to determine all the faults within a particular code.

➢ Experience-Based techniques

These techniques are highly dependent on tester's experience to understand the most important areas of the software. The outcomes of these techniques are based on the skills, knowledge, and expertise of the people involved. The types of experience-based techniquesare as follows:

Error Guessing

In this technique, the testers anticipate errors based on their experience, availability of data and their knowledge of product failure. Error guessing is dependent on the skills, intuition, and experience of the testers.

Exploratory Testing

This technique is used to test the application without any formal documentation. There isminimum time available for testing and maximum for test execution. In exploratory testing, the test design and test execution are performed concurrently.

5.4 Sample test data and results

Following test cases were carried out:

Cases	**Action To be Performed**	**Expected Results**	**Actual Result**
Case 1:	Admin login	If Admin details a re correct, Login done	f Admin details a re correct, Login done
Case 2:	Update Details	If company with respective id exists, update details	Updated Success fully.
Case 3:	Update resume Details	If an update id exists, details update.	Updated Success fully.
Case 4:	User Login	If user id provided exist, update successfully.	User Updated Success fully.
Case 4:	Update User Details	If a valid company id is provided, add Employee.	Employee Added Success fully. Employee Id

			generated
Case 5:	Update resume Details	If an update id exists, details update	Updated Successfully.
Case 6:	Add file format	If the valid format is provided, add pay slip.	File format added successfully
Case 7:	Delete resume	If the resumey id provided exists, delete the company details.	resume details deleted successfully.

Chapter 6: Limitations

6.1 Limitation

Like any other project, the "Resume Builder for skilled Fresher" project may have some limitations. Some potential limitations include:

1. User adoption: It is possible that users may not adopt the project if they prefer to use traditional methods of creating resumes, or if they do not have access to the internet or computer systems required to use the project.

2. Technical limitations: The project may have technical limitations that could affect its performance or usability. For example, the project may not be able to handle large amounts of data or may not be compatible with all browsers or operating systems.

3. Limited features: The project may have limited features compared to other existing resume builders. Some users may prefer more advanced features, such as integration with applicant tracking systems or more customization options.

4. Data security: As the project involves storing personal and confidential information, it is essential to ensure data security measures are in place to protect user data.

5. Language limitations: The project may not be able to support all languages, which could limit its accessibility for users in different regions or countries.

6. Dependence on internet connectivity: The project requires a stable internet connection to function correctly, which could be a limitation for users in areas with poor connectivity.

It is important to identify and address these limitations to ensure that the project is successful and meets the needs of its intended users.

Chapter 7: Summary and Conclusions

The "Resume Builder for skilled Fresher" project has a lot of potential for future development and expansion. Some possible areas of future scope include:

1. Integration with job portals: The project could be integrated with popular job portals such as Indeed, LinkedIn, or Glassdoor to make it easier for users to apply for jobs.

2. Customization options: The project could include more customization options to allow users to create resumes that are tailored to their specific needs and preferences.

3. Multi-language support: The project could be expanded to support multiple languages, making it more accessible to users around the world.

4. Artificial intelligence (AI) and machine learning (ML) integration: The project could be integrated with AI and ML algorithms to provide users with personalized recommendations and suggestions for improving their resumes.

5. Collaboration features: The project could include collaboration features that allow users to work together on a single resume, making it easier for teams or groups to create and edit resumes together.

6. Mobile application: The project could be developed as a mobile application to allow users to create and edit their resumes on-the-go.

7. Analytics and reporting: The project could include analytics and reporting features to help users track their resume views, application success rates, and other relevant metrics.

Overall, there are many potential areas of future development and expansion for the "Resume Builder for skilled Fresher" project. These developments could help to make the project even more useful and valuable for users, while also expanding its reach and impact.

Chapter 9: Future Scope

9.1 Resume Builder for skilled Fresher

1. Integration with job search platforms: You could integrate your resume builder with popular job search platforms such as LinkedIn or Indeed. This would allow users to easily apply to jobs directly from their resume and track their job application status.

2. Personalized resume suggestions: Using machine learning algorithms, you could suggest improvements to the user's resume based on their industry and job title. This would make the resume building process more efficient and effective for the user.

3. Cover letter builder: In addition to the resume builder, you could also develop a cover letter builder. This would allow users to easily create a customized cover letter for each job they apply to, and could include suggestions for formatting and content.

4. Collaboration and feedback features: You could enable users to share their resumes with friends, mentors or career counselors, and receive feedback and suggestions for improvement. This would make the resume building process more collaborative and increase the chances of creating a high-quality resume.

5. Analytics and insights: You could provide users with analytics and insights about their resume, such as how many times it has been viewed or downloaded by potential employers. This would help users to track the effectiveness of their resume and make data-driven decisions about their job search strategy.

Appendix

✓ Process: A process done in the system is denoted by this symbol. For example, prepare attendance report, pay slip, etc.

✓ External entity: A source or destination of data which is external to the system.

✓ A data flow: it is packet or data. It may be in the form of document or letter.

✓ Data store: Any store data but with no reference to the physical method of storing.

✓ Multiplicity: Use to represent one to many relationships between the entities

*

✓ Association: It represents the relationship between the entities

✓ State: It represents current state of system that is being designed.

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Resume Builder for skilled Fresher

A Major Project Report

submitted in partial fulfillment of requirement of the degree

of

Master of Computer Applications

by

Akshat Dwivedi
EN21CA501013

under the guidance of

Prof. Ritu Sodhi

Department of Computer Applications
Faculty of Engineering
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Jan-June 2023

Report Approval

The project work **"Resume Builder for skilled Fresher"** is hereby approved as a creditable study of an engineering/computer application subject carried out and presented in a manner satisfactory to warrant its acceptance as prerequisite for the Degree for which it has been submitted.

It is to be understood that by this approval the undersigned do not endorse or approval any statement made, opinion expressed or conclusion drawn there in; but approve the "Project Report" only for the purpose for which it has been submitted.

Examiner(s)

Name(s)	Signature(s)
1. …….	…….
2. …….	…….
3. …….	…….
4. …….	…….
5. …….	…….

Date: …….

Declaration

I hereby declare that the project entitled "**Resume Builder for skilled Fresher**" submitted in partial fulfillment for the award of the degree of Master of Computer Applications in "Department of Computer Applications" completed under the supervision of **Prof. Ritu Sodhi Major Project Guide, Department of Computer Applications,** Faculty of Engineering, Medi-Caps University Indore is an authentic work.

Further, I declare that the content of this Project work, in full or in parts, have neither been taken from any other source nor have been submitted to any other Institute or University for the award of any degree or diploma.

Signature

Akshat Dwivedi

04/05/2023

Certificate

I, **Prof. Ritu Sodhi** certify that the project entitled "**Resume Builder for skilled Fresher**" submitted in partial fulfillment for the award of the degree of Master of Computer Applications by **Akshat Dwivedi** is the record carried out by him under my guidance.

Prof. Ritu Sodhi

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Dear **Akshat Dwivedi,** M.C.A 4th Semester Medicaps University, Indore

On behalf of **Annova Solutions,** I am pleased to inform your acceptance of an internship position as **Intern NodeJS Backend Developer** . Your first day of joining is **25-Jan-2023**. In addition to your duties outlined in the interview, you will report to your internship manager **Mr. Hemant Vijayvargiya (Contact 9669562594)**

As an intern, you are not the company's employee; and therefore, will not receive any regular employee benefits. This is an unpaid internship program. You understand that participating in the internship program is not an offer of employment. This internship will end on **25-May-2023.**

During your internship, you will have an access to company's clients and confidential information. You agree that you will keep all this information and client information strictly confidential and will not share it with anyone outside the company. You will not use it for your own benefits and on completion of the internship; you will return documents, equipment, and all property of the company.

Congratulations on the Internship.

Best Regards,

ANNOVA SOLUTIONS PVT. LTD. INDORE

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Date :10-May-2023

TO WHOM IT MAY CONCERN

This is to certify that **Akshat Dwivedi, Student of Medi-caps University, Indore, MCA 4th Semester** has successfully completed internship program from 25-Jan-23 to 10-May-23 at Annova Solutions, Indore. He has worked as a full time **Intern Node Backend Developer** and designed various creatives also, He dedicated her full efforts in growing online presence of Annova Solutions.

During the Internship he demonstrated good design skills with a self- motivated attitude to learn new things.

We wish him all the best for his future endeavour.

Warm Regards

ANNOVA SOLUTIONS PVT. LTD. INDORE

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I express my heartfelt gratitude to my **External Guide, Mr. Hemant Vijayvargiya, Annova Solutions Private Limited** as well as to my Internal Guide, **Prof. Ritu Sodhi, Major Project Guide, Department of Computer Applications,** for continuous help and support which helped me to complete this project.

I would also like to thank to my team at Tata Consultancy Services Limited who extended their kind support and help towards the completion of this project. It is their help and support, due to which I/we am/are able to complete the design and technical report. Without their support this report would not have been possible.

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Abstract

The "Resume Builder for skilled Fresher" project is aimed at providing a user-friendly application that enables job seekers to quickly and easily create professional resumes. The application allows users to input their personal information, work experience, education, and other relevant details, and offers a range of templates to choose from.

The project is designed to provide a high-quality resume generator that can be used by fresher job seekers who are looking to make a strong impression in the job market. The resume generator will be built using a programming language such as Python, Java, or JavaScript, and will be user-friendly with an intuitive interface.

The generated resumes will be in a professional format that is suitable for job applications. The project also focuses on ensuring the privacy and security of user data.

The "Resume Builder for skilled Fresher" project aims to provide an effective and efficient tool for job seekers to create resumes that stand out in the competitive job market. By leveraging technology, the project aims to simplify and streamline the resume creation process, helping job seekers to better showcase their skills and qualifications.

1. Simplify the resume creation process: The project aims to provide a user-friendly interface that simplifies the process of creating a resume, making it easy for even inexperienced job seekers to create a professional-looking resume.

2. Save time: By providing customizable templates and pre-populated fields, the project aims to save job seekers time in creating a resume, allowing them to focus on other aspects of their job search.

3. Increase visibility: The project aims to create resumes that are visually appealing and stand out from the competition, increasing the visibility of job seekers in a crowded job market.

4. Showcase skills and qualifications: The project aims to provide a platform for job seekers to showcase their skills and qualifications in a clear and concise manner, making it easier for potential employers to identify suitable candidates.

5. Improve job search success: By providing job seekers with a professional-looking resume that effectively showcases their skills and qualifications, the project aims to improve their chances of success in their job search.

Overall, the objective of the "Resume Builder for skilled Fresher" project is to provide a user-friendly and efficient tool that helps fresher job seekers create professional-looking resumes that effectively showcase their skills and qualifications, improving their chances of success in their job search.

The Resume Builder Project is a web-based tool designed to help job seekers create professional resumes quickly and easily. The project aims to simplify the process of resume creation by providing users with a user-friendly interface and customizable templates to suit different job roles and industries. The tool allows users to input their personal information, work experience, education, and skills, and then generates a visually appealing and professional resume. The project also includes features such as real-time feedback and suggestions, resume sharing, and a preview feature to help users see how their resumes will look before downloading. Overall, the Resume Builder Project provides a simple and effective solution to the challenge of creating a resume that stands out to potential employers.

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Abbreviations

- IT- Information technology
- RAM- Random Access Memory
- MHz-Mega Hertz
- IFR-Information Flow Representation
- ERD- Entity Relationship Diagram

Notations and Symbols/Nomenclatures

Process

External Entity

Data Flow

Multiplicity *

Association

Chapter 1: Introduction

1.1 Annova Solutions

At Annova Solutions, we believe in solving problems and overcoming challenges for our clients. Our leaders have extensive knowledge across various verticals across the globe. Our teams are powered with innovation, new-techniques, and adaptability which makes working with us flexible yet efficient. Annova sets up Knowledge Service Units (KSUs) which are nothing but an extension of your team – except that Annova does most of the heavy lifting, ideation, execution, so that you can sit back, relax and focus on most strategic areas of your business. We are the pioneers and masters of AI & Machine Learning Services, Computer Vision Services, Healthcare Operations, and shared service partners in India. We work for clients from across the globe, 90% of them being from the USA.

Annova Solutions specializes in building custom software applications, data analytics solutions, and providing technology consulting services to help businesses optimize their operations and achieve their goals. The company has a team of experienced developers, data scientists, and technology experts who work closely with clients to understand their unique needs and develop tailored solutions that deliver measurable results.

Some of the key services offered by Annova Solutions include custom software development, data analytics and business intelligence, cloud computing solutions, mobile application development, and IT consulting. The company has worked with a range of clients, from small startups to large enterprises, and has delivered solutions across various industries, including finance, healthcare, retail, and logistics.

Annova Solutions is known for its expertise in emerging technologies such as artificial intelligence, machine learning, blockchain, and the Internet of Things (IoT), and has been recognized for its innovative solutions and exceptional client service.

Headquarters of The Company

Indore, Madhya Pradesh, India

Products & Services Provided

Annova Solutions provides a wide range of information technology-related products and services including application development, business process outsourcing, capacity planning, consulting, enterprise software, hardware sizing, payment processing, software management, and technology education services

1.2 Description of Project

The "Resume Builder for skilled Fresher" project is aimed at providing a web-based application that allows fresher job seekers to create professional resumes easily and quickly. The application will have an intuitive user interface that will guide the user through the process of creating a resume by providing step-by-step instructions.

The application will offer a range of resume templates that users can choose from, with different sections and formatting options. The templates will be designed to showcase the user's skills and qualifications effectively, helping them stand out in the competitive job market.

The application will allow users to input their personal information, work experience, education, and other relevant details. The user can then preview and customize the templates according to their preferences. Once the user is satisfied with the resume, they can download or print it in a professional format suitable for job applications.

The project will focus on providing a user-friendly and seamless experience for the users while ensuring the security and privacy of their data.

The application will be tested extensively to ensure that it meets all the requirements and functions correctly. The "Resume Builder for skilled Fresher" project aims to provide a valuable tool for fresher job seekers to create high-quality resumes that will help them stand out in the job market and increase their chances of getting hired.

1.3 Significance of Resume Builder for skilled Fresher

The "Resume Builder for skilled Fresher" project is significant because it addresses a common challenge faced by many fresher job seekers – creating a professional resume that effectively showcases their skills and qualifications. A well-crafted resume can make all the difference in securing a job interview, and this project aims to provide a tool that simplifies the process of creating a high-quality resume.

By providing a range of customizable templates and an easy-to-use interface, the "Resume Builder for skilled Fresher" project aims to help users create resumes that stand out in the competitive job market. The project's significance lies in its ability to provide an efficient and effective tool for fresher job seekers to create professional resumes that are tailored to their specific needs and qualifications.

Additionally, the project leverages technology to streamline the resume creation process, saving users time and effort in creating a resume from scratch. The project's web-based application allows users to access the resume builder from anywhere, making it a convenient solution for those on the go.

1.4 Importance of Resume Builder for skilled Fresher

The "Resume Builder for skilled Fresher" project is important for several reasons. Firstly, it addresses the need for a tool that helps fresher job seekers create professional resumes that effectively showcase their skills and qualifications. This is important because a well-crafted resume can make all the difference in securing a job interview, especially in a competitive job market.

Secondly, the project is important because it leverages technology to streamline the resume creation process. By providing a web-based application that offers customizable templates and an easy-to-use interface, the project saves users time and effort in creating a resume from scratch. This is particularly important for fresher job seekers who may not have the experience or knowledge to create a professional-looking resume on their own.

Thirdly, the project's emphasis on privacy and security is important. Job seekers often have to provide personal information when creating a resume, and the project's focus on ensuring the privacy and security of user data is crucial in building trust with users.

Finally, the "Resume Builder for skilled Fresher" project is important because it provides a valuable tool for fresher job seekers to achieve their career goals. By simplifying the process of creating a high-quality resume, the project helps job seekers to stand out in the job market and increases their chances of success in securing a job interview and ultimately landing their desired job.

Overall, the "Resume Builder for skilled Fresher" project is important because it provides a user-friendly, efficient, and effective tool that addresses a common challenge faced by fresher job seekers and helps them achieve their career goals.

Chapter 2: Background

2.1 Description of the existing system

The traditional way of making a resume involved using a word processor such as Microsoft Word or Google Docs to create a document from scratch. The user would start with a blank page and manually input their personal information, work experience, education, skills, and other relevant details.

The user would then format the document by selecting fonts, font sizes, and styles, and adjusting the margins and spacing to create a professional-looking layout. The user would often have to refer to various resources such as online guides or templates to ensure that their resume was structured and presented correctly.

Creating a resume in the traditional way was often a time-consuming and daunting task, especially for fresher job seekers who may not have a lot of work experience or knowledge of resume formatting. Additionally, the traditional approach often resulted in resumes that were less visually appealing and less likely to stand out in a competitive job market.

Overall, while the traditional approach to creating a resume may have worked in the past, it is becoming increasingly outdated in today's digital age, where technology can streamline and simplify the resume creation process. Tools such as the "Resume Builder for skilled Fresher" project can provide a more efficient and effective way for job seekers to create professional-looking resumes that effectively showcase their skills and qualifications.

2.2 Circumstances leading to the current new system

The current system of making resumes in the traditional form has its roots in the pre-digital era when job seekers would submit printed copies of their resumes to potential employers. This system relied on the use of typewriters and printers, with job seekers manually typing their resumes and then printing them out on paper.

As technology evolved, word processing software such as Microsoft Word and Google Docs became widely available, making it easier for job seekers to create and format their resumes. However, the process of creating a resume in the traditional form remained largely unchanged, with users manually inputting their personal information and formatting the document themselves.

The traditional approach to creating a resume was also influenced by the prevailing job market conditions. In the past, many jobs were advertised in newspapers or through word of mouth, and job seekers had to submit their resumes in person or by mail. This made it necessary for resumes to be presented in a printed format, and for job seekers to have a physical copy of their resume to hand out to potential employers.

Today, however, the job market has shifted towards digital channels, with many job postings and applications taking place online. This has led to the development of new tools and technologies for creating resumes, such as the "Resume Builder for skilled Fresher" project, which leverages web-based technologies to provide a more efficient and effective way of creating resumes.

Overall, the circumstances leading to the current system of resume making in the traditional form were influenced by the technology and prevailing job market conditions of the time. However, as technology continues to evolve and the job market shifts towards digital channels, there is a need for more streamlined and efficient approaches to resume creation, such as the use of web-based resume builders.

2.3 Work already carried out in the project domain

There has been significant work carried out in the domain of resume builders for job seekers. Some of the notable examples include:

1. Canva: Canva is a graphic design platform that offers a range of templates for creating resumes, including ones designed specifically for fresher job seekers. The platform provides an easy-to-use interface and customization options, making it popular among job seekers.

2. Zety: Zety is a web-based resume builder that offers a range of templates and customization options for creating professional-looking resumes. The platform also provides resume writing tips and a resume-checking service to help users optimize their resumes for job applications.

3. Novoresume: Novoresume is another web-based resume builder that offers customizable templates and an easy-to-use interface for creating resumes. The platform also provides a range of features, including a cover letter builder and a resume tracking system.

4. LinkedIn: LinkedIn is a social networking platform that also offers a range of tools for job seekers, including a resume builder. The platform allows users to import their existing resumes and offers customization options for formatting and design.

5. Google Docs: Google Docs is a popular word processing software that offers a range of templates for creating resumes. The platform also allows for collaboration and sharing, making it easy for job seekers to work on their resumes with others.

2.4 Objective of the project

As placement season of most of the colleges is going to start, making Resume is a very hectic work for all the students. Also, many companies judge the candidature of a student just by his/her Resume. So it is necessary for the student to think beyond the third dimension while making the Resume.

- "Resume Builder for skilled Fresher" is the Web Application which helps students to get their resume in hand just by filling up a simple form where important credentials need to be filled.
- The resume is downloadable in PDF format. Also, the user can log in again to access the previous resume that he had made.
- The resume is of Standard Format as stated by most of the Engineering Colleges of India.

Overall, the objective of the "Resume Builder for skilled Fresher" project is to provide a user-friendly and efficient tool that helps fresher job seekers create professional-looking resumes that effectively showcase their skills and qualifications, improving their chances of success in their job search.

2.5 What is to be achieved and method of measuring the extent of that achievement

To measure the achievement of the "Resume Builder for skilled Fresher" project is to provide a user-friendly and efficient tool that helps fresher job seekers create professional-looking resumes that effectively showcase their skills and qualifications, improving their chances of success in their job search.

The achievement of this goal can be measured in several ways, including:

1. User feedback: User feedback is one of the most important measures of the success of the project. Feedback can be gathered through surveys, focus groups, and user testing sessions. This feedback will help the development team identify any areas that need improvement and make adjustments accordingly.

2. Adoption rate: The adoption rate of the tool is another measure of success. This can be measured by tracking the number of users who sign up for the tool and use it to create their resumes.

3. User satisfaction: User satisfaction is another important measure of success. This can be measured by tracking user engagement with the tool and analyzing user feedback to determine how satisfied they are with the tool's features and functionality.

4. Job placement rate: The ultimate measure of success is the job placement rate of the job seekers who use the tool. This can be tracked by analyzing data on the number of job applications submitted by users and the number of job offers received.

By measuring these metrics, the project team can determine the extent of the achievement of the project goals and make any necessary adjustments to improve the tool's effectiveness in helping fresher job seekers create professional-looking resumes and improve their chances of success in their job search.

Chapter 3: Analysis

3.1 System Requirement Analysis

System Requirement Analysis is a critical step in the software development lifecycle, which involves identifying, analyzing, and documenting the functional and non-functional requirements of a software system. Here are some of the system requirements for the "Resume Builder for skilled Fresher" project:

1. Functional Requirements:

- The system should allow users to create a new account or log in to an existing account.
- The system should provide users with a user-friendly interface to create a resume.
-
- The system should allow users to input their personal information, education, work experience, skills, and qualifications.
- The system should allow users to preview their resume and make changes before finalizing it.
- The system should allow users to save their resume in various formats such as PDF, Word, or HTML.
- The system should provide users with the option to share their resume on social media platforms or with potential employers.

2. Non-functional Requirements:

- The system should be responsive and load quickly on all devices.
- The system should be secure and protect users' personal information.
- The system should be scalable and able to handle a large number of users.

By identifying and documenting these requirements, the development team can ensure that the "Resume Builder for skilled Fresher" project meets the needs of the users and is successful in achieving its objectives.

Hardware Requirements:

233 MHz Pentium processor or another compatible IntelChipset Motherboard
512 MB SD-RAM
4 GB hard disk

Software Requirements:

Operating System -Windows 98 onwardsApplication Software –Spring Tool SuiteDatabase Tool – PostgreSQL

3.2 System Analysis

System analysis is the process of understanding and defining the requirements of a software system, and designing a solution that meets those requirements. Here is a brief overview of the system analysis process for the "Resume Builder for skilled Fresher" project:

1. Requirements Gathering: In this phase, the development team will gather information about the requirements of the system by interviewing stakeholders, reviewing existing documentation, and researching industry best practices. The team will identify the functional and non-functional requirements of the system.

2. System Design: Based on the requirements gathered in the previous phase, the development team will design the system architecture, including the user interface, data model, and software components. The team will also create wireframes and prototypes to demonstrate the functionality of the system.

3. System Development: In this phase, the development team will write the code for the system components, including the front-end user interface, back-end database, and application programming interfaces (APIs) that allow different components to communicate with each other.

4. Testing: Once the system components are developed, the development team will conduct a variety of tests to ensure that the system meets the requirements and functions as intended. These tests may include functional testing, performance testing, security testing, and user acceptance testing.

5. Deployment: Once the system passes all tests, the development team will deploy the system to a production environment and make it available to users.

6. Maintenance: After deployment, the development team will monitor the system and provide ongoing maintenance and support to ensure that it continues to function properly and meet the needs of users.

By following this system analysis process, the development team can ensure that the "Resume Builder for skilled Fresher" project meets the requirements of users and achieves its objectives.

➢ Use Case Diagram

Use-case diagrams describe the high-level functions and scope of a system. These diagrams also identify the interactions between the system and its actors. The use cases and actors in use-case diagrams describe what the system does and how the user use it, but not how the system operates internally.

Use Case Diagram

➢ Sequence Diagram

A sequence diagram or system sequence diagram (SSD) shows object interactions arranged in time sequence in the field of software engineering. It depicts the objects involved in the scenario and the sequence of messagesexchanged between the objects needed to carry out the functionality of scenario. Sequence diagrams are typically associated with use case realizations in the logical view of the system under development. Sequencediagrams are sometimes called event diagrams or event scenarios.

Sequence Diagram

➢ Activity Diagram

An activity diagram is a behavioral diagram i.e. it depicts the behavior of a system. An activity diagram portrays the control flow from a start point to afinish point showing the various decision paths that exist while the activity is being executed.

➢ ER Diagram

ER Diagram stands for Entity Relationship Diagram, also known as ERD isa diagram that displays the relationship of entity sets stored in a database. Inother words, ER diagrams help to explain the logical structure of databases. ER diagrams are created based on three basic concepts: entities, attributes and relationships.

ER Diagram

We have analyzed the feasibility of the system in terms of following spans:

- Technical Feasibility
- Operational Feasibility
- Economical Feasibility

3.3 Technical Feasibility

Technical feasibility is an assessment of whether the proposed project can be developed with the existing technology and resources. In the case of the "Resume Builder for skilled Fresher" project, the following technical feasibility factors need to be considered:

1. Platform and tools: The project needs to be developed using programming languages, frameworks, and libraries that are compatible with the intended platform. The project may require tools such as text editors, integrated development environments (IDEs), databases, and hosting services. It is important to ensure that these tools are available and compatible with each other.

2. Data storage: The project will require a database to store user information, resumes, and other data. The type of database, such as relational or non-relational, and the storage capacity required must be determined.

3. Security: The project will store sensitive information, such as user login credentials and personal information. It is essential to implement security measures to protect this information from unauthorized access or data breaches.

4. User interface design: The project must have an intuitive user interface that is easy to navigate and use. The user interface should be designed to work across different devices and platforms.

5. Performance and scalability: The project should be designed to perform well under varying user loads and be scalable to accommodate increasing numbers of users.

Based on the above factors, it is technically feasible to develop the "Resume Builder for skilled Fresher" project using existing technologies and resources. However, it will require careful planning, design, and implementation to ensure that the project is successful and meets the requirements of users.

3.4 Operational Feasibility

Operational feasibility refers to whether the proposed project can be integrated into the existing operations of an organization or business. In the case of the "Resume Builder for skilled Fresher" project, the following operational feasibility factors need to be considered:

1. User acceptance: The project should meet the needs of the intended users, i.e., skilled freshers looking to create a professional resume. The user interface and features must be easy to understand and use. User feedback should be gathered during the development process to ensure that the project meets their needs.

2. Cost: The cost of developing and implementing the project should be reasonable and within the budget of the organization or business. The project should also generate revenue or add value to the organization or business to justify its costs.

3. Integration with existing systems: The project should be compatible with existing systems and processes. For example, the project should integrate with job portals, social media platforms, or applicant tracking systems (ATS).

4. Training and support: The project should be accompanied by training and support resources to help users understand how to use the system. Technical support should also be available to address any issues or bugs that may arise.

5. Legal and regulatory compliance: The project must comply with relevant laws and regulations, such as data protection laws, intellectual property laws, and anti-discrimination laws.

Based on the above factors, it is operationally feasible to develop and implement the "Resume Builder for skilled Fresher" project. However, it will require careful planning, user testing, and ongoing support to ensure that the project is successfully integrated into the operations of organizations and businesses.

3.5 Economic Feasibility

The economic feasibility of a resume builder for skilled freshers depends on several factors such as the target market, pricing strategy, marketing efforts, and operational costs.

Target Market:
The success of a resume builder for skilled freshers largely depends on the size and demand of the target market. A resume builder aimed at a small niche market may not be economically viable, while one targeted at a large market may generate significant revenue.

Pricing Strategy:
The pricing strategy plays a critical role in determining the economic feasibility of a resume builder. The pricing should be competitive enough to attract customers while also generating sufficient revenue to cover operational costs and generate profits. The pricing model could be subscription-based, pay-per-use, or a combination of both.

Marketing Efforts:
The marketing efforts can greatly impact the economic feasibility of a resume builder. A well-planned marketing strategy can help reach a wider audience and attract potential customers. Social media, SEO, content marketing, and paid advertising are some of the marketing channels that can be used to promote a resume builder.

Operational Costs:
The operational costs of a resume builder include expenses such as website hosting, software development, customer support, and salaries of employees. Keeping operational costs low is important to ensure that the revenue generated from the product can cover all expenses and leave room for profits.

In conclusion, the economic feasibility of a resume builder for skilled freshers depends on several factors, including the target market, pricing strategy, marketing efforts, and operational costs. If the product is targeted at a large market, with a competitive pricing strategy and effective marketing efforts, it has the potential to be economically feasibility.

3.6 Data Flow Diagram

An information flow diagram (IFD) is a diagram that shows how information is communicated (or "flows") from a source to a receiver or target (e.g. A→C), through some medium. The medium acts as a bridge, a means of transmitting the information.

Level 0-

Level 1

User
Login
Check
Forgot password
check credentials
manage modules
Resume_Details
User_Profiles
send email to user

Level 2

Admin
Login to System
Check Roles of Access
Forgot Password
Check Credentials
Manage Modules
Send Email to User
Manage Resume Details
Manage Job Details
Manage Skills Details
Manage Jobskeer Details
Manage Salary Details
Manage User Profiles
Manage Report
Manage System Admins
Manage Roles of User
Manage User Permission

3.7 Method/Technology to be used

Programming Language

JavaScript is a programming language that is widely used for creating dynamic and interactive websites. It was first introduced in 1995 by Netscape Communications, and has since become one of the most popular programming languages in the world.

JavaScript allows developers to add interactive elements to their websites, such as pop-up windows, animations, and drop-down menus. It can also be used to create more complex applications, such as web-based games and mobile apps.

One of the key features of JavaScript is its ability to manipulate the Document Object Model (DOM) of a webpage. The DOM is a hierarchical structure that represents the elements of a webpage, such as images, text, and links. By using JavaScript to manipulate the DOM, developers can dynamically update the content of a webpage without having to reload the entire page.

JavaScript is a client-side language, which means that it is executed by the user's web browser, rather than on the server. This makes it a powerful tool for creating interactive web applications that respond to user input in real time.

In recent years, JavaScript has also become increasingly popular for server-side programming, with the introduction of frameworks such as Node.js. These frameworks allow developers to use JavaScript to create back-end web applications, as well as front-end applications.

Framework

React.js, commonly known as React, is a popular open-source JavaScript library for building user interfaces. It was developed by Facebook and released in 2013.

React allows developers to build reusable UI components and efficiently manage the state of those components, making it easier to create complex user interfaces with minimal code. React uses a declarative programming style, meaning that developers can describe what they want their UI to look like and React will take care of rendering it in the browser.

One of the key features of React is its virtual DOM (Document Object Model), which allows React to update only the parts of the UI that have changed rather than updating the entire page. This makes React highly efficient and fast, even when dealing with large and complex applications.

React is often used in conjunction with other libraries and frameworks such as Redux, React Router, and Next.js. It can be used to build a wide range of applications, including single-page applications (SPAs), mobile applications, and even desktop applications using technologies such as Electron.

Overall, React has become a popular choice for building modern, dynamic user interfaces due to its performance, flexibility, and ease of use.

Node.js is an open-source, cross-platform, back-end JavaScript runtime environment that enables developers to run JavaScript code outside of a web browser. It was developed by Ryan Dahl in 2009 and has since become a popular platform for building server-side applications.

One of the key advantages of Node.js is that it uses an event-driven, non-blocking I/O model, which makes it particularly well-suited for building real-time applications that require a lot of data to be processed quickly. It is also built on top of the Google V8 JavaScript engine, which provides fast performance and scalability.

Node.js is often used in conjunction with popular web frameworks such as Express.js, Hapi, and Koa, and it can be used to build a wide range of applications, from simple command-line tools to complex web applications and APIs.

HTML stands for HyperText Markup Language. It is the standard markup language used to create web pages and other web-based documents. HTML provides a way to structure content on the web using a series of tags and attributes, which define how different elements of a web page should be displayed.

HTML is a declarative language, meaning that it describes the structure and content of a web page, rather than specifying how it should be displayed. Web browsers then use this information to render the web page and display it to users.

HTML documents are made up of a series of tags, which are enclosed in angle brackets (< >). Tags are used to define the structure and content of different elements on a web page, such as headings, paragraphs, links, images, and forms.

HTML also supports the use of attributes, which provide additional information about an element. For example, the "href" attribute is used to specify the destination of a link, and the "src" attribute is used to specify the source of an image.

Overall, HTML is a fundamental technology for building websites and other web-based applications. By learning HTML, developers can create rich, dynamic, and interactive web pages that can be accessed by users all around the world.

Visual Studio Code (often referred to as VS Code) is a free and open-source code editor developed
by Microsoft. It was first released in 2015 and has since become one of the most popular code editors in the developer community

VS Code, short for Visual Studio Code, is a free and open-source source code editor developed by Microsoft. It is available for Windows, macOS, and Linux, and is one of the most popular code editors used by developers today.

VS Code is designed to be highly customizable and flexible, with a wide range of features and extensions that allow developers to work with a variety of programming languages and frameworks. Some of the key features of VS Code include:

- Intelligent code completion and error highlighting
- Integrated debugging and testing tools
- Git integration and support for version control
- Built-in terminal and command line interface
- Support for multiple programming languages and file types
- Wide range of extensions and plugins for additional functionality

One of the main advantages of VS Code is its performance and responsiveness, even when working with large and complex codebases. It also has a large and active community of developers, who have contributed to the development of many useful extensions and plugins.

Overall, VS Code is a powerful and versatile code editor that has become a popular choice for developers due to its flexibility, performance, and ease of use.

Vs code Snapshot

- **Testing Tools**

Postman: Postman is an application used for API testing. It is an HTTP client thattests HTTP requests, utilizing a graphical user interface, through which we obtain different types of responses that need to be subsequently validated.

Postman Snapshot

Chapter 4: Design

4.1 System Architecture

A system architecture is the conceptual model that defines the structure, behavior, and more views of a system. An architecture description is a formal description and representation of a system, organized in a way that supports reasoning about the structuresand behaviors of the system.

4.2 Data Design

Database design is the organization of data according to a database model. The designerdetermines what data must be stored and how the data elements interrelate. With this information, they can begin to fit the data to the database model. Database management system manages the data accordingly.

We created four entities, Company, Department, Employee and Salary slip. In each of these we created variables as information of respective entities.

4.3 Interface Design

#While adding Information like experience

#While adding Information like education

#While adding Information like skills

#Database Screenshot

#While adding Information like Achievements

Chapter 5: Testing

5.1 Scope of testing

Software testing is a process of checking software applications and products for bugs anderrors to ensure their performance is efficient. Testing in software engineering is a fundamental process of creating reliable – and usable – software products.

That's what makes it necessary in guiding effective software development. Understanding the different types of software testing is what the need for Quality Assurance in software development stems from.

Usually, companies that attempt to create software have dedicated software testers – an in- house means of software testing help. By detecting errors and mistakes that affect the quality of software, these testers can ensure that software products are worthy of being sold in the market. Thus, they guarantee a software's usefulness, and help turning software applications into end-products that perform the way their designers intended them to.

5.2 Test plan

A Test Plan refers to a detailed document that catalogs the test strategy, objectives, schedule, estimations, deadlines, and the resources required for completing that particularproject. Think of it as a blueprint for running the tests needed to ensure the software is working properly – controlled by test managers.

A well-crafted test plan is a dynamic document that changes according to progressions in the project and stays current at all times. It is the point of reference, based on which testingactivities are executed and coordinated among a QA team.

5.3 Test case design

A good test case design technique is crucial to improving the quality of the software testing process. This helps to improve the overall quality and effectiveness of the released software.
The test case design techniques are broadly classified into three major categories.

5.4 Specification-Based techniques
5.5 Structure-Based techniques
5.6 Experience-Based techniques

➢ Specification-Based or Black-Box techniques

This technique leverages the external description of the software such as technical specifications, design, and client's requirements to design test cases. The technique enablestesters to develop test cases that provide full test coverage. The Specification-based or black box test case design techniques are divided further into 5 categories. Thesecategories are as follows:

Boundary Value Analysis (BVA)

This technique is applied to explore errors at the boundary of the input domain. BVA catches any input errors that might interrupt with the proper functioning of the program.

Equivalence Partitioning (EP)

In Equivalence Partitioning, the test input data is partitioned into a number of classes having an equivalent number of data. The test cases are then designed for each class or partition. This helps to reduce the number of test cases.

Decision Table Testing

In this technique, test cases are designed on the basis of the decision tables that are formulated using different combinations of inputs and their corresponding outputs based onvarious conditions and scenarios adhering to different business rules.

State Transition Diagrams

In this technique, the software under test is perceived as a system having a finite number ofstates of different types. The transition from one state to another is guided by a set of rules. The rules define the response to different inputs. This technique can be implemented on thesystems which have certain workflows within them.

Use Case Testing

A use case is a description of a particular use of the software by a user. In this technique, the test cases are designed to execute different business scenarios and end-user functionalities. Use case testing helps to identify test cases that cover the entire system.

➢ Structure-Based or White-Box techniques

The structure-based or white-box technique design test cases based on the internal structureof the software. This technique exhaustively tests the developed code. Developers who have complete information of the software code, its internal structure, and design help to design the test cases. This technique is further divided into five categories.

Statement Testing & Coverage

This technique involves execution of all the executable statements in the source code atleast once. The percentage of the executable statements is calculated as per the given requirement. This is the least preferred metric for checking test coverage.

Decision Testing Coverage

This technique is also known as branch coverage is a testing method in which each one of the possible branches from each decision point is executed at least once to ensure all reachable code is executed. This helps to validate all the branches in the code. This helpsto ensure that no branch leads to unexpected behavior of the application.

Condition Testing

Condition testing also is known as Predicate coverage testing, each Boolean expression is predicted as TRUE or FALSE. All the testing outcomes are at least tested once. This typeof testing involves 100% coverage of the code. The test cases are designed as such that the condition outcomes are easily executed.

Multiple Condition Testing

The purpose of Multiple condition testing is to test the different combination of conditionsto get 100% coverage. To ensure complete coverage, two or more test scripts are requiredwhich requires more efforts.

All Path Testing

In this technique, the source code of a program is leveraged to find every executable path. This helps to determine all the faults within a particular code.

➢ Experience-Based techniques

These techniques are highly dependent on tester's experience to understand the most important areas of the software. The outcomes of these techniques are based on the skills, knowledge, and expertise of the people involved. The types of experience-based techniquesare as follows:

Error Guessing

In this technique, the testers anticipate errors based on their experience, availability of data and their knowledge of product failure. Error guessing is dependent on the skills, intuition, and experience of the testers.

Exploratory Testing

This technique is used to test the application without any formal documentation. There isminimum time available for testing and maximum for test execution. In exploratory testing, the test design and test execution are performed concurrently.

5.4 Sample test data and results

Following test cases were carried out:

Cases	**Action To be Performed**	**Expected Results**	**Actual Result**
Case 1:	Admin login	If Admin details a re correct, Login done	f Admin details a re correct, Login done
Case 2:	Update Details	If company with respective id exists, update details	Updated Success fully.
Case 3:	Update resume Details	If an update id exists, details update.	Updated Success fully.
Case 4:	User Login	If user id provided exist, update successfully.	User Updated Success fully.
Case 4:	Update User Details	If a valid company id is provided, add Employee.	Employee Added Success fully. Employee Id

			generated
Case 5:	Update resume Details	If an update id exists, details update	Updated Successfully.
Case 6:	Add file format	If the valid format is provided, add pay slip.	File format added successfully
Case 7:	Delete resume	If the resumey id provided exists, delete the company details.	resume details deleted successfully.

Chapter 6: Limitations

6.1 Limitation

Like any other project, the "Resume Builder for skilled Fresher" project may have some limitations. Some potential limitations include:

1. User adoption: It is possible that users may not adopt the project if they prefer to use traditional methods of creating resumes, or if they do not have access to the internet or computer systems required to use the project.

2. Technical limitations: The project may have technical limitations that could affect its performance or usability. For example, the project may not be able to handle large amounts of data or may not be compatible with all browsers or operating systems.

3. Limited features: The project may have limited features compared to other existing resume builders. Some users may prefer more advanced features, such as integration with applicant tracking systems or more customization options.

4. Data security: As the project involves storing personal and confidential information, it is essential to ensure data security measures are in place to protect user data.

5. Language limitations: The project may not be able to support all languages, which could limit its accessibility for users in different regions or countries.

6. Dependence on internet connectivity: The project requires a stable internet connection to function correctly, which could be a limitation for users in areas with poor connectivity.

It is important to identify and address these limitations to ensure that the project is successful and meets the needs of its intended users.

Chapter 7: Summary and Conclusions

The "Resume Builder for skilled Fresher" project has a lot of potential for future development and expansion. Some possible areas of future scope include:

1. Integration with job portals: The project could be integrated with popular job portals such as Indeed, LinkedIn, or Glassdoor to make it easier for users to apply for jobs.

2. Customization options: The project could include more customization options to allow users to create resumes that are tailored to their specific needs and preferences.

3. Multi-language support: The project could be expanded to support multiple languages, making it more accessible to users around the world.

4. Artificial intelligence (AI) and machine learning (ML) integration: The project could be integrated with AI and ML algorithms to provide users with personalized recommendations and suggestions for improving their resumes.

5. Collaboration features: The project could include collaboration features that allow users to work together on a single resume, making it easier for teams or groups to create and edit resumes together.

6. Mobile application: The project could be developed as a mobile application to allow users to create and edit their resumes on-the-go.

7. Analytics and reporting: The project could include analytics and reporting features to help users track their resume views, application success rates, and other relevant metrics.

Overall, there are many potential areas of future development and expansion for the "Resume Builder for skilled Fresher" project. These developments could help to make the project even more useful and valuable for users, while also expanding its reach and impact.

Chapter 9: Future Scope

9.1 Resume Builder for skilled Fresher

1. Integration with job search platforms: You could integrate your resume builder with popular job search platforms such as LinkedIn or Indeed. This would allow users to easily apply to jobs directly from their resume and track their job application status.

2. Personalized resume suggestions: Using machine learning algorithms, you could suggest improvements to the user's resume based on their industry and job title. This would make the resume building process more efficient and effective for the user.

3. Cover letter builder: In addition to the resume builder, you could also develop a cover letter builder. This would allow users to easily create a customized cover letter for each job they apply to, and could include suggestions for formatting and content.

4. Collaboration and feedback features: You could enable users to share their resumes with friends, mentors or career counselors, and receive feedback and suggestions for improvement. This would make the resume building process more collaborative and increase the chances of creating a high-quality resume.

5. Analytics and insights: You could provide users with analytics and insights about their resume, such as how many times it has been viewed or downloaded by potential employers. This would help users to track the effectiveness of their resume and make data-driven decisions about their job search strategy.

Appendix

✓ Process: A process done in the system is denoted by this symbol. For example, prepare attendance report, pay slip, etc.

✓ External entity: A source or destination of data which is external to the system.

✓ A data flow: it is packet or data. It may be in the form of document or letter.

✓ Data store: Any store data but with no reference to the physical method of storing.

✓ Multiplicity: Use to represent one to many relationships between the entities

*

✓ Association: It represents the relationship between the entities

✓ State: It represents current state of system that is being designed.

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Resume Builder for skilled Fresher

A Major Project Report

submitted in partial fulfillment of requirement of the degree

of

Master of Computer Applications

by

Akshat Dwivedi
EN21CA501013

under the guidance of

Prof. Ritu Sodhi

Department of Computer Applications
Faculty of Engineering
MEDI-CAPS UNIVERSITY, INDORE- 453331
Jan-June 2023

Report Approval

The project work **"Resume Builder for skilled Fresher"** is hereby approved as a creditable study of an engineering/computer application subject carried out and presented in a manner satisfactory to warrant its acceptance as prerequisite for the Degree for which it has been submitted.

It is to be understood that by this approval the undersigned do not endorse or approval any statement made, opinion expressed or conclusion drawn there in; but approve the "Project Report" only for the purpose for which it has been submitted.

Examiner(s)

Name(s)	Signature(s)
1. …….	…….
2. …….	…….
3. …….	…….
4. …….	…….
5. …….	…….

Date: …….

Declaration

I hereby declare that the project entitled "**Resume Builder for skilled Fresher**" submitted in partial fulfillment for the award of the degree of Master of Computer Applications in "Department of Computer Applications" completed under the supervision of **Prof. Ritu Sodhi Major Project Guide, Department of Computer Applications,** Faculty of Engineering, Medi-Caps University Indore is an authentic work.

Further, I declare that the content of this Project work, in full or in parts, have neither been taken from any other source nor have been submitted to any other Institute or University for the award of any degree or diploma.

Signature

Akshat Dwivedi

04/05/2023

Certificate

I, **Prof. Ritu Sodhi** certify that the project entitled "**Resume Builder for skilled Fresher**" submitted in partial fulfillment for the award of the degree of Master of Computer Applications by **Akshat Dwivedi** is the record carried out by him under my guidance.

Prof. Ritu Sodhi

Department of Computer Applications

Medi-Caps University, Indore

Mr. Hemant Vijayvargiyaa

Annova solutions

Mr. Anil Patidar

Head of the Department

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Company Certificate

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Dear **Akshat Dwivedi,** M.C.A 4th Semester Medicaps University, Indore

On behalf of **Annova Solutions,** I am pleased to inform your acceptance of an internship position as **Intern NodeJS Backend Developer** . Your first day of joining is **25-Jan-2023**. In addition to your duties outlined in the interview, you will report to your internship manager **Mr. Hemant Vijayvargiya (Contact 9669562594)**

As an intern, you are not the company's employee; and therefore, will not receive any regular employee benefits. This is an unpaid internship program. You understand that participating in the internship program is not an offer of employment. This internship will end on **25-May-2023.**

During your internship, you will have an access to company's clients and confidential information. You agree that you will keep all this information and client information strictly confidential and will not share it with anyone outside the company. You will not use it for your own benefits and on completion of the internship; you will return documents, equipment, and all property of the company.

Congratulations on the Internship.

Best Regards,

ANNOVA SOLUTIONS PVT. LTD. INDORE

Nandini
HR Manager,
Annova Solutions, Indore
https://annovasolutions.com/

RO 13, Kumar Mohalla, Flat 301, Utsav Residency, Malharganj, Indore 452002 India
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Completion Certificate

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Date :10-May-2023

TO WHOM IT MAY CONCERN

This is to certify that **Akshat Dwivedi, Student of Medi-caps University, Indore, MCA 4th Semester** has successfully completed internship program from 25-Jan-23 to 10-May-23 at Annova Solutions, Indore. He has worked as a full time **Intern Node Backend Developer** and designed various creatives also, He dedicated her full efforts in growing online presence of Annova Solutions.

During the Internship he demonstrated good design skills with a self- motivated attitude to learn new things.

We wish him all the best for his future endeavour.

Warm Regards

ANNOVA SOLUTIONS PVT. LTD. INDORE

Nandini
HR Manager,
Annova Solutions, Indore
https://annovasolution.com/

RO 13, Kumar Mohalla, Flat 301, Utsav Residency, Malharganj, Indore 452002 India
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Acknowledgement

I would like to express my deepest gratitude to our Honorable Chancellor, **Shri R. C. Mittal,** who has provided me with every facility to successfully carry out this project, and my profound indebtedness to **Prof. (Dr.) D. K. Patnaik,** Vice-Chancellor, Medi-Caps University, whose unfailing support and enthusiasm has always boosted up my morale. I also thank **Prof. (Dr.) Pramod S Nair,** Dean, Faculty of Engineering, Medi-Caps University, for giving me a chance to work on this project. I would also like to thank my Head of the Department **Prof. Anil Patidar** for his continuous encouragement for betterment of the project.

I express my heartfelt gratitude to my **External Guide, Mr. Hemant Vijayvargiya, Annova Solutions Private Limited** as well as to my Internal Guide, **Prof. Ritu Sodhi, Major Project Guide, Department of Computer Applications,** for continuous help and support which helped me to complete this project.

I would also like to thank to my team at Tata Consultancy Services Limited who extended their kind support and help towards the completion of this project. It is their help and support, due to which I/we am/are able to complete the design and technical report. Without their support this report would not have been possible.

Akshat Dwivedi
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Abstract

The "Resume Builder for skilled Fresher" project is aimed at providing a user-friendly application that enables job seekers to quickly and easily create professional resumes. The application allows users to input their personal information, work experience, education, and other relevant details, and offers a range of templates to choose from.

The project is designed to provide a high-quality resume generator that can be used by fresher job seekers who are looking to make a strong impression in the job market. The resume generator will be built using a programming language such as Python, Java, or JavaScript, and will be user-friendly with an intuitive interface.

The generated resumes will be in a professional format that is suitable for job applications. The project also focuses on ensuring the privacy and security of user data.

The "Resume Builder for skilled Fresher" project aims to provide an effective and efficient tool for job seekers to create resumes that stand out in the competitive job market. By leveraging technology, the project aims to simplify and streamline the resume creation process, helping job seekers to better showcase their skills and qualifications.

1. Simplify the resume creation process: The project aims to provide a user-friendly interface that simplifies the process of creating a resume, making it easy for even inexperienced job seekers to create a professional-looking resume.

2. Save time: By providing customizable templates and pre-populated fields, the project aims to save job seekers time in creating a resume, allowing them to focus on other aspects of their job search.

3. Increase visibility: The project aims to create resumes that are visually appealing and stand out from the competition, increasing the visibility of job seekers in a crowded job market.

4. Showcase skills and qualifications: The project aims to provide a platform for job seekers to showcase their skills and qualifications in a clear and concise manner, making it easier for potential employers to identify suitable candidates.

5. Improve job search success: By providing job seekers with a professional-looking resume that effectively showcases their skills and qualifications, the project aims to improve their chances of success in their job search.

Overall, the objective of the "Resume Builder for skilled Fresher" project is to provide a user-friendly and efficient tool that helps fresher job seekers create professional-looking resumes that effectively showcase their skills and qualifications, improving their chances of success in their job search.

The Resume Builder Project is a web-based tool designed to help job seekers create professional resumes quickly and easily. The project aims to simplify the process of resume creation by providing users with a user-friendly interface and customizable templates to suit different job roles and industries. The tool allows users to input their personal information, work experience, education, and skills, and then generates a visually appealing and professional resume. The project also includes features such as real-time feedback and suggestions, resume sharing, and a preview feature to help users see how their resumes will look before downloading. Overall, the Resume Builder Project provides a simple and effective solution to the challenge of creating a resume that stands out to potential employers.

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Abbreviations

- IT- Information technology
- RAM- Random Access Memory
- MHz-Mega Hertz
- IFR-Information Flow Representation
- ERD- Entity Relationship Diagram

Notations and Symbols/Nomenclatures

Process

External Entity

Data Flow

Multiplicity *

Association

Chapter 1: Introduction

1.1 Annova Solutions

At Annova Solutions, we believe in solving problems and overcoming challenges for our clients. Our leaders have extensive knowledge across various verticals across the globe. Our teams are powered with innovation, new-techniques, and adaptability which makes working with us flexible yet efficient. Annova sets up Knowledge Service Units (KSUs) which are nothing but an extension of your team – except that Annova does most of the heavy lifting, ideation, execution, so that you can sit back, relax and focus on most strategic areas of your business. We are the pioneers and masters of AI & Machine Learning Services, Computer Vision Services, Healthcare Operations, and shared service partners in India. We work for clients from across the globe, 90% of them being from the USA.

Annova Solutions specializes in building custom software applications, data analytics solutions, and providing technology consulting services to help businesses optimize their operations and achieve their goals. The company has a team of experienced developers, data scientists, and technology experts who work closely with clients to understand their unique needs and develop tailored solutions that deliver measurable results.

Some of the key services offered by Annova Solutions include custom software development, data analytics and business intelligence, cloud computing solutions, mobile application development, and IT consulting. The company has worked with a range of clients, from small startups to large enterprises, and has delivered solutions across various industries, including finance, healthcare, retail, and logistics.

Annova Solutions is known for its expertise in emerging technologies such as artificial intelligence, machine learning, blockchain, and the Internet of Things (IoT), and has been recognized for its innovative solutions and exceptional client service.

Headquarters of The Company

Indore, Madhya Pradesh, India

Products & Services Provided

Annova Solutions provides a wide range of information technology-related products and services including application development, business process outsourcing, capacity planning, consulting, enterprise software, hardware sizing, payment processing, software management, and technology education services

1.2 Description of Project

The "Resume Builder for skilled Fresher" project is aimed at providing a web-based application that allows fresher job seekers to create professional resumes easily and quickly. The application will have an intuitive user interface that will guide the user through the process of creating a resume by providing step-by-step instructions.

The application will offer a range of resume templates that users can choose from, with different sections and formatting options. The templates will be designed to showcase the user's skills and qualifications effectively, helping them stand out in the competitive job market.

The application will allow users to input their personal information, work experience, education, and other relevant details. The user can then preview and customize the templates according to their preferences. Once the user is satisfied with the resume, they can download or print it in a professional format suitable for job applications.

The project will focus on providing a user-friendly and seamless experience for the users while ensuring the security and privacy of their data.

The application will be tested extensively to ensure that it meets all the requirements and functions correctly. The "Resume Builder for skilled Fresher" project aims to provide a valuable tool for fresher job seekers to create high-quality resumes that will help them stand out in the job market and increase their chances of getting hired.

1.3 Significance of Resume Builder for skilled Fresher

The "Resume Builder for skilled Fresher" project is significant because it addresses a common challenge faced by many fresher job seekers – creating a professional resume that effectively showcases their skills and qualifications. A well-crafted resume can make all the difference in securing a job interview, and this project aims to provide a tool that simplifies the process of creating a high-quality resume.

By providing a range of customizable templates and an easy-to-use interface, the "Resume Builder for skilled Fresher" project aims to help users create resumes that stand out in the competitive job market. The project's significance lies in its ability to provide an efficient and effective tool for fresher job seekers to create professional resumes that are tailored to their specific needs and qualifications.

Additionally, the project leverages technology to streamline the resume creation process, saving users time and effort in creating a resume from scratch. The project's web-based application allows users to access the resume builder from anywhere, making it a convenient solution for those on the go.

1.4 Importance of Resume Builder for skilled Fresher

The "Resume Builder for skilled Fresher" project is important for several reasons. Firstly, it addresses the need for a tool that helps fresher job seekers create professional resumes that effectively showcase their skills and qualifications. This is important because a well-crafted resume can make all the difference in securing a job interview, especially in a competitive job market.

Secondly, the project is important because it leverages technology to streamline the resume creation process. By providing a web-based application that offers customizable templates and an easy-to-use interface, the project saves users time and effort in creating a resume from scratch. This is particularly important for fresher job seekers who may not have the experience or knowledge to create a professional-looking resume on their own.

Thirdly, the project's emphasis on privacy and security is important. Job seekers often have to provide personal information when creating a resume, and the project's focus on ensuring the privacy and security of user data is crucial in building trust with users.

Finally, the "Resume Builder for skilled Fresher" project is important because it provides a valuable tool for fresher job seekers to achieve their career goals. By simplifying the process of creating a high-quality resume, the project helps job seekers to stand out in the job market and increases their chances of success in securing a job interview and ultimately landing their desired job.

Overall, the "Resume Builder for skilled Fresher" project is important because it provides a user-friendly, efficient, and effective tool that addresses a common challenge faced by fresher job seekers and helps them achieve their career goals.

Chapter 2: Background

2.1 Description of the existing system

The traditional way of making a resume involved using a word processor such as Microsoft Word or Google Docs to create a document from scratch. The user would start with a blank page and manually input their personal information, work experience, education, skills, and other relevant details.

The user would then format the document by selecting fonts, font sizes, and styles, and adjusting the margins and spacing to create a professional-looking layout. The user would often have to refer to various resources such as online guides or templates to ensure that their resume was structured and presented correctly.

Creating a resume in the traditional way was often a time-consuming and daunting task, especially for fresher job seekers who may not have a lot of work experience or knowledge of resume formatting. Additionally, the traditional approach often resulted in resumes that were less visually appealing and less likely to stand out in a competitive job market.

Overall, while the traditional approach to creating a resume may have worked in the past, it is becoming increasingly outdated in today's digital age, where technology can streamline and simplify the resume creation process. Tools such as the "Resume Builder for skilled Fresher" project can provide a more efficient and effective way for job seekers to create professional-looking resumes that effectively showcase their skills and qualifications.

2.2 Circumstances leading to the current new system

The current system of making resumes in the traditional form has its roots in the pre-digital era when job seekers would submit printed copies of their resumes to potential employers. This system relied on the use of typewriters and printers, with job seekers manually typing their resumes and then printing them out on paper.

As technology evolved, word processing software such as Microsoft Word and Google Docs became widely available, making it easier for job seekers to create and format their resumes. However, the process of creating a resume in the traditional form remained largely unchanged, with users manually inputting their personal information and formatting the document themselves.

The traditional approach to creating a resume was also influenced by the prevailing job market conditions. In the past, many jobs were advertised in newspapers or through word of mouth, and job seekers had to submit their resumes in person or by mail. This made it necessary for resumes to be presented in a printed format, and for job seekers to have a physical copy of their resume to hand out to potential employers.

Today, however, the job market has shifted towards digital channels, with many job postings and applications taking place online. This has led to the development of new tools and technologies for creating resumes, such as the "Resume Builder for skilled Fresher" project, which leverages web-based technologies to provide a more efficient and effective way of creating resumes.

Overall, the circumstances leading to the current system of resume making in the traditional form were influenced by the technology and prevailing job market conditions of the time. However, as technology continues to evolve and the job market shifts towards digital channels, there is a need for more streamlined and efficient approaches to resume creation, such as the use of web-based resume builders.

2.3 Work already carried out in the project domain

There has been significant work carried out in the domain of resume builders for job seekers. Some of the notable examples include:

1. Canva: Canva is a graphic design platform that offers a range of templates for creating resumes, including ones designed specifically for fresher job seekers. The platform provides an easy-to-use interface and customization options, making it popular among job seekers.

2. Zety: Zety is a web-based resume builder that offers a range of templates and customization options for creating professional-looking resumes. The platform also provides resume writing tips and a resume-checking service to help users optimize their resumes for job applications.

3. Novoresume: Novoresume is another web-based resume builder that offers customizable templates and an easy-to-use interface for creating resumes. The platform also provides a range of features, including a cover letter builder and a resume tracking system.

4. LinkedIn: LinkedIn is a social networking platform that also offers a range of tools for job seekers, including a resume builder. The platform allows users to import their existing resumes and offers customization options for formatting and design.

5. Google Docs: Google Docs is a popular word processing software that offers a range of templates for creating resumes. The platform also allows for collaboration and sharing, making it easy for job seekers to work on their resumes with others.

2.4 Objective of the project

As placement season of most of the colleges is going to start, making Resume is a very hectic work for all the students. Also, many companies judge the candidature of a student just by his/her Resume. So it is necessary for the student to think beyond the third dimension while making the Resume.

- "Resume Builder for skilled Fresher" is the Web Application which helps students to get their resume in hand just by filling up a simple form where important credentials need to be filled.
- The resume is downloadable in PDF format. Also, the user can log in again to access the previous resume that he had made.
- The resume is of Standard Format as stated by most of the Engineering Colleges of India.

Overall, the objective of the "Resume Builder for skilled Fresher" project is to provide a user-friendly and efficient tool that helps fresher job seekers create professional-looking resumes that effectively showcase their skills and qualifications, improving their chances of success in their job search.

2.5 What is to be achieved and method of measuring the extent of that achievement

To measure the achievement of the "Resume Builder for skilled Fresher" project is to provide a user-friendly and efficient tool that helps fresher job seekers create professional-looking resumes that effectively showcase their skills and qualifications, improving their chances of success in their job search.

The achievement of this goal can be measured in several ways, including:

1. User feedback: User feedback is one of the most important measures of the success of the project. Feedback can be gathered through surveys, focus groups, and user testing sessions. This feedback will help the development team identify any areas that need improvement and make adjustments accordingly.

2. Adoption rate: The adoption rate of the tool is another measure of success. This can be measured by tracking the number of users who sign up for the tool and use it to create their resumes.

3. User satisfaction: User satisfaction is another important measure of success. This can be measured by tracking user engagement with the tool and analyzing user feedback to determine how satisfied they are with the tool's features and functionality.

4. Job placement rate: The ultimate measure of success is the job placement rate of the job seekers who use the tool. This can be tracked by analyzing data on the number of job applications submitted by users and the number of job offers received.

By measuring these metrics, the project team can determine the extent of the achievement of the project goals and make any necessary adjustments to improve the tool's effectiveness in helping fresher job seekers create professional-looking resumes and improve their chances of success in their job search.

Chapter 3: Analysis

3.1 System Requirement Analysis

System Requirement Analysis is a critical step in the software development lifecycle, which involves identifying, analyzing, and documenting the functional and non-functional requirements of a software system. Here are some of the system requirements for the "Resume Builder for skilled Fresher" project:

1. Functional Requirements:

- The system should allow users to create a new account or log in to an existing account.
- The system should provide users with a user-friendly interface to create a resume.
-
- The system should allow users to input their personal information, education, work experience, skills, and qualifications.
- The system should allow users to preview their resume and make changes before finalizing it.
- The system should allow users to save their resume in various formats such as PDF, Word, or HTML.
- The system should provide users with the option to share their resume on social media platforms or with potential employers.

2. Non-functional Requirements:

- The system should be responsive and load quickly on all devices.
- The system should be secure and protect users' personal information.
- The system should be scalable and able to handle a large number of users.

By identifying and documenting these requirements, the development team can ensure that the "Resume Builder for skilled Fresher" project meets the needs of the users and is successful in achieving its objectives.

Hardware Requirements:

233 MHz Pentium processor or another compatible IntelChipset Motherboard
512 MB SD-RAM
4 GB hard disk

Software Requirements:

Operating System -Windows 98 onwardsApplication Software –Spring Tool SuiteDatabase Tool – PostgreSQL

3.2 System Analysis

System analysis is the process of understanding and defining the requirements of a software system, and designing a solution that meets those requirements. Here is a brief overview of the system analysis process for the "Resume Builder for skilled Fresher" project:

1. Requirements Gathering: In this phase, the development team will gather information about the requirements of the system by interviewing stakeholders, reviewing existing documentation, and researching industry best practices. The team will identify the functional and non-functional requirements of the system.

2. System Design: Based on the requirements gathered in the previous phase, the development team will design the system architecture, including the user interface, data model, and software components. The team will also create wireframes and prototypes to demonstrate the functionality of the system.

3. System Development: In this phase, the development team will write the code for the system components, including the front-end user interface, back-end database, and application programming interfaces (APIs) that allow different components to communicate with each other.

4. Testing: Once the system components are developed, the development team will conduct a variety of tests to ensure that the system meets the requirements and functions as intended. These tests may include functional testing, performance testing, security testing, and user acceptance testing.

5. Deployment: Once the system passes all tests, the development team will deploy the system to a production environment and make it available to users.

6. Maintenance: After deployment, the development team will monitor the system and provide ongoing maintenance and support to ensure that it continues to function properly and meet the needs of users.

By following this system analysis process, the development team can ensure that the "Resume Builder for skilled Fresher" project meets the requirements of users and achieves its objectives.

➢ Use Case Diagram

Use-case diagrams describe the high-level functions and scope of a system. These diagrams also identify the interactions between the system and its actors. The use cases and actors in use-case diagrams describe what the system does and how the user use it, but not how the system operates internally.

Use Case Diagram

➢ Sequence Diagram

A sequence diagram or system sequence diagram (SSD) shows object interactions arranged in time sequence in the field of software engineering. It depicts the objects involved in the scenario and the sequence of messagesexchanged between the objects needed to carry out the functionality of scenario. Sequence diagrams are typically associated with use case realizations in the logical view of the system under development. Sequencediagrams are sometimes called event diagrams or event scenarios.

Sequence Diagram

➢ Activity Diagram

An activity diagram is a behavioral diagram i.e. it depicts the behavior of a system. An activity diagram portrays the control flow from a start point to afinish point showing the various decision paths that exist while the activity is being executed.

➢ ER Diagram

ER Diagram stands for Entity Relationship Diagram, also known as ERD isa diagram that displays the relationship of entity sets stored in a database. Inother words, ER diagrams help to explain the logical structure of databases. ER diagrams are created based on three basic concepts: entities, attributes and relationships.

ER Diagram

We have analyzed the feasibility of the system in terms of following spans:

- Technical Feasibility
- Operational Feasibility
- Economical Feasibility

3.3 Technical Feasibility

Technical feasibility is an assessment of whether the proposed project can be developed with the existing technology and resources. In the case of the "Resume Builder for skilled Fresher" project, the following technical feasibility factors need to be considered:

1. Platform and tools: The project needs to be developed using programming languages, frameworks, and libraries that are compatible with the intended platform. The project may require tools such as text editors, integrated development environments (IDEs), databases, and hosting services. It is important to ensure that these tools are available and compatible with each other.

2. Data storage: The project will require a database to store user information, resumes, and other data. The type of database, such as relational or non-relational, and the storage capacity required must be determined.

3. Security: The project will store sensitive information, such as user login credentials and personal information. It is essential to implement security measures to protect this information from unauthorized access or data breaches.

4. User interface design: The project must have an intuitive user interface that is easy to navigate and use. The user interface should be designed to work across different devices and platforms.

5. Performance and scalability: The project should be designed to perform well under varying user loads and be scalable to accommodate increasing numbers of users.

Based on the above factors, it is technically feasible to develop the "Resume Builder for skilled Fresher" project using existing technologies and resources. However, it will require careful planning, design, and implementation to ensure that the project is successful and meets the requirements of users.

3.4 Operational Feasibility

Operational feasibility refers to whether the proposed project can be integrated into the existing operations of an organization or business. In the case of the "Resume Builder for skilled Fresher" project, the following operational feasibility factors need to be considered:

1. User acceptance: The project should meet the needs of the intended users, i.e., skilled freshers looking to create a professional resume. The user interface and features must be easy to understand and use. User feedback should be gathered during the development process to ensure that the project meets their needs.

2. Cost: The cost of developing and implementing the project should be reasonable and within the budget of the organization or business. The project should also generate revenue or add value to the organization or business to justify its costs.

3. Integration with existing systems: The project should be compatible with existing systems and processes. For example, the project should integrate with job portals, social media platforms, or applicant tracking systems (ATS).

4. Training and support: The project should be accompanied by training and support resources to help users understand how to use the system. Technical support should also be available to address any issues or bugs that may arise.

5. Legal and regulatory compliance: The project must comply with relevant laws and regulations, such as data protection laws, intellectual property laws, and anti-discrimination laws.

Based on the above factors, it is operationally feasible to develop and implement the "Resume Builder for skilled Fresher" project. However, it will require careful planning, user testing, and ongoing support to ensure that the project is successfully integrated into the operations of organizations and businesses.

3.5 Economic Feasibility

The economic feasibility of a resume builder for skilled freshers depends on several factors such as the target market, pricing strategy, marketing efforts, and operational costs.

Target Market:
The success of a resume builder for skilled freshers largely depends on the size and demand of the target market. A resume builder aimed at a small niche market may not be economically viable, while one targeted at a large market may generate significant revenue.

Pricing Strategy:
The pricing strategy plays a critical role in determining the economic feasibility of a resume builder. The pricing should be competitive enough to attract customers while also generating sufficient revenue to cover operational costs and generate profits. The pricing model could be subscription-based, pay-per-use, or a combination of both.

Marketing Efforts:
The marketing efforts can greatly impact the economic feasibility of a resume builder. A well-planned marketing strategy can help reach a wider audience and attract potential customers. Social media, SEO, content marketing, and paid advertising are some of the marketing channels that can be used to promote a resume builder.

Operational Costs:
The operational costs of a resume builder include expenses such as website hosting, software development, customer support, and salaries of employees. Keeping operational costs low is important to ensure that the revenue generated from the product can cover all expenses and leave room for profits.

In conclusion, the economic feasibility of a resume builder for skilled freshers depends on several factors, including the target market, pricing strategy, marketing efforts, and operational costs. If the product is targeted at a large market, with a competitive pricing strategy and effective marketing efforts, it has the potential to be economically feasibility.

3.6 Data Flow Diagram

An information flow diagram (IFD) is a diagram that shows how information is communicated (or "flows") from a source to a receiver or target (e.g. A→C), through some medium. The medium acts as a bridge, a means of transmitting the information.

Level 0-

Level 1

User
Login
Check
Forgot password
check credentials
manage modules
Resume_Details
User_Profiles
send email to user

Level 2

Admin
Login to System
Check Roles of Access
Forgot Password
Check Credentials
Manage Modules
Send Email to User
Manage Resume Details
Manage Job Details
Manage Skills Details
Manage Jobskeer Details
Manage Salary Details
Manage User Profiles
Manage Report
Manage System Admins
Manage Roles of User
Manage User Permission

3.7 Method/Technology to be used

Programming Language

JavaScript is a programming language that is widely used for creating dynamic and interactive websites. It was first introduced in 1995 by Netscape Communications, and has since become one of the most popular programming languages in the world.

JavaScript allows developers to add interactive elements to their websites, such as pop-up windows, animations, and drop-down menus. It can also be used to create more complex applications, such as web-based games and mobile apps.

One of the key features of JavaScript is its ability to manipulate the Document Object Model (DOM) of a webpage. The DOM is a hierarchical structure that represents the elements of a webpage, such as images, text, and links. By using JavaScript to manipulate the DOM, developers can dynamically update the content of a webpage without having to reload the entire page.

JavaScript is a client-side language, which means that it is executed by the user's web browser, rather than on the server. This makes it a powerful tool for creating interactive web applications that respond to user input in real time.

In recent years, JavaScript has also become increasingly popular for server-side programming, with the introduction of frameworks such as Node.js. These frameworks allow developers to use JavaScript to create back-end web applications, as well as front-end applications.

Framework

React.js, commonly known as React, is a popular open-source JavaScript library for building user interfaces. It was developed by Facebook and released in 2013.

React allows developers to build reusable UI components and efficiently manage the state of those components, making it easier to create complex user interfaces with minimal code. React uses a declarative programming style, meaning that developers can describe what they want their UI to look like and React will take care of rendering it in the browser.

One of the key features of React is its virtual DOM (Document Object Model), which allows React to update only the parts of the UI that have changed rather than updating the entire page. This makes React highly efficient and fast, even when dealing with large and complex applications.

React is often used in conjunction with other libraries and frameworks such as Redux, React Router, and Next.js. It can be used to build a wide range of applications, including single-page applications (SPAs), mobile applications, and even desktop applications using technologies such as Electron.

Overall, React has become a popular choice for building modern, dynamic user interfaces due to its performance, flexibility, and ease of use.

Node.js is an open-source, cross-platform, back-end JavaScript runtime environment that enables developers to run JavaScript code outside of a web browser. It was developed by Ryan Dahl in 2009 and has since become a popular platform for building server-side applications.

One of the key advantages of Node.js is that it uses an event-driven, non-blocking I/O model, which makes it particularly well-suited for building real-time applications that require a lot of data to be processed quickly. It is also built on top of the Google V8 JavaScript engine, which provides fast performance and scalability.

Node.js is often used in conjunction with popular web frameworks such as Express.js, Hapi, and Koa, and it can be used to build a wide range of applications, from simple command-line tools to complex web applications and APIs.

HTML stands for HyperText Markup Language. It is the standard markup language used to create web pages and other web-based documents. HTML provides a way to structure content on the web using a series of tags and attributes, which define how different elements of a web page should be displayed.

HTML is a declarative language, meaning that it describes the structure and content of a web page, rather than specifying how it should be displayed. Web browsers then use this information to render the web page and display it to users.

HTML documents are made up of a series of tags, which are enclosed in angle brackets (< >). Tags are used to define the structure and content of different elements on a web page, such as headings, paragraphs, links, images, and forms.

HTML also supports the use of attributes, which provide additional information about an element. For example, the "href" attribute is used to specify the destination of a link, and the "src" attribute is used to specify the source of an image.

Overall, HTML is a fundamental technology for building websites and other web-based applications. By learning HTML, developers can create rich, dynamic, and interactive web pages that can be accessed by users all around the world.

Visual Studio Code (often referred to as VS Code) is a free and open-source code editor developed
by Microsoft. It was first released in 2015 and has since become one of the most popular code editors in the developer community

VS Code, short for Visual Studio Code, is a free and open-source source code editor developed by Microsoft. It is available for Windows, macOS, and Linux, and is one of the most popular code editors used by developers today.

VS Code is designed to be highly customizable and flexible, with a wide range of features and extensions that allow developers to work with a variety of programming languages and frameworks. Some of the key features of VS Code include:

- Intelligent code completion and error highlighting
- Integrated debugging and testing tools
- Git integration and support for version control
- Built-in terminal and command line interface
- Support for multiple programming languages and file types
- Wide range of extensions and plugins for additional functionality

One of the main advantages of VS Code is its performance and responsiveness, even when working with large and complex codebases. It also has a large and active community of developers, who have contributed to the development of many useful extensions and plugins.

Overall, VS Code is a powerful and versatile code editor that has become a popular choice for developers due to its flexibility, performance, and ease of use.

Vs code Snapshot

- **Testing Tools**

Postman: Postman is an application used for API testing. It is an HTTP client thattests HTTP requests, utilizing a graphical user interface, through which we obtain different types of responses that need to be subsequently validated.

Postman Snapshot

Chapter 4: Design

4.1 System Architecture

A system architecture is the conceptual model that defines the structure, behavior, and more views of a system. An architecture description is a formal description and representation of a system, organized in a way that supports reasoning about the structuresand behaviors of the system.

4.2 Data Design

Database design is the organization of data according to a database model. The designerdetermines what data must be stored and how the data elements interrelate. With this information, they can begin to fit the data to the database model. Database management system manages the data accordingly.

We created four entities, Company, Department, Employee and Salary slip. In each of these we created variables as information of respective entities.

4.3 Interface Design

#While adding Information like experience

#While adding Information like education

#While adding Information like skills

#Database Screenshot

#While adding Information like Achievements

Chapter 5: Testing

5.1 Scope of testing

Software testing is a process of checking software applications and products for bugs anderrors to ensure their performance is efficient. Testing in software engineering is a fundamental process of creating reliable – and usable – software products.

That's what makes it necessary in guiding effective software development. Understanding the different types of software testing is what the need for Quality Assurance in software development stems from.

Usually, companies that attempt to create software have dedicated software testers – an in- house means of software testing help. By detecting errors and mistakes that affect the quality of software, these testers can ensure that software products are worthy of being sold in the market. Thus, they guarantee a software's usefulness, and help turning software applications into end-products that perform the way their designers intended them to.

5.2 Test plan

A Test Plan refers to a detailed document that catalogs the test strategy, objectives, schedule, estimations, deadlines, and the resources required for completing that particularproject. Think of it as a blueprint for running the tests needed to ensure the software is working properly – controlled by test managers.

A well-crafted test plan is a dynamic document that changes according to progressions in the project and stays current at all times. It is the point of reference, based on which testingactivities are executed and coordinated among a QA team.

5.3 Test case design

A good test case design technique is crucial to improving the quality of the software testing process. This helps to improve the overall quality and effectiveness of the released software.
The test case design techniques are broadly classified into three major categories.

5.4 Specification-Based techniques
5.5 Structure-Based techniques
5.6 Experience-Based techniques

➢ Specification-Based or Black-Box techniques

This technique leverages the external description of the software such as technical specifications, design, and client's requirements to design test cases. The technique enablestesters to develop test cases that provide full test coverage. The Specification-based or black box test case design techniques are divided further into 5 categories. Thesecategories are as follows:

Boundary Value Analysis (BVA)

This technique is applied to explore errors at the boundary of the input domain. BVA catches any input errors that might interrupt with the proper functioning of the program.

Equivalence Partitioning (EP)

In Equivalence Partitioning, the test input data is partitioned into a number of classes having an equivalent number of data. The test cases are then designed for each class or partition. This helps to reduce the number of test cases.

Decision Table Testing

In this technique, test cases are designed on the basis of the decision tables that are formulated using different combinations of inputs and their corresponding outputs based onvarious conditions and scenarios adhering to different business rules.

State Transition Diagrams

In this technique, the software under test is perceived as a system having a finite number ofstates of different types. The transition from one state to another is guided by a set of rules. The rules define the response to different inputs. This technique can be implemented on thesystems which have certain workflows within them.

Use Case Testing

A use case is a description of a particular use of the software by a user. In this technique, the test cases are designed to execute different business scenarios and end-user functionalities. Use case testing helps to identify test cases that cover the entire system.

➢ Structure-Based or White-Box techniques

The structure-based or white-box technique design test cases based on the internal structureof the software. This technique exhaustively tests the developed code. Developers who have complete information of the software code, its internal structure, and design help to design the test cases. This technique is further divided into five categories.

Statement Testing & Coverage

This technique involves execution of all the executable statements in the source code atleast once. The percentage of the executable statements is calculated as per the given requirement. This is the least preferred metric for checking test coverage.

Decision Testing Coverage

This technique is also known as branch coverage is a testing method in which each one of the possible branches from each decision point is executed at least once to ensure all reachable code is executed. This helps to validate all the branches in the code. This helpsto ensure that no branch leads to unexpected behavior of the application.

Condition Testing

Condition testing also is known as Predicate coverage testing, each Boolean expression is predicted as TRUE or FALSE. All the testing outcomes are at least tested once. This typeof testing involves 100% coverage of the code. The test cases are designed as such that the condition outcomes are easily executed.

Multiple Condition Testing

The purpose of Multiple condition testing is to test the different combination of conditionsto get 100% coverage. To ensure complete coverage, two or more test scripts are requiredwhich requires more efforts.

All Path Testing

In this technique, the source code of a program is leveraged to find every executable path. This helps to determine all the faults within a particular code.

➢ Experience-Based techniques

These techniques are highly dependent on tester's experience to understand the most important areas of the software. The outcomes of these techniques are based on the skills, knowledge, and expertise of the people involved. The types of experience-based techniquesare as follows:

Error Guessing

In this technique, the testers anticipate errors based on their experience, availability of data and their knowledge of product failure. Error guessing is dependent on the skills, intuition, and experience of the testers.

Exploratory Testing

This technique is used to test the application without any formal documentation. There isminimum time available for testing and maximum for test execution. In exploratory testing, the test design and test execution are performed concurrently.

5.4 Sample test data and results

Following test cases were carried out:

Cases	**Action To be Performed**	**Expected Results**	**Actual Result**
Case 1:	Admin login	If Admin details a re correct, Login done	f Admin details a re correct, Login done
Case 2:	Update Details	If company with respective id exists, update details	Updated Success fully.
Case 3:	Update resume Details	If an update id exists, details update.	Updated Success fully.
Case 4:	User Login	If user id provided exist, update successfully.	User Updated Success fully.
Case 4:	Update User Details	If a valid company id is provided, add Employee.	Employee Added Success fully. Employee Id

			generated
Case 5:	Update resume Details	If an update id exists, details update	Updated Successfully.
Case 6:	Add file format	If the valid format is provided, add pay slip.	File format added successfully
Case 7:	Delete resume	If the resumey id provided exists, delete the company details.	resume details deleted successfully.

Chapter 6: Limitations

6.1 Limitation

Like any other project, the "Resume Builder for skilled Fresher" project may have some limitations. Some potential limitations include:

1. User adoption: It is possible that users may not adopt the project if they prefer to use traditional methods of creating resumes, or if they do not have access to the internet or computer systems required to use the project.

2. Technical limitations: The project may have technical limitations that could affect its performance or usability. For example, the project may not be able to handle large amounts of data or may not be compatible with all browsers or operating systems.

3. Limited features: The project may have limited features compared to other existing resume builders. Some users may prefer more advanced features, such as integration with applicant tracking systems or more customization options.

4. Data security: As the project involves storing personal and confidential information, it is essential to ensure data security measures are in place to protect user data.

5. Language limitations: The project may not be able to support all languages, which could limit its accessibility for users in different regions or countries.

6. Dependence on internet connectivity: The project requires a stable internet connection to function correctly, which could be a limitation for users in areas with poor connectivity.

It is important to identify and address these limitations to ensure that the project is successful and meets the needs of its intended users.

Chapter 7: Summary and Conclusions

The "Resume Builder for skilled Fresher" project has a lot of potential for future development and expansion. Some possible areas of future scope include:

1. Integration with job portals: The project could be integrated with popular job portals such as Indeed, LinkedIn, or Glassdoor to make it easier for users to apply for jobs.

2. Customization options: The project could include more customization options to allow users to create resumes that are tailored to their specific needs and preferences.

3. Multi-language support: The project could be expanded to support multiple languages, making it more accessible to users around the world.

4. Artificial intelligence (AI) and machine learning (ML) integration: The project could be integrated with AI and ML algorithms to provide users with personalized recommendations and suggestions for improving their resumes.

5. Collaboration features: The project could include collaboration features that allow users to work together on a single resume, making it easier for teams or groups to create and edit resumes together.

6. Mobile application: The project could be developed as a mobile application to allow users to create and edit their resumes on-the-go.

7. Analytics and reporting: The project could include analytics and reporting features to help users track their resume views, application success rates, and other relevant metrics.

Overall, there are many potential areas of future development and expansion for the "Resume Builder for skilled Fresher" project. These developments could help to make the project even more useful and valuable for users, while also expanding its reach and impact.

Chapter 9: Future Scope

9.1 Resume Builder for skilled Fresher

1. Integration with job search platforms: You could integrate your resume builder with popular job search platforms such as LinkedIn or Indeed. This would allow users to easily apply to jobs directly from their resume and track their job application status.

2. Personalized resume suggestions: Using machine learning algorithms, you could suggest improvements to the user's resume based on their industry and job title. This would make the resume building process more efficient and effective for the user.

3. Cover letter builder: In addition to the resume builder, you could also develop a cover letter builder. This would allow users to easily create a customized cover letter for each job they apply to, and could include suggestions for formatting and content.

4. Collaboration and feedback features: You could enable users to share their resumes with friends, mentors or career counselors, and receive feedback and suggestions for improvement. This would make the resume building process more collaborative and increase the chances of creating a high-quality resume.

5. Analytics and insights: You could provide users with analytics and insights about their resume, such as how many times it has been viewed or downloaded by potential employers. This would help users to track the effectiveness of their resume and make data-driven decisions about their job search strategy.

Appendix

✓ Process: A process done in the system is denoted by this symbol. For example, prepare attendance report, pay slip, etc.

✓ External entity: A source or destination of data which is external to the system.

✓ A data flow: it is packet or data. It may be in the form of document or letter.

✓ Data store: Any store data but with no reference to the physical method of storing.

✓ Multiplicity: Use to represent one to many relationships between the entities

*

✓ Association: It represents the relationship between the entities

✓ State: It represents current state of system that is being designed.

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Offer Letter

Date - 30th December 2022

Dear Ankit Mishra,

Based on our recent discussion, we are pleased to offer you the position of **Software Trainee**. You will report to our Indore based office. Your appointment will be governed by the terms and conditions mentioned in the employee policy & NDA.

We extend this offer and the opportunity it represents, with great confidence in your abilities. You have made a very favorable impression with everyone you met and we are excited with the prospect of you joining our organization on **19th January 2023**

Your employment is subject to the satisfactory completion of a probationary period of six months. The probationary period is designed to grant the employer time to assess whether you are able to fulfill your role with the employer. During the probationary period your employment may be terminated by either you or the employer upon providing 1 week written notice.

Your Compensation for 6 months will be **90,000 & after 6 months based on your performance it will be revised to 4,00,000 (3 lac fixed and 1 Lac variable)**

Note - 1 Lac variable pay will be paid after successfully completion of 2 years with the company on quarterly basis based on your performance.

Your compensation details are confidential and you may discuss it only with the undersigned in case of any clarification.

Your office hours will be 11.00 AM to 8.00PM, office offers may differ on the basis of work assigned to you. As a full time employee you will devote substantially the whole of your time and attention during the employers business hours to the performance of your under this agreement.

After receiving your acceptance of this offer, the company reserves the right to communicate with your college to confirm your availability to join as agreed and to conduct professional reference checks and background verification.

In case, your background verification fails, Golden Eagle IT Technologies Pvt LTD has the right to terminate your employment with immediate effect.

You are required to sign an agreement for Three years effective from your date of joining. (Three Year Agreement with Golden Eagle. Bank cheque for security pre-filled with 2 Lakh).

On your date of joining you are expected to complete the necessary joining formalities and submit below listed documents (Scan copies) -

1) All Educational Certificates
2) Copy of Aadhar card
3) Copy of Pan Card
4) 3 passport Size photographs.

Please note :

- This appointment is subject to satisfactory professional reference checks.
- This offer from Golden Eagle is valid for 2 days only from the date of offer, any extension said validity shall be at the discretion of the company and shall be communicated to you in writing.

It is our hope that your acceptance of our offer will be just the beginning of a mutually beneficial relationship with our organization.This letter and Golden Eagle IT Technologies Pvt LTD employment application are intended to be final. To accept the offer and the terms of this letter, please revert with your acceptance.

Ankit, everyone you have interviewed with joins me in extending to you congratulations and warm regards.

We look forward to you joining our team. If you wish to discuss any details of this offer, please feel free to contact us.

Best Regards,

Anshita Airan

Anshita Airan

Head of Recruitment & operations

Golden Eagle IT Technologies Pvt LTD

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Anshita Airan

Anshita Airan

Head of Recruitment & operations

Golden Eagle IT Technologies Pvt LTD

CRICKET SCORE BOARD

A Major Project Report

submitted in partial fulfillment of requirements of the degree

of

Master of Computer Applications

by

ANKIT MISHRA
EN21CA501021

under the guidance of

Prof. Mohit Kadwal

Department of Computer Applications
Faculty of Engineering

MEDI-CAPS UNIVERSITY, INDORE- 453331

Jan - June 2023

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MEDI-CAPS UNIVERSITY, INDORE- 453331

Jan - June 2023

Report Approval

The project work **CRICKET SCORE BOARD** is hereby approved as a creditable study of an engineering/computer application subject carried out and presented in a manner satisfactory to warrant its acceptance as prerequisite for the Degree for which it has been submitted.

It is to be understood that by this approval the undersigned do not endorse or approval any statement made, opinion expressed or conclusion drawn there in; but approve the "Project Report" only for the purpose for which it has been submitted.

Examiner(s)

Name(s)	Signature(s)
1. …….	…….
2. …….	…….
3. …….	…….
4. …….	…….
5. …….	…….

Date: …….

Declaration

I hereby declare that the project entitled **CRICKET SCORE BOARD** submitted in partial fulfillment for the award of the degree of Master of Computer Applications in "Master of Computer Application" completed under the supervision of **Prof. Mohit Kadwal Asst. Professor and Department of Computer Application,** Faculty of Engineering, Medi-Caps University Indore is an authentic work.

Further, I/we declare that the content of this Project work, in full or in parts, have neither been taken from any other source nor have been submitted to any other Institute or University for the award of any degree or diploma.

Signature _____

Ankit Mishra

Date

Certificate

I **ADITYA KUMAR** certify that the project entitled **CRICKET SCORE BOARD** submitted in partial fulfillment for the award of the degree of Master of Computer Applications by **ANKIT MISHRA** is the record carried out by him/her/them under my/our guidance.

Prof. Mohit Kadwal	Mr. Yogesh Dwivedi
Department of Computer Application	CEO
Medi-Caps University, Indore	Golden Eagle

Prof. Anil Patidar

Head of the Department

Department Of Computer Application

Medi-Caps University, Indore

Acknowledgement

Student shall write in his/her/their own words.

I would like to express my deepest gratitude to our Honorable Chancellor, **Shri R. C. Mittal,** who has provided me with every facility to successfully carry out this project, and my profound indebtedness to **Prof. (Dr.) D. K. Patnaik,** Vice- Chancellor, Medi-Caps University, whose unfailing support and enthusiasm hasalways boosted up my morale. I also thank **Prof. (Dr.) Pramod S Nair,** Dean, Faculty of Engineering, Medi-Caps University, for giving me a chance to work on this project. I would also like to thank my Head of the Department **Prof. Anil Patidar** for his continuous encouragement for betterment of the project.

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I would also like to thank to my team at Golden Eagle, **Mr. Yogesh Dwivedi** who extended their kind support and help towards the completion of this project. It is their help and support, due to which I/we am/are able to complete the design and technical report. Without their support this report would not have been possible.

ANKIT MISHRA (EN21CA501021)
MCA IV Semester
Department of Computer ApplicationsFaculty of Engineering
Medi-Caps University, Indore

Abstract

Customer Relationship Management (CRM) is a business strategy that focuses on building strong relationships with customers. It involves the use of technology to organize, automate, and synchronize sales, marketing, customer service, and technical support processes. A CRM system enables businesses to manage their interactions with customers, gain insights into their behavior and preferences, and improve customer satisfaction and loyalty. A CRM project typically involves the implementation of a CRM system, which can be either an on-premises or cloud- based solution. The project team typically consists of business analysts, IT professionals, and stakeholders from various departments such as sales, marketing, and customer service. The project scope includes defining the business requirements, selecting the right CRM solution, configuring the system, testing, training, and deployment. Using HTML, CSS, Node.Js, MongoDb m and Node.Js the system is designed. The CRM is a new technique in marketingwhere the marketer tries to develop long term relationship with the customers to develop them as life time customers. CRM aims to make the customer climb up the ladder of loyalty.

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Abbreviations

Keywords

1. CSB: - Cricket Score Board

Notations and Symbols/Nomenclatures

1. **Data Flow Diagram Notation:-**

Function

File/Database

Input/Output

Flow

External Entity

External Entity

2. Use Case Diagram Notation: -

Chapter1

Introduction

The cricket score board is a website project which is primarily focused on bringing the entertainment of cricket into your hands you can feel the importance of cricket with the help of this website. Once you log into this website you can get easy access to all the unique Features of this website which are full of high end features and all the other unique features which are required to make it available for cricket users.

This website is easy to operate and you can easily understand the working of this website because it is designed in such a way that is very easy to operate and is very easily available for it’s users it will be of great use for it’s users.

This website will be developed more in the near future because it is not completed yet it is in working stage now but the updates will be coming in the near features and more and more advancements will be done to this website in the near future

This Project is the combination of practices, strategies and technologies that companies use to manage and analyze customer interactions and data throughout the customer lifecycle. The goal is to improve customer service relationships and assist in customer retention and drive sales growth. It combines customer data across different channels, or points of contact, between the customer and the company, which could include the company's website, telephone, live chat, direct mail, marketing materials and social networks. It’s systems can also give customer-facing staff members detailed information on customers'personal information, purchase history, buying preferences and concerns.

consolidates customer information and documents it into a single CRM database so business userscan more easily access and manage it. Over time, many additional functions have been added to CRM systems to make them more useful. Some of these functions include recording various customer interactions over email, phone, social media or other channels; depending on system capabilities, automating various workflow automation processes, such as tasks, calendars and alerts;and giving managers the ability to track performance and productivity basedon information logged within the system.

Marketing automation. CSB tools with marketing automation capabilities can automate repetitive tasks to enhance marketing efforts at different points in the lifecycle for lead generation. For example, as salesprospects come into the system, it might automatically send email

1.1 Identity of Client/Organization

Golden Eagle create web and client/server software on different platforms, in particular Java, Python, Nodejs, React JS and Node.Js Technology, with the aim of creating solid, modular and functional business applications, easy to use and custom-designed.

Senior Project Manager: Mr. Yogesh Dwivedi

Website: info@goldeneagle.ai

Email: info@goldeneagle.ai
Contact No.: +91 7987585868
Location: NRK Biz Park Behind C21 Mall,
PU-4, Scheme No. 54, AB Road Indore
Specialties: Web Development, Web Designing, Mobile App Development, Android App Development, NodeJS, Python, Node.Js,React Native.

1.2 Description of Project: -

The cricket score board is a website project which is primarily focused on bringing the entertainment of cricket into your hands you can feel the importance of cricket with the help of this website. Once you log into this website you can get easy access to all the unique Features of this website which are full of high end features and all the other unique features which are required to make it available for cricket users.

Once the CSB solution has been selected, the project team needs to configure the system to meet the organization's requirements. This involves defining data fields, designing workflows, and integrating the CSB system with other business applications. The team also needs to ensure that the CSB system is secure and complies with data privacy regulations.

The project team needs to provide adequate training to users to ensure they can effectively utilize the CSB system. This includes training on data entry, reporting, and analysis, and customer service best practices. The team also needs to develop user manuals and provide ongoing support to ensure that the CSB system continues to meet the organization's needs.

CHAPTER 2

BACKGROUND

2.1 Description of the existing system: -

The system may include features such as contact management, leadtracking, sales forecasting, marketing automation, customer service andsupport, and analytics and reporting. The system may also integrate with othersoftware systems, such as accounting, e-commerce, or social media platforms. The success of a CSB project depends on several factors, including thealignment of the system with the organization's goals and processes, effectiveuser adoption and training, data quality and management, and ongoing monitoring and optimization. A well-executed CSB project can lead toimproved customer relationships, increased sales, and enhanced customerloyalty and retention.

2.2 Circumstances leading to the current new system: -

The current CSB system may be outdated and no longer meet the needs of the business or its customers. This may result in inefficiencies, inaccuracies, or delays in managing customer data. In new CSB project adding new functionality like: -invoice generating, invoice display and printing.

2.3 Work already carried out in the project domain: -

Market research and analysis: This involves conducting market research to identify the target audience, analyzing the competition, and identifying the most effective lead generation strategies.

Lead capture and management system evaluation: This involves evaluating the current lead management system and identifying areas for improvement. This could include evaluating the current lead capture forms, lead scoring models, lead routing rules, and lead nurturing strategies.

CRM system integration: This involves integrating the lead management system with the existing customer relationship management (CRM) system to ensure a seamless flow of information and data between the two systems.

Continuous improvement: This involves continuously monitoring and evaluating the lead management process and making changes as necessary to ensure that it is meeting the project goals and objectives.

2.4 Objective of project: -

The primary objective of a customer lead management project is to increase the efficiency and effectiveness of managing customer leads, which can lead to increased sales revenue and customer satisfaction. Here are some specific objectives of a customer lead management project:

Improve lead quality: By implementing a lead management process, the project aims to improve lead quality by identifying the most promising leadsthat are more likely to convert to customers.

Increase lead conversion rates: The project aims to increase lead conversion rates by ensuring that the leads are properly nurtured, and sales teams followup with them in a timely and effective manner.

Enhance customer engagement: The project aims to enhance customer engagement by providing personalized and relevant content to the leads at

every stage of the buying process, leading to higher customer satisfaction andloyalty.

Optimize sales processes: The project aims to optimize the sales processes by streamlining lead capture, scoring, and routing, resulting in faster sales cyclesand reduced sales costs.

Improve data management: The project aims to improve data management by providing a centralized system for managing customer data, resulting in better data quality, accuracy, and consistency.

Increase revenue: By improving lead quality, conversion rates, and sales processes, the project aims to increase revenue and profitability for the organization.

lead data, identifying trends, and developing targeted marketing strategies, leading to better customer engagement and increased sales.

CHAPTER 3ANALYSIS

3.1 System Requirement Analysis: -

There are two types of System requirement analysis

- Information Gathering
- Feasibility Study

Information Gathering

We gathered information on the basis of following questionnaires: -

- How the existing systems work?
- What are the limitations of existing system?
- What features we should provide to overcome those limitations which are inexisting system?
- What will be the tables in the database?
- What and how many attributes will be in each table?
- How the data will flow in the system?
- What will be the access level of user to use the system?
- What the information we should provide which will be interesting to theuser?
- How to maintain the interactivity with the use.

Feasibility Study

A feasibility study is a test of a system proposal according to its workability, impact on the organization, ability to meet user needs, & effective use ofresources. The objective of a feasibility study is not to solve the problem but to acquire a sense of its scope. In the analysis phase we first focus on the fact that is the required system is actually feasible or not? Is the required system will work according to the present.

condition or not? And we get a successful result that is our system is feasiblein present condition.

Economic Feasibility: -

In economic feasibility we work on the following questions like, are there sufficient benefits to creating the system to make the costs acceptable? Or the cost of none is creating the system so great that the project must be undertaken? Then after the cost benefit analysis we conclude that our system is economically feasible. We are using SUBLIME as a front end and MONGODB as back end which are also freely available. So, this project the cost of development is negligible as compare to the running cost. In absence of this software, a user would have to wait long time. So as a whole, software is economically feasible.

Technical Feasibility: -

The technical feasibility is that is our project is technically feasible, that menace is present technology is useful & supported by our project? Our project is technically physical it supports the minimum pc configuration. Technical feasibility focuses around the present computer system (Hardware & Software) & to extent it can support the proposed addition. We are usingSUBLIME as front-end so that software is platform independent. It can workon windows & MONGODB as back-end. The total number of databases has been identified as 18 entities. The major part of the databases is categorized as administrative components and the general user components. The administrative components are useful in managing the actual master data thatis very much necessary to maintain the consistency upon the system. The administrative databases are purely used for the internal organizational needs and necessities only at the upper and middle management areas. The user

components are designed to handle the transactional states that arise upon the system whenever the general employee within the organization visits the user interface for mock enquiry for the required data. The normal user interfaces get associated to the environment mostly for the sake of report standardization. The user components are scheduled to accept parametrical information fromthe users as per the system necessity.

Behavior Feasibility: -

People are inherently resistant to change, and computer has been known to facilitate change. All estimates regarding reaction, comfort & ease of use forthe people it meant for, should be made prior. So, this software is also behavior feasible.

3.2 System Analysis: -

System analysis is a critical step in a CSB project that involves examining the existing processes, identifying any inefficiencies, and designing a new systemto improve the overall customer experience. Here are some system analysis points that should be considered in a CSB project:

1. Current system analysis: The project team should analyze the existing CSB system to understand how it is currently being used, how data is being collected and managed, and the overall performance of the system.
2. Business process analysis: The team should analyze the business processes that are involved in the customer relationship management, including lead generation, lead nurturing, sales, and customer service.
3. Customer journey mapping: The team should map out the customer journey from lead generation to customer acquisition and beyond, identifying touchpoints where the customer interacts with the business.
4. Data analysis: The team should analyze the data being collected to identify patterns, trends, and opportunities for improvement. This could include customer demographics, sales data, and customer feedback.
5. System requirements: Based on the analysis, the team should identify the requirements for the new CRM system, including the desired features, functionality, and integrations with other systems.
6. User requirements: The team should also identify the requirements of the users of the CSB system, including sales representatives, marketing teams, and customer service agents.
7. Data migration: The team should plan for the migration of data from the old system to the new system, ensuring that the data is accurate and consistent.
8. System testing: The team should test the new system to ensure that it meets the requirements and is functioning correctly. This could include unit testing, integration testing, and user acceptance testing.

9. User training: The team should provide training to the users of the new CSB system, ensuring that they understand how to use the system effectively.
10. Maintenance and support: The team should plan for the ongoing maintenanceand support of the new CSB system, including regular updates and bug fixes.

3.3 Information flow representation: -

3.3.1 Use Case Diagram: -

Usecase Diagram of Cricket Training Management

3.3.2 ER Diagram: -

ER Diagram For Cricket Training Management

3.3.3 Activity Diagram: -

3.4 Method/Technology to be used

- Language: Node Js,
- Other languages: React JS
- Database: MongoDb
- Operating System: Microsoft Window and Linix

3.5 Testing Tools: -

There are various testing tools that can be used for a CSB project. Some of the popular ones are:

1. Selenium: It is an open-source testing tool used for automating webapplications. It can be used to automate repetitive testing tasks and can help speed up the testing process.
2. Test Complete: It is a commercial testing tool that can be used to automate testing tasks for web, desktop, and mobile applications. It provides a user- friendly interface for creating and executing test cases.
3. Appium: It is an open-source testing tool used for testing mobile applications.It supports both Android and iOS platforms and can be used for testing native, hybrid, and web applications.
4. JMeter: It is an open-source testing tool used for testing web applications. Itcan be used to test the performance and load of web applications.
5. SoapUI: It is an open-source testing tool used for testing web services. It canbe used to test SOAP and RESTful web services.

6. LoadRunner: It is a commercial testing tool used for testing the performance and load of web and mobile applications.
7. Postman: It is an open-source testing tool used for testing RESTful web services. It can be used to create and execute API tests.
8. These are just a few examples of the many testing tools that can be used for a CSB project. The choice of testing tool will depend on the specific requirements of the project and the resources available.

CHAPTER 4DESIGN

4.1 System Architecture: -

4.2 Data Design: -

Designing a CSB data structure requires careful consideration of the types of data that will be stored, how the data will be organized, and how it will be used by different departments and users within the organization. Here are somegeneral steps to follow when designing a CSB data structure:

1. Identify the data types: Start by identifying the types of data that will be stored in the CSB such as customer information, sales data, marketing data, support tickets, and other relevant information.
2. Determine data relationships: Once you have identified the data types, determine how they are related to each other. For example, customer data may be related to sales data, support tickets may be related to customer data, and so on.
3. Plan data organization: Plan how the data will be organized in the CSB. This includes defining data fields, data types, and data relationships. Consider creating a data dictionary or data schema to ensure consistency in data organization.
4. Create data entry forms: Once the data structure has been designed, create data entry forms to facilitate data entry into the system. Consider the user experience and ease of use when designing these forms.
5. Plan data access: Plan how different users and departments will access the data stored in the CSB. This includes defining user roles and permissions, as wellas determining which data should be accessible to each user.
6. Plan data analysis: Plan how the data stored in the CSB will be analyzed and used to generate reports and insights. This may involve creating custom reports, dashboards, or other tools to help users access and analyze the data.

4.2.1 USER TABLE: -

Collection Name	Documents	Logical Data Size	Avg Document Size	Storage Size	Indexes	Index Size	Avg Index Size
ipaddresses	1	61B	61B	20KB	1	20KB	20KB
lastbowlers	1	102B	102B	36KB	1	20KB	20KB
laststrikes	1	102B	102B	36KB	1	20KB	20KB
overs	0	0B	0B	4KB	1	4KB	4KB
players	22	4.98KB	232B	36KB	1	36KB	36KB
schedules	4	472B	118B	36KB	1	36KB	36KB
scoreballs	22	4.77KB	222B	36KB	1	20KB	20KB
scorebats	22	4.58KB	213B	36KB	1	20KB	20KB
scoreboards	1	2.28KB	2.28KB	36KB	1	20KB	20KB
teams	5	577B	116B	36KB	2	72KB	36KB

https://cloud.mongodb.com/v2/63b9384ab608da0b2c98117c#/metrics/replicaSet/63b93a3a9ad16b4bd8234ed2/explorer/cricket/scorebats/find
Atlas
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Backup
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cricket
ipaddresses
lastbowlers
laststrikes
overs
players
schedules
scoreballs
scorebats
scoreboards
teams
new_db
originalShots
STORAGE SIZE: 36KB LOGICAL DATA SIZE: 4.58KB TOTAL DOCUMENTS: 22 INDEXES TOTAL SIZE: 20KB
Find
Indexes
Schema Anti-Patterns
Aggregation
Search Indexes
Charts
INSERT DOCUMENT
Filter
Type a query: { field: 'value' }
Reset
Apply
More Options
QUERY RESULTS: 1-20 OF MANY
_id: ObjectId('6411754b61fcbf356bce3250')
Batted: true
Strike: false
PlayerId: "64116ed661fcbf356bce315e"
MatchId: "641173b861fcbf356bce322e"
Runs: 10
BallsPlayed: 4
_4s: 2
_6s: 0
SR: 250
Date: 2023-03-15T07:07:27.800+00:00
Out: Object
PREVIOUS
1-20 of many results
NEXT
System Status: All Good
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https://cloud.mongodb.com/v2/63b9384ab608da0b2c98117c#/metrics/replicaSet/63b93a3a9ad16b4bd8234ed2/explorer/cricket/teams/find
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cricket
ipaddresses
lastbowlers
laststrikes
overs
players
schedules
scoreballs
scorebats
scoreboards
teams
new_db
originalShots
STORAGE SIZE: 36KB LOGICAL DATA SIZE: 577B TOTAL DOCUMENTS: 5 INDEXES TOTAL SIZE: 72KB
Find
Indexes
Schema Anti-Patterns
Aggregation
Search Indexes
Charts
INSERT DOCUMENT
Filter
Type a query: { field: 'value' }
Reset
Apply
More Options
QUERY RESULTS: 1-5 OF 5
_id: ObjectId('64116d3b8b4beb9c549454df')
Team: "GEITPL"
Logo: "http://192.168.1.16:4000/api/v1/getImg/1678863675562.png"
__v: 0
_id: ObjectId('64116d558b4beb9c549454ea')
Team: "Wipro"
Logo: "http://192.168.1.16:4000/api/v1/getImg/1678863700331.png"
__v: 0
_id: ObjectId('64116d6c8b4beb9c549454f0')
Team: "Capgemini"
Logo: "http://192.168.1.16:4000/api/v1/getImg/1678863724090.png"
System Status: All Good
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new_db
originalShots
STORAGE SIZE: 36KB LOGICAL DATA SIZE: 4.77KB TOTAL DOCUMENTS: 22 INDEXES TOTAL SIZE: 20KB
Find
Indexes
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Search Indexes
Charts
INSERT DOCUMENT
Filter
Type a query: { field: 'value' }
Reset
Apply
More Options
QUERY RESULTS: 1-20 OF MANY
_id: ObjectId('6411754b61fcbf356bce3252')
Bowling: false
PlayerId: "64116ed661fcbf356bce315e"
MatchId: "641173b861fcbf356bce322e"
Runs: 0
Wickets: 0
_4s: 0
Extras: 0
_6s: 0
ER: 0
Maiden: 0
Overs: Array
PREVIOUS
1-20 of many results
NEXT
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teams
new_db
originalShots
STORAGE SIZE: 20KB LOGICAL DATA SIZE: 61B TOTAL DOCUMENTS: 1 INDEXES TOTAL SIZE: 20KB
Find
Indexes
Schema Anti-Patterns
Aggregation
Search Indexes
Charts
INSERT DOCUMENT
Filter
Type a query: { field: 'value' }
Reset
Apply
More Options
QUERY RESULTS: 1-1 OF 1
_id: ObjectId('64116d268b4beb9c549454da')
url: "192.168.1.16"
id: 1
__v: 0
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ipaddresses
lastbowlers
laststrikes
overs
players
schedules
scoreballs
scorebats
scoreboards
teams
new_db
originalShots
STORAGE SIZE: 36KB LOGICAL DATA SIZE: 472B TOTAL DOCUMENTS: 4 INDEXES TOTAL SIZE: 36KB
Find
Indexes
Schema Anti-Patterns
Aggregation
Search Indexes
Charts
INSERT DOCUMENT
Filter
Type a query: { field: 'value' }
Reset
Apply
More Options
QUERY RESULTS: 1-4 OF 4
_id: ObjectId('641173b861fcbf356bce322e')
Team: "GEITPL"
Opponent: "Wipro"
Venue: "Mumbai"
DateAndTime: 2023-03-15T07:28:48.679+00:00
Played: false
__v: 0
_id: ObjectId('641173d361fcbf356bce3236')
Team: "Wipro"
Opponent: "Capgemini"
Venue: "kolkata"
DateAndTime: 2023-03-16T07:29:00.684+00:00
Played: false
__v: 0
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teams
new_db
originalShots
STORAGE SIZE: 36KB LOGICAL DATA SIZE: 102B TOTAL DOCUMENTS: 1 INDEXES TOTAL SIZE: 20KB
Find
Indexes
Schema Anti-Patterns
Aggregation
Search Indexes
Charts
INSERT DOCUMENT
Filter
Type a query: { field: 'value' }
Reset
Apply
More Options
QUERY RESULTS: 1-1 OF 1
_id: ObjectId('6411758f61fcbf356bce33b9')
id: "6411754b61fcbf356bce3254"
MatchId: "641173b861fcbf356bce322e"
__v: 0
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lastbowlers
laststrikes
overs
players
schedules
scoreballs
scorebats
scoreboards
teams
new_db
originalShots
STORAGE SIZE: 36KB LOGICAL DATA SIZE: 2.28KB TOTAL DOCUMENTS: 1 INDEXES TOTAL SIZE: 20KB
Find
Indexes
Schema Anti-Patterns
Aggregation
Search Indexes
Charts
INSERT DOCUMENT
Filter
Type a query: { field: 'value' }
Reset
Apply
More Options
QUERY RESULTS: 1-1 OF 1
_id: ObjectId('6411754c61fcbf356bce32a8')
MatchId: "641173b861fcbf356bce322e"
Status: true
Overs: 20
Date: 2023-03-15T07:07:27.845+00:00
Team: Array
__v: 0
System Status: All Good
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bookStore
cricket
ipaddresses
lastbowlers
laststrikes
overs
players
schedules
scoreballs
scorebats
scoreboards
teams
new_db
originalShots
LOGICAL DATA SIZE: 17.89KB STORAGE SIZE: 312KB INDEX SIZE: 268KB TOTAL COLLECTIONS: 10
CREATE COLLECTION
Collection Name Documents Logical Data Size Avg Document Size Storage Size Indexes Index Size Avg Index Size
ipaddresses 1 61B 61B 20KB 1 20KB 20KB
lastbowlers 1 102B 102B 36KB 1 20KB 20KB
laststrikes 1 102B 102B 36KB 1 20KB 20KB
overs 0 0B 0B 4KB 1 4KB 4KB
players 22 4.98KB 232B 36KB 1 36KB 36KB
schedules 4 472B 118B 36KB 1 36KB 36KB
scoreballs 22 4.77KB 222B 36KB 1 20KB 20KB
scorebats 22 4.58KB 213B 36KB 1 20KB 20KB
scoreboards 1 2.28KB 2.28KB 36KB 1 20KB 20KB
teams 5 577B 116B 36KB 2 72KB 36KB
System Status: All Good
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LOGICAL DATA SIZE: 17.89KB STORAGE SIZE: 312KB INDEX SIZE: 268KB TOTAL COLLECTIONS: 10
CREATE COLLECTION
Collection Name Documents Logical Data Size Avg Document Size Storage Size Indexes Index Size Avg Index Size
ipaddresses 1 61B 61B 20KB 1 20KB 20KB
lastbowlers 1 102B 102B 36KB 1 20KB 20KB
laststrikes 1 102B 102B 36KB 1 20KB 20KB
overs 0 0B 0B 4KB 1 4KB 4KB
players 22 4.98KB 232B 36KB 1 36KB 36KB
schedules 4 472B 118B 36KB 1 36KB 36KB
scoreballs 22 4.77KB 222B 36KB 1 20KB 20KB
scorebats 22 4.58KB 213B 36KB 1 20KB 20KB
scoreboards 1 2.28KB 2.28KB 36KB 1 20KB 20KB
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Find
Indexes
Schema Anti-Patterns
Aggregation
Search Indexes
Charts
INSERT DOCUMENT
Filter
Type a query: { field: 'value' }
Reset
Apply
More Options
QUERY RESULTS: 1-1 OF 1
_id: ObjectId('6411758f61fcbf356bce339f')
MatchId: "641173b861fcbf356bce322e"
id: "6411754b61fcbf356bce327e"
__v: 0
System Status: All Good
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4.3 Interface Design: -

GUI'S

In the flexibility of the uses the interface has been developed a graphics concept in mind, associated through a browses interface.

The GUI'S at the top level have been categorized as:

1. Administrative user interface

2. The operational or generic user interface

The administrative user interface concentrates on the consistent information that is practically, part of the organizational activities and which needs proper authentication for the data collection. The interfaces help the administrations with all the transactional states like Data insertion, Data deletion and Data updation along with the extensive data search capabilities.

The operational or generic user interface helps the users upon the system in transactions through the existing data and required services. The operationaluser interface also helps the ordinary users in managing their own information helps the ordinary users in managing their own information in a customized manner as per the assisted flexibilities.

User Interfaces of our system: -

REGISTER PAGE: -

React App
localhost:3000/viewTeams
Registered Teams
India
Pakistan
Austrelia
England
Activate Windows
Go to Settings to activate Windows.
Type here to search
22°C Haze
ENG IN
11:49 PM
03-05-2023

React App
localhost:3000
localhost:3000 says
login failed
OK
Hello Admin!
Login to Your account
sandeep@gmail.com
LOG IN
Welcome Back!
Golden Eagle IT Technologies going to organise a grand cricket tournament
Golden Eagle premier league
Activate Windows
Go to Settings to activate Windows.
Type here to search
22°C Haze
ENG IN
11:55 PM
03-05-2023

React App
localhost:3000/viewTeams
Registered Teams
CSK
Activate Windows
Go to Settings to activate Windows.
Type here to search
22°C Haze
ENG IN
11:46 PM
03-05-2023

React App
localhost:3000/registerTeam
GOLDEN EAGLE
Register Team
Team Name
CSK
Compony Logo
Choose File
Register
Activate Windows
Go to Settings to activate Windows.
Type here to search
Earnings upcoming
ENG IN
11:42 PM
03-05-2023

React App
localhost:3000/registerTeam
GOLDEN EAGLE
Register Team
Team Name
TeamName
Compony Logo
Choose File
Register
Activate Windows
Go to Settings to activate Windows.
Type here to search
Earnings upcoming
ENG IN
11:41 PM
03-05-2023

React App
React App
localhost:3001/schedule
Live Scores
Schedule
News
Series
Teams
Rankings
More
GoldenScore Plus
World Test Championship
World Cup Super League
Photos
Careers
Contact Us
Cricket Schedule
Activate Windows
Go to Settings to activate Windows.
localhost:3001
Type here to search
GBP/INR +0.67%
ENG IN
10:59 PM
03-05-2023

React App
localhost:3000
Admin Log In
Hello Admin!
Login to Your account
UserId
Password
LOG IN
Welcome Back!
Golden Eagle IT Technologies going to organise a grand cricket tournament
Golden Eagle premier league
Activate Windows
Go to Settings to activate Windows.
Type here to search
GBP/INR +0.79%
ENG IN
11:39 PM
03-05-2023

React App
localhost:3000
Admin Log In
Hello Admin!
Login to Your account
ankit@gmail.com
LOG IN
Welcome Back!
Golden Eagle IT Technologies going to organise a grand cricket tournament
Golden Eagle premier league
Activate Windows
Go to Settings to activate Windows.
Type here to search
22°C Haze
ENG IN
11:40 PM
03-05-2023

React App
React App
localhost:3001/schedule
Live Scores
Schedule
News
Series
Teams
Rankings
More
GoldenScore Plus
ICC Ranking -Men
ICC Ranking -Women
Cricket Schedule
Activate Windows
Go to Settings to activate Windows.
localhost:3001
Type here to search
GBP/INR +0.67%
ENG
IN
10:59 PM
03-05-2023

React App
localhost:3000/registerTeam
GOLDEN EAGLE
Register Team
Team Name
TeamName
Compony Logo
Choose File
Register
Activate Windows
Go to Settings to activate Windows.
Type here to search
Earnings upcoming
ENG IN
11:41 PM
03-05-2023

CHAPTER 5TESTING

5.1 System Testing: -

The philosophy behind testing is to find errors. Test cases are devised with this in mind. Astrategy employed for system testing is code testing.

Code Testing: -

This strategy examines the logic of the program. To follow this method we developed some test data that resulted in executing every instruction in the program and module i.e. every path is tested. Systems are not designed as entire nor are they tested as single systems. To ensure that the coding is perfect two types of testing is performed or for that matter is performed or that matteris performed or for that matter is performed on all systems.

Types Of Testing: -

- Unit Testing
- Link Testing

Unit Testing: -

Unit testing focuses verification effort on the smallest unit of software i.e. the module. Using the detailed design and the process specifications testing isdone to uncover errors within the boundary of the module. All modules mustbe successful in the unit test beforethe start of the integration testing begins.

In this project each service can be thought of a module. There are so many modules like Login, HWAdmin, MasterAdmin, Normal User, and PManager. Giving different sets of inputs has tested each module. When developing the module as well as finishing the development so that each module works without any error. The inputs are validated when accepting from the user. In this application developer tests the programs up as system. Software units in a system are the modules and routines that are assembled and integrated to forma specific function. Unit the modules and routines that are assembled andintegrated to form a specific function. Unit testing is first done on modules, independent of one another to locate errors. This enables to detect errors.Through this errors resulting from interaction between modules initially avoided.

Link Testing: -

Link testing does not test software but rather the integration of each module in system. The primary concern is the compatibility of each module. The Programmer tests where modules are designed with different parameters, length, type etc.

Integration Testing: -

After the unit testing we have to perform integration testing. The goal here isto see if Modules can be integrated properly, the emphasis being on testing interfaces between Modules. This testing activity can be considered as testing the design and hence the emphasis on testing module interactions.

In this project integrating all the modules forms the main system. When integrating all the modules I have checked whether the integration effects working of any of the services by giving different combinations of inputs with which the two services run perfectly before Integration.

System Testing: -

Here entire 'ATM' has been tested against requirements of project and it is checked whether all requirements of project have been satisfied or not.

Acceptance Testing: -

Acceptance Test is performed with realistic data of the client to demonstrate that the software is working satisfactorily. Testing here is focused on external behavior of the system; the internal logic of program is not emphasized. In this project 'Network Management Of Database System' I have collected some data and tested whether project is working correctly or not.

Test cases should be selected so that the largest number of attributes of an equivalence class is exercised at once. The testing phase is an important part of software development. It is the process of finding errors and missing operations and also a complete verification to determine whether the objectives are met and the user requirements are satisfied.

White Box Testing: -

This is a unit testing method where a unit will be taken at a time and tested thoroughly at a statement level to find the maximum possible errors. I testedstep wise every piece of code, taking care that every statement in the code is executed at least once. The white box testing is also called Glass Box Testing.I have generated a list of test cases, sample data, which is used to check all possible combinations of execution paths through the code at every module level.

Black Box Testing: -

This testing method considers a module as a single unit and checks the unit at interface and communication with other modules rather getting into details at statement level. Here the module will be treated as a block box that will take some input and generate output. Output for a given set of input combinationsare forwarded to other modules.

5.2 Test plan: -

5.3 Test case designTest Case 1: - Login Page: -

- After login a option page will be opened where admin can add information touser's and company's account and can navigate contact details.
- This page contains the text boxes in which Admin can add new information.

- After login a option page will be opened where admin can add information touser's and company's account and can navigate contact details.
- This page contains the text boxes in which Admin can add new information.

5.2 Sample test data and results: -

How to Prepare Data that will Ensure Maximum Test Coverage?Design your data considering the following categories:

1) No data: Run your test cases on blank or default data. See if proper error messages are generated.

2) Valid data set: Create it to check if the application is functioning as per requirements and valid input data is properly saved in database or files.

3) Invalid data set: Prepare invalid data set to check application behavior for negative values, alphanumeric string inputs.

4) Illegal data format: Make one data set of illegal data format. The system should not

5) Boundary Condition dataset: Dataset containing out of range data. Identify application boundary cases and prepare data set that will cover lower as wellas upper boundary conditions.

6) The dataset for performance, load and stress testing: This data set should be large in volume.

CHAPTER 6

Limitations

We tried our best to make a flexible and error free system but there are some limitations in this system. The Major problem with this system.is , only one administrator handle detailsof whole company.

While a CRM (Customer Relationship Management) project can bring many benefits to a business, there are also some potential limitations that should be considered. Here are a few examples:

1. Cost: Implementing a CSB system can be expensive, especially for smaller businesses. In addition to the cost of the software itself, there may be costs associated with hardware, training, and ongoing maintenance and support.
2. Integration: Integrating a CSB system with other existing business systems can be challenging. For example, integrating with an ERP (Enterprise Resource Planning) system or an ecommerce platform may require significant customization and development work.
3. Data Quality: A CSB system is only as good as the data that is entered into it.If data is incomplete or inaccurate, the system may not provide the intended benefits. Ensuring data quality requires ongoing effort and attention.
4. Adoption: A CSB system is only effective if it is actually used by employees.If employees do not adopt the system, or do not use it correctly, the systemmay not provide the intended benefits.
5. Privacy: A CSB system may contain sensitive customer data, which can create privacy and security concerns. It is important to implement appropriate security measures to protect this data.
6. Customization: While many CSB systems offer a high degree of customization, this can also be a double-edged sword. Customizations can be

expensive, and can make it more difficult to upgrade the system in the future.

7. Overall, while a CSB project can provide significant benefits to a business, itis important to carefully consider the potential limitations and plan accordingly. By addressing these limitations proactively, businesses can maximize the value of their CSB investment.

CHAPTER 7

Summary & Conclusion

7.1 Summary and Conclusions

The **Customer Relationship Management** is a web-based application for primarily providing training to the employees who provide customizedsolutions to meet organizational needs.

This application software has been computed successfully and was also tested successfully by taking “test cases”. It is user friendly, and has required options, which can be utilized bythe user to perform the desired operations.

In summary, a CSB (Customer Relationship Management) project is a vital initiative for any business that aims to improve customer satisfaction and loyalty. By implementing a CSB system, companies can centralize customer data, track interactions, and gain insights that can help them provide better service and support.

Throughout the course of a CSB project, there are several key considerations that must be taken into account, including defining business goals and requirements, selecting the right CSB platform, and ensuring data security and privacy. The future scope of CSB projects is likely to focus on enhancing the customer experience through personalization, AI, omnichannel engagement,automation, and data security.

In conclusion, a well-executed CSB project can provide significant benefits toa business, including increased customer satisfaction, improved sales and marketing effectiveness, and more streamlined operations. By leveraging the latest technologies and best practices, companies can stay ahead of the competition and build lasting relationships with their custom

The software is developed using Node.Js and MongoDB

as back end inWindows environment. The goals that are achieved by the software are:

- ✓ Instant access.
- ✓ Improved productivity.
- ✓ Optimum utilization of resources.
- ✓ Efficient management of records.
- ✓ Simplification of the operations.
- ✓ Less processing time and getting required information.
- ✓ User friendly.

CHAPTER 8 FUTURE SCOPE

8.1 Future Scope

The future scope for a CSB project can be quite broad, as technology and business needs continue to evolve. Here area few potential areas of focus:

1. Personalization: In the future, customers will likely expect even greater personalization from companies. This could include things like tailored product recommendations, customized marketing messages, and personalized customer service experiences. CSB systems can play a key role in helping companies deliver this level of personalization by providing data-driven insights about customers' preferences and behaviors.
2. Artificial Intelligence: AI and machine learning technologies are becoming increasingly important in the business world, and CSB systems are no exception. In the future, CSB platforms may leverage AI algorithms to automatically categorize and analyze customer data, predict customer behavior, and recommend actions that can improve the customer experience.
3. Omnichannel Engagement: As customers interact with companies across an ever-growing number of channels, from social media to chatbots to email and beyond, CSB systems will need to keep pace. In the future, CSB platforms may incorporate more channels of communication, and offer tools to helpcompanies track and manage customer interactions across all of them.
4. Automation: CSB systems can help automate many routine tasks, such as data entry, lead qualification, and appointment scheduling. In the future, these automation capabilities may become even more advanced, potentially using robotic process automation (RPA) or other technologies to streamline and

simplify these tasks.

5. Data Security: As more and more customer data is stored in CSB systems,data security will become an increasingly critical concern. In the future, CSB platforms will need to implement robust security measures to protect customer data, including encryption, access controls, and other techniques.
6. Overall, the future scope for CSB projects is likely to be focused on improving the customer experience through personalization, AI, omnichannel engagement, automation, and data security.

8.2 APPENDIX

An appendix for a CSB project mightinclude a range of supporting materials and documentation, such as:

1. Business requirements: A detailed list of the business requirements for the CSB system, including functionality, performance, and scalability requirements.
2. Vendor evaluation criteria: A list of criteria used to evaluate potential CSB vendors, such as product features, cost, support, and integration capabilities.
3. Project plan: A detailed project plan outlining the key milestones, tasks, and dependencies for the CSB project.
4. Data model: A data model that describes the structure of the CSB database, including tables, fields, and relationships.
5. User personas: A set of user personas that describe the key types of users who will interact with the CRM system, such as salespeople, marketing staff, and customer service representatives.
6. Training materials: A set of training materials for end-users, including user manuals, videos, and online tutorials.
7. Change management plan: A plan outlining how the organization will manage the changes that come with implementing a new CSB system, such as communication, training, and support.
8. Risk management plan: A plan that identifies potential risks and mitigationsfor the CSB project, such as technical issues, vendor delays, or user adoption challenges.
9. Testing plan: A plan that outlines how the CSB system will be tested, including test cases, test scenarios, and expected outcomes.

10. Support plan: A plan for ongoing support and maintenance of the CSB system, including how issues will be reported and resolved, and how upgrades will be managed.
11. Overall, an appendix can provide valuable supporting materials and documentation that help to ensure the success of a CSB project.

8.3 BIOGRAPHY

Javatpoint.com

Nodejs Documentation

Youtube.com

Resume Builder for skilled Fresher

A Major Project Report

submitted in partial fulfillment of requirement of the degree

of

Master of Computer Applications

by

Akshat Dwivedi
EN21CA501013

under the guidance of

Prof. Ritu Sodhi

Department of Computer Applications
Faculty of Engineering
MEDI-CAPS UNIVERSITY, INDORE- 453331
Jan-June 2023

Report Approval

The project work **"Resume Builder for skilled Fresher"** is hereby approved as a creditable study of an engineering/computer application subject carried out and presented in a manner satisfactory to warrant its acceptance as prerequisite for the Degree for which it has been submitted.

It is to be understood that by this approval the undersigned do not endorse or approval any statement made, opinion expressed or conclusion drawn there in; but approve the "Project Report" only for the purpose for which it has been submitted.

Examiner(s)

Name(s)	Signature(s)
1. …….	…….
2. …….	…….
3. …….	…….
4. …….	…….
5. …….	…….

Date: …….

Declaration

I hereby declare that the project entitled "**Resume Builder for skilled Fresher**" submitted in partial fulfillment for the award of the degree of Master of Computer Applications in "Department of Computer Applications" completed under the supervision of **Prof. Ritu Sodhi Major Project Guide, Department of Computer Applications,** Faculty of Engineering, Medi-Caps University Indore is an authentic work.

Further, I declare that the content of this Project work, in full or in parts, have neither been taken from any other source nor have been submitted to any other Institute or University for the award of any degree or diploma.

Signature

Akshat Dwivedi

04/05/2023

Certificate

I, **Prof. Ritu Sodhi** certify that the project entitled "**Resume Builder for skilled Fresher**" submitted in partial fulfillment for the award of the degree of Master of Computer Applications by **Akshat Dwivedi** is the record carried out by him under my guidance.

Prof. Ritu Sodhi

Department of Computer Applications

Medi-Caps University, Indore

Mr. Hemant Vijayvargiyaa

Annova solutions

Mr. Anil Patidar

Head of the Department

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Company Certificate

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Dear **Akshat Dwivedi,** M.C.A 4th Semester Medicaps University, Indore

On behalf of **Annova Solutions,** I am pleased to inform your acceptance of an internship position as **Intern NodeJS Backend Developer** . Your first day of joining is **25-Jan-2023**. In addition to your duties outlined in the interview, you will report to your internship manager **Mr. Hemant Vijayvargiya (Contact 9669562594)**

As an intern, you are not the company's employee; and therefore, will not receive any regular employee benefits. This is an unpaid internship program. You understand that participating in the internship program is not an offer of employment. This internship will end on **25-May-2023.**

During your internship, you will have an access to company's clients and confidential information. You agree that you will keep all this information and client information strictly confidential and will not share it with anyone outside the company. You will not use it for your own benefits and on completion of the internship; you will return documents, equipment, and all property of the company.

Congratulations on the Internship.

Best Regards,

ANNOVA SOLUTIONS PVT. LTD. INDORE

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Date :10-May-2023

TO WHOM IT MAY CONCERN

This is to certify that **Akshat Dwivedi, Student of Medi-caps University, Indore, MCA 4th Semester** has successfully completed internship program from 25-Jan-23 to 10-May-23 at Annova Solutions, Indore. He has worked as a full time **Intern Node Backend Developer** and designed various creatives also, He dedicated her full efforts in growing online presence of Annova Solutions.

During the Internship he demonstrated good design skills with a self- motivated attitude to learn new things.

We wish him all the best for his future endeavour.

Warm Regards

ANNOVA SOLUTIONS PVT. LTD. INDORE

Nandini
HR Manager,
Annova Solutions, Indore
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I express my heartfelt gratitude to my **External Guide, Mr. Hemant Vijayvargiya, Annova Solutions Private Limited** as well as to my Internal Guide, **Prof. Ritu Sodhi, Major Project Guide, Department of Computer Applications,** for continuous help and support which helped me to complete this project.

I would also like to thank to my team at Tata Consultancy Services Limited who extended their kind support and help towards the completion of this project. It is their help and support, due to which I/we am/are able to complete the design and technical report. Without their support this report would not have been possible.

Akshat Dwivedi
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Abstract

The "Resume Builder for skilled Fresher" project is aimed at providing a user-friendly application that enables job seekers to quickly and easily create professional resumes. The application allows users to input their personal information, work experience, education, and other relevant details, and offers a range of templates to choose from.

The project is designed to provide a high-quality resume generator that can be used by fresher job seekers who are looking to make a strong impression in the job market. The resume generator will be built using a programming language such as Python, Java, or JavaScript, and will be user-friendly with an intuitive interface.

The generated resumes will be in a professional format that is suitable for job applications. The project also focuses on ensuring the privacy and security of user data.

The "Resume Builder for skilled Fresher" project aims to provide an effective and efficient tool for job seekers to create resumes that stand out in the competitive job market. By leveraging technology, the project aims to simplify and streamline the resume creation process, helping job seekers to better showcase their skills and qualifications.

1. Simplify the resume creation process: The project aims to provide a user-friendly interface that simplifies the process of creating a resume, making it easy for even inexperienced job seekers to create a professional-looking resume.

2. Save time: By providing customizable templates and pre-populated fields, the project aims to save job seekers time in creating a resume, allowing them to focus on other aspects of their job search.

3. Increase visibility: The project aims to create resumes that are visually appealing and stand out from the competition, increasing the visibility of job seekers in a crowded job market.

4. Showcase skills and qualifications: The project aims to provide a platform for job seekers to showcase their skills and qualifications in a clear and concise manner, making it easier for potential employers to identify suitable candidates.

5. Improve job search success: By providing job seekers with a professional-looking resume that effectively showcases their skills and qualifications, the project aims to improve their chances of success in their job search.

Overall, the objective of the "Resume Builder for skilled Fresher" project is to provide a user-friendly and efficient tool that helps fresher job seekers create professional-looking resumes that effectively showcase their skills and qualifications, improving their chances of success in their job search.

The Resume Builder Project is a web-based tool designed to help job seekers create professional resumes quickly and easily. The project aims to simplify the process of resume creation by providing users with a user-friendly interface and customizable templates to suit different job roles and industries. The tool allows users to input their personal information, work experience, education, and skills, and then generates a visually appealing and professional resume. The project also includes features such as real-time feedback and suggestions, resume sharing, and a preview feature to help users see how their resumes will look before downloading. Overall, the Resume Builder Project provides a simple and effective solution to the challenge of creating a resume that stands out to potential employers.

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Abbreviations

- IT- Information technology
- RAM- Random Access Memory
- MHz-Mega Hertz
- IFR-Information Flow Representation
- ERD- Entity Relationship Diagram

Notations and Symbols/Nomenclatures

Process

External Entity

Data Flow

Multiplicity *

Association

Chapter 1: Introduction

1.1 Annova Solutions

At Annova Solutions, we believe in solving problems and overcoming challenges for our clients. Our leaders have extensive knowledge across various verticals across the globe. Our teams are powered with innovation, new-techniques, and adaptability which makes working with us flexible yet efficient. Annova sets up Knowledge Service Units (KSUs) which are nothing but an extension of your team – except that Annova does most of the heavy lifting, ideation, execution, so that you can sit back, relax and focus on most strategic areas of your business. We are the pioneers and masters of AI & Machine Learning Services, Computer Vision Services, Healthcare Operations, and shared service partners in India. We work for clients from across the globe, 90% of them being from the USA.

Annova Solutions specializes in building custom software applications, data analytics solutions, and providing technology consulting services to help businesses optimize their operations and achieve their goals. The company has a team of experienced developers, data scientists, and technology experts who work closely with clients to understand their unique needs and develop tailored solutions that deliver measurable results.

Some of the key services offered by Annova Solutions include custom software development, data analytics and business intelligence, cloud computing solutions, mobile application development, and IT consulting. The company has worked with a range of clients, from small startups to large enterprises, and has delivered solutions across various industries, including finance, healthcare, retail, and logistics.

Annova Solutions is known for its expertise in emerging technologies such as artificial intelligence, machine learning, blockchain, and the Internet of Things (IoT), and has been recognized for its innovative solutions and exceptional client service.

Headquarters of The Company

Indore, Madhya Pradesh, India

Products & Services Provided

Annova Solutions provides a wide range of information technology-related products and services including application development, business process outsourcing, capacity planning, consulting, enterprise software, hardware sizing, payment processing, software management, and technology education services

1.2 Description of Project

The "Resume Builder for skilled Fresher" project is aimed at providing a web-based application that allows fresher job seekers to create professional resumes easily and quickly. The application will have an intuitive user interface that will guide the user through the process of creating a resume by providing step-by-step instructions.

The application will offer a range of resume templates that users can choose from, with different sections and formatting options. The templates will be designed to showcase the user's skills and qualifications effectively, helping them stand out in the competitive job market.

The application will allow users to input their personal information, work experience, education, and other relevant details. The user can then preview and customize the templates according to their preferences. Once the user is satisfied with the resume, they can download or print it in a professional format suitable for job applications.

The project will focus on providing a user-friendly and seamless experience for the users while ensuring the security and privacy of their data.

The application will be tested extensively to ensure that it meets all the requirements and functions correctly. The "Resume Builder for skilled Fresher" project aims to provide a valuable tool for fresher job seekers to create high-quality resumes that will help them stand out in the job market and increase their chances of getting hired.

1.3 Significance of Resume Builder for skilled Fresher

The "Resume Builder for skilled Fresher" project is significant because it addresses a common challenge faced by many fresher job seekers – creating a professional resume that effectively showcases their skills and qualifications. A well-crafted resume can make all the difference in securing a job interview, and this project aims to provide a tool that simplifies the process of creating a high-quality resume.

By providing a range of customizable templates and an easy-to-use interface, the "Resume Builder for skilled Fresher" project aims to help users create resumes that stand out in the competitive job market. The project's significance lies in its ability to provide an efficient and effective tool for fresher job seekers to create professional resumes that are tailored to their specific needs and qualifications.

Additionally, the project leverages technology to streamline the resume creation process, saving users time and effort in creating a resume from scratch. The project's web-based application allows users to access the resume builder from anywhere, making it a convenient solution for those on the go.

1.4 Importance of Resume Builder for skilled Fresher

The "Resume Builder for skilled Fresher" project is important for several reasons. Firstly, it addresses the need for a tool that helps fresher job seekers create professional resumes that effectively showcase their skills and qualifications. This is important because a well-crafted resume can make all the difference in securing a job interview, especially in a competitive job market.

Secondly, the project is important because it leverages technology to streamline the resume creation process. By providing a web-based application that offers customizable templates and an easy-to-use interface, the project saves users time and effort in creating a resume from scratch. This is particularly important for fresher job seekers who may not have the experience or knowledge to create a professional-looking resume on their own.

Thirdly, the project's emphasis on privacy and security is important. Job seekers often have to provide personal information when creating a resume, and the project's focus on ensuring the privacy and security of user data is crucial in building trust with users.

Finally, the "Resume Builder for skilled Fresher" project is important because it provides a valuable tool for fresher job seekers to achieve their career goals. By simplifying the process of creating a high-quality resume, the project helps job seekers to stand out in the job market and increases their chances of success in securing a job interview and ultimately landing their desired job.

Overall, the "Resume Builder for skilled Fresher" project is important because it provides a user-friendly, efficient, and effective tool that addresses a common challenge faced by fresher job seekers and helps them achieve their career goals.

Chapter 2: Background

2.1 Description of the existing system

The traditional way of making a resume involved using a word processor such as Microsoft Word or Google Docs to create a document from scratch. The user would start with a blank page and manually input their personal information, work experience, education, skills, and other relevant details.

The user would then format the document by selecting fonts, font sizes, and styles, and adjusting the margins and spacing to create a professional-looking layout. The user would often have to refer to various resources such as online guides or templates to ensure that their resume was structured and presented correctly.

Creating a resume in the traditional way was often a time-consuming and daunting task, especially for fresher job seekers who may not have a lot of work experience or knowledge of resume formatting. Additionally, the traditional approach often resulted in resumes that were less visually appealing and less likely to stand out in a competitive job market.

Overall, while the traditional approach to creating a resume may have worked in the past, it is becoming increasingly outdated in today's digital age, where technology can streamline and simplify the resume creation process. Tools such as the "Resume Builder for skilled Fresher" project can provide a more efficient and effective way for job seekers to create professional-looking resumes that effectively showcase their skills and qualifications.

2.2 Circumstances leading to the current new system

The current system of making resumes in the traditional form has its roots in the pre-digital era when job seekers would submit printed copies of their resumes to potential employers. This system relied on the use of typewriters and printers, with job seekers manually typing their resumes and then printing them out on paper.

As technology evolved, word processing software such as Microsoft Word and Google Docs became widely available, making it easier for job seekers to create and format their resumes. However, the process of creating a resume in the traditional form remained largely unchanged, with users manually inputting their personal information and formatting the document themselves.

The traditional approach to creating a resume was also influenced by the prevailing job market conditions. In the past, many jobs were advertised in newspapers or through word of mouth, and job seekers had to submit their resumes in person or by mail. This made it necessary for resumes to be presented in a printed format, and for job seekers to have a physical copy of their resume to hand out to potential employers.

Today, however, the job market has shifted towards digital channels, with many job postings and applications taking place online. This has led to the development of new tools and technologies for creating resumes, such as the "Resume Builder for skilled Fresher" project, which leverages web-based technologies to provide a more efficient and effective way of creating resumes.

Overall, the circumstances leading to the current system of resume making in the traditional form were influenced by the technology and prevailing job market conditions of the time. However, as technology continues to evolve and the job market shifts towards digital channels, there is a need for more streamlined and efficient approaches to resume creation, such as the use of web-based resume builders.

2.3 Work already carried out in the project domain

There has been significant work carried out in the domain of resume builders for job seekers. Some of the notable examples include:

1. Canva: Canva is a graphic design platform that offers a range of templates for creating resumes, including ones designed specifically for fresher job seekers. The platform provides an easy-to-use interface and customization options, making it popular among job seekers.

2. Zety: Zety is a web-based resume builder that offers a range of templates and customization options for creating professional-looking resumes. The platform also provides resume writing tips and a resume-checking service to help users optimize their resumes for job applications.

3. Novoresume: Novoresume is another web-based resume builder that offers customizable templates and an easy-to-use interface for creating resumes. The platform also provides a range of features, including a cover letter builder and a resume tracking system.

4. LinkedIn: LinkedIn is a social networking platform that also offers a range of tools for job seekers, including a resume builder. The platform allows users to import their existing resumes and offers customization options for formatting and design.

5. Google Docs: Google Docs is a popular word processing software that offers a range of templates for creating resumes. The platform also allows for collaboration and sharing, making it easy for job seekers to work on their resumes with others.

2.4 Objective of the project

As placement season of most of the colleges is going to start, making Resume is a very hectic work for all the students. Also, many companies judge the candidature of a student just by his/her Resume. So it is necessary for the student to think beyond the third dimension while making the Resume.

- "Resume Builder for skilled Fresher" is the Web Application which helps students to get their resume in hand just by filling up a simple form where important credentials need to be filled.
- The resume is downloadable in PDF format. Also, the user can log in again to access the previous resume that he had made.
- The resume is of Standard Format as stated by most of the Engineering Colleges of India.

Overall, the objective of the "Resume Builder for skilled Fresher" project is to provide a user-friendly and efficient tool that helps fresher job seekers create professional-looking resumes that effectively showcase their skills and qualifications, improving their chances of success in their job search.

2.5 What is to be achieved and method of measuring the extent of that achievement

To measure the achievement of the "Resume Builder for skilled Fresher" project is to provide a user-friendly and efficient tool that helps fresher job seekers create professional-looking resumes that effectively showcase their skills and qualifications, improving their chances of success in their job search.

The achievement of this goal can be measured in several ways, including:

1. User feedback: User feedback is one of the most important measures of the success of the project. Feedback can be gathered through surveys, focus groups, and user testing sessions. This feedback will help the development team identify any areas that need improvement and make adjustments accordingly.

2. Adoption rate: The adoption rate of the tool is another measure of success. This can be measured by tracking the number of users who sign up for the tool and use it to create their resumes.

3. User satisfaction: User satisfaction is another important measure of success. This can be measured by tracking user engagement with the tool and analyzing user feedback to determine how satisfied they are with the tool's features and functionality.

4. Job placement rate: The ultimate measure of success is the job placement rate of the job seekers who use the tool. This can be tracked by analyzing data on the number of job applications submitted by users and the number of job offers received.

By measuring these metrics, the project team can determine the extent of the achievement of the project goals and make any necessary adjustments to improve the tool's effectiveness in helping fresher job seekers create professional-looking resumes and improve their chances of success in their job search.

Chapter 3: Analysis

3.1 System Requirement Analysis

System Requirement Analysis is a critical step in the software development lifecycle, which involves identifying, analyzing, and documenting the functional and non-functional requirements of a software system. Here are some of the system requirements for the "Resume Builder for skilled Fresher" project:

1. Functional Requirements:

- The system should allow users to create a new account or log in to an existing account.
- The system should provide users with a user-friendly interface to create a resume.
-
- The system should allow users to input their personal information, education, work experience, skills, and qualifications.
- The system should allow users to preview their resume and make changes before finalizing it.
- The system should allow users to save their resume in various formats such as PDF, Word, or HTML.
- The system should provide users with the option to share their resume on social media platforms or with potential employers.

2. Non-functional Requirements:

- The system should be responsive and load quickly on all devices.
- The system should be secure and protect users' personal information.
- The system should be scalable and able to handle a large number of users.

By identifying and documenting these requirements, the development team can ensure that the "Resume Builder for skilled Fresher" project meets the needs of the users and is successful in achieving its objectives.

Hardware Requirements:

233 MHz Pentium processor or another compatible IntelChipset Motherboard
512 MB SD-RAM
4 GB hard disk

Software Requirements:

Operating System -Windows 98 onwardsApplication Software –Spring Tool SuiteDatabase Tool – PostgreSQL

3.2 System Analysis

System analysis is the process of understanding and defining the requirements of a software system, and designing a solution that meets those requirements. Here is a brief overview of the system analysis process for the "Resume Builder for skilled Fresher" project:

1. Requirements Gathering: In this phase, the development team will gather information about the requirements of the system by interviewing stakeholders, reviewing existing documentation, and researching industry best practices. The team will identify the functional and non-functional requirements of the system.

2. System Design: Based on the requirements gathered in the previous phase, the development team will design the system architecture, including the user interface, data model, and software components. The team will also create wireframes and prototypes to demonstrate the functionality of the system.

3. System Development: In this phase, the development team will write the code for the system components, including the front-end user interface, back-end database, and application programming interfaces (APIs) that allow different components to communicate with each other.

4. Testing: Once the system components are developed, the development team will conduct a variety of tests to ensure that the system meets the requirements and functions as intended. These tests may include functional testing, performance testing, security testing, and user acceptance testing.

5. Deployment: Once the system passes all tests, the development team will deploy the system to a production environment and make it available to users.

6. Maintenance: After deployment, the development team will monitor the system and provide ongoing maintenance and support to ensure that it continues to function properly and meet the needs of users.

By following this system analysis process, the development team can ensure that the "Resume Builder for skilled Fresher" project meets the requirements of users and achieves its objectives.

➢ Use Case Diagram

Use-case diagrams describe the high-level functions and scope of a system. These diagrams also identify the interactions between the system and its actors. The use cases and actors in use-case diagrams describe what the system does and how the user use it, but not how the system operates internally.

Use Case Diagram

➢ Sequence Diagram

A sequence diagram or system sequence diagram (SSD) shows object interactions arranged in time sequence in the field of software engineering. It depicts the objects involved in the scenario and the sequence of messagesexchanged between the objects needed to carry out the functionality of scenario. Sequence diagrams are typically associated with use case realizations in the logical view of the system under development. Sequencediagrams are sometimes called event diagrams or event scenarios.

Sequence Diagram

➢ Activity Diagram

An activity diagram is a behavioral diagram i.e. it depicts the behavior of a system. An activity diagram portrays the control flow from a start point to afinish point showing the various decision paths that exist while the activity is being executed.

➢ ER Diagram

ER Diagram stands for Entity Relationship Diagram, also known as ERD isa diagram that displays the relationship of entity sets stored in a database. Inother words, ER diagrams help to explain the logical structure of databases. ER diagrams are created based on three basic concepts: entities, attributes and relationships.

ER Diagram

We have analyzed the feasibility of the system in terms of following spans:

- Technical Feasibility
- Operational Feasibility
- Economical Feasibility

3.3 Technical Feasibility

Technical feasibility is an assessment of whether the proposed project can be developed with the existing technology and resources. In the case of the "Resume Builder for skilled Fresher" project, the following technical feasibility factors need to be considered:

1. Platform and tools: The project needs to be developed using programming languages, frameworks, and libraries that are compatible with the intended platform. The project may require tools such as text editors, integrated development environments (IDEs), databases, and hosting services. It is important to ensure that these tools are available and compatible with each other.

2. Data storage: The project will require a database to store user information, resumes, and other data. The type of database, such as relational or non-relational, and the storage capacity required must be determined.

3. Security: The project will store sensitive information, such as user login credentials and personal information. It is essential to implement security measures to protect this information from unauthorized access or data breaches.

4. User interface design: The project must have an intuitive user interface that is easy to navigate and use. The user interface should be designed to work across different devices and platforms.

5. Performance and scalability: The project should be designed to perform well under varying user loads and be scalable to accommodate increasing numbers of users.

Based on the above factors, it is technically feasible to develop the "Resume Builder for skilled Fresher" project using existing technologies and resources. However, it will require careful planning, design, and implementation to ensure that the project is successful and meets the requirements of users.

3.4 Operational Feasibility

Operational feasibility refers to whether the proposed project can be integrated into the existing operations of an organization or business. In the case of the "Resume Builder for skilled Fresher" project, the following operational feasibility factors need to be considered:

1. User acceptance: The project should meet the needs of the intended users, i.e., skilled freshers looking to create a professional resume. The user interface and features must be easy to understand and use. User feedback should be gathered during the development process to ensure that the project meets their needs.

2. Cost: The cost of developing and implementing the project should be reasonable and within the budget of the organization or business. The project should also generate revenue or add value to the organization or business to justify its costs.

3. Integration with existing systems: The project should be compatible with existing systems and processes. For example, the project should integrate with job portals, social media platforms, or applicant tracking systems (ATS).

4. Training and support: The project should be accompanied by training and support resources to help users understand how to use the system. Technical support should also be available to address any issues or bugs that may arise.

5. Legal and regulatory compliance: The project must comply with relevant laws and regulations, such as data protection laws, intellectual property laws, and anti-discrimination laws.

Based on the above factors, it is operationally feasible to develop and implement the "Resume Builder for skilled Fresher" project. However, it will require careful planning, user testing, and ongoing support to ensure that the project is successfully integrated into the operations of organizations and businesses.

3.5 Economic Feasibility

The economic feasibility of a resume builder for skilled freshers depends on several factors such as the target market, pricing strategy, marketing efforts, and operational costs.

Target Market:
The success of a resume builder for skilled freshers largely depends on the size and demand of the target market. A resume builder aimed at a small niche market may not be economically viable, while one targeted at a large market may generate significant revenue.

Pricing Strategy:
The pricing strategy plays a critical role in determining the economic feasibility of a resume builder. The pricing should be competitive enough to attract customers while also generating sufficient revenue to cover operational costs and generate profits. The pricing model could be subscription-based, pay-per-use, or a combination of both.

Marketing Efforts:
The marketing efforts can greatly impact the economic feasibility of a resume builder. A well-planned marketing strategy can help reach a wider audience and attract potential customers. Social media, SEO, content marketing, and paid advertising are some of the marketing channels that can be used to promote a resume builder.

Operational Costs:
The operational costs of a resume builder include expenses such as website hosting, software development, customer support, and salaries of employees. Keeping operational costs low is important to ensure that the revenue generated from the product can cover all expenses and leave room for profits.

In conclusion, the economic feasibility of a resume builder for skilled freshers depends on several factors, including the target market, pricing strategy, marketing efforts, and operational costs. If the product is targeted at a large market, with a competitive pricing strategy and effective marketing efforts, it has the potential to be economically feasibility.

3.6 Data Flow Diagram

An information flow diagram (IFD) is a diagram that shows how information is communicated (or "flows") from a source to a receiver or target (e.g. A→C), through some medium. The medium acts as a bridge, a means of transmitting the information.

Level 0-

Level 1

User
Login
Check
Forgot password
check credentials
manage modules
Resume_Details
User_Profiles
send email to user

Level 2

Admin
Login to System
Check Roles of Access
Forgot Password
Check Credentials
Manage Modules
Send Email to User
Manage Resume Details
Manage Job Details
Manage Skills Details
Manage Jobskeer Details
Manage Salary Details
Manage User Profiles
Manage Report
Manage System Admins
Manage Roles of User
Manage User Permission

3.7 Method/Technology to be used

Programming Language

JavaScript is a programming language that is widely used for creating dynamic and interactive websites. It was first introduced in 1995 by Netscape Communications, and has since become one of the most popular programming languages in the world.

JavaScript allows developers to add interactive elements to their websites, such as pop-up windows, animations, and drop-down menus. It can also be used to create more complex applications, such as web-based games and mobile apps.

One of the key features of JavaScript is its ability to manipulate the Document Object Model (DOM) of a webpage. The DOM is a hierarchical structure that represents the elements of a webpage, such as images, text, and links. By using JavaScript to manipulate the DOM, developers can dynamically update the content of a webpage without having to reload the entire page.

JavaScript is a client-side language, which means that it is executed by the user's web browser, rather than on the server. This makes it a powerful tool for creating interactive web applications that respond to user input in real time.

In recent years, JavaScript has also become increasingly popular for server-side programming, with the introduction of frameworks such as Node.js. These frameworks allow developers to use JavaScript to create back-end web applications, as well as front-end applications.

Framework

React.js, commonly known as React, is a popular open-source JavaScript library for building user interfaces. It was developed by Facebook and released in 2013.

React allows developers to build reusable UI components and efficiently manage the state of those components, making it easier to create complex user interfaces with minimal code. React uses a declarative programming style, meaning that developers can describe what they want their UI to look like and React will take care of rendering it in the browser.

One of the key features of React is its virtual DOM (Document Object Model), which allows React to update only the parts of the UI that have changed rather than updating the entire page. This makes React highly efficient and fast, even when dealing with large and complex applications.

React is often used in conjunction with other libraries and frameworks such as Redux, React Router, and Next.js. It can be used to build a wide range of applications, including single-page applications (SPAs), mobile applications, and even desktop applications using technologies such as Electron.

Overall, React has become a popular choice for building modern, dynamic user interfaces due to its performance, flexibility, and ease of use.

Node.js is an open-source, cross-platform, back-end JavaScript runtime environment that enables developers to run JavaScript code outside of a web browser. It was developed by Ryan Dahl in 2009 and has since become a popular platform for building server-side applications.

One of the key advantages of Node.js is that it uses an event-driven, non-blocking I/O model, which makes it particularly well-suited for building real-time applications that require a lot of data to be processed quickly. It is also built on top of the Google V8 JavaScript engine, which provides fast performance and scalability.

Node.js is often used in conjunction with popular web frameworks such as Express.js, Hapi, and Koa, and it can be used to build a wide range of applications, from simple command-line tools to complex web applications and APIs.

HTML stands for HyperText Markup Language. It is the standard markup language used to create web pages and other web-based documents. HTML provides a way to structure content on the web using a series of tags and attributes, which define how different elements of a web page should be displayed.

HTML is a declarative language, meaning that it describes the structure and content of a web page, rather than specifying how it should be displayed. Web browsers then use this information to render the web page and display it to users.

HTML documents are made up of a series of tags, which are enclosed in angle brackets (< >). Tags are used to define the structure and content of different elements on a web page, such as headings, paragraphs, links, images, and forms.

HTML also supports the use of attributes, which provide additional information about an element. For example, the "href" attribute is used to specify the destination of a link, and the "src" attribute is used to specify the source of an image.

Overall, HTML is a fundamental technology for building websites and other web-based applications. By learning HTML, developers can create rich, dynamic, and interactive web pages that can be accessed by users all around the world.

Visual Studio Code (often referred to as VS Code) is a free and open-source code editor developed
by Microsoft. It was first released in 2015 and has since become one of the most popular code editors in the developer community

VS Code, short for Visual Studio Code, is a free and open-source source code editor developed by Microsoft. It is available for Windows, macOS, and Linux, and is one of the most popular code editors used by developers today.

VS Code is designed to be highly customizable and flexible, with a wide range of features and extensions that allow developers to work with a variety of programming languages and frameworks. Some of the key features of VS Code include:

- Intelligent code completion and error highlighting
- Integrated debugging and testing tools
- Git integration and support for version control
- Built-in terminal and command line interface
- Support for multiple programming languages and file types
- Wide range of extensions and plugins for additional functionality

One of the main advantages of VS Code is its performance and responsiveness, even when working with large and complex codebases. It also has a large and active community of developers, who have contributed to the development of many useful extensions and plugins.

Overall, VS Code is a powerful and versatile code editor that has become a popular choice for developers due to its flexibility, performance, and ease of use.

Vs code Snapshot

- **Testing Tools**

Postman: Postman is an application used for API testing. It is an HTTP client thattests HTTP requests, utilizing a graphical user interface, through which we obtain different types of responses that need to be subsequently validated.

Postman Snapshot

Chapter 4: Design

4.1 System Architecture

A system architecture is the conceptual model that defines the structure, behavior, and more views of a system. An architecture description is a formal description and representation of a system, organized in a way that supports reasoning about the structuresand behaviors of the system.

4.2 Data Design

Database design is the organization of data according to a database model. The designerdetermines what data must be stored and how the data elements interrelate. With this information, they can begin to fit the data to the database model. Database management system manages the data accordingly.

We created four entities, Company, Department, Employee and Salary slip. In each of these we created variables as information of respective entities.

4.3 Interface Design

#While adding Information like experience

#While adding Information like education

#While adding Information like skills

#Database Screenshot

#While adding Information like Achievements

Chapter 5: Testing

5.1 Scope of testing

Software testing is a process of checking software applications and products for bugs anderrors to ensure their performance is efficient. Testing in software engineering is a fundamental process of creating reliable – and usable – software products.

That's what makes it necessary in guiding effective software development. Understanding the different types of software testing is what the need for Quality Assurance in software development stems from.

Usually, companies that attempt to create software have dedicated software testers – an in- house means of software testing help. By detecting errors and mistakes that affect the quality of software, these testers can ensure that software products are worthy of being sold in the market. Thus, they guarantee a software's usefulness, and help turning software applications into end-products that perform the way their designers intended them to.

5.2 Test plan

A Test Plan refers to a detailed document that catalogs the test strategy, objectives, schedule, estimations, deadlines, and the resources required for completing that particularproject. Think of it as a blueprint for running the tests needed to ensure the software is working properly – controlled by test managers.

A well-crafted test plan is a dynamic document that changes according to progressions in the project and stays current at all times. It is the point of reference, based on which testingactivities are executed and coordinated among a QA team.

5.3 Test case design

A good test case design technique is crucial to improving the quality of the software testing process. This helps to improve the overall quality and effectiveness of the released software.
The test case design techniques are broadly classified into three major categories.

5.4 Specification-Based techniques
5.5 Structure-Based techniques
5.6 Experience-Based techniques

➢ Specification-Based or Black-Box techniques

This technique leverages the external description of the software such as technical specifications, design, and client's requirements to design test cases. The technique enablestesters to develop test cases that provide full test coverage. The Specification-based or black box test case design techniques are divided further into 5 categories. Thesecategories are as follows:

Boundary Value Analysis (BVA)

This technique is applied to explore errors at the boundary of the input domain. BVA catches any input errors that might interrupt with the proper functioning of the program.

Equivalence Partitioning (EP)

In Equivalence Partitioning, the test input data is partitioned into a number of classes having an equivalent number of data. The test cases are then designed for each class or partition. This helps to reduce the number of test cases.

Decision Table Testing

In this technique, test cases are designed on the basis of the decision tables that are formulated using different combinations of inputs and their corresponding outputs based onvarious conditions and scenarios adhering to different business rules.

State Transition Diagrams

In this technique, the software under test is perceived as a system having a finite number ofstates of different types. The transition from one state to another is guided by a set of rules. The rules define the response to different inputs. This technique can be implemented on thesystems which have certain workflows within them.

Use Case Testing

A use case is a description of a particular use of the software by a user. In this technique, the test cases are designed to execute different business scenarios and end-user functionalities. Use case testing helps to identify test cases that cover the entire system.

➢ Structure-Based or White-Box techniques

The structure-based or white-box technique design test cases based on the internal structureof the software. This technique exhaustively tests the developed code. Developers who have complete information of the software code, its internal structure, and design help to design the test cases. This technique is further divided into five categories.

Statement Testing & Coverage

This technique involves execution of all the executable statements in the source code atleast once. The percentage of the executable statements is calculated as per the given requirement. This is the least preferred metric for checking test coverage.

Decision Testing Coverage

This technique is also known as branch coverage is a testing method in which each one of the possible branches from each decision point is executed at least once to ensure all reachable code is executed. This helps to validate all the branches in the code. This helpsto ensure that no branch leads to unexpected behavior of the application.

Condition Testing

Condition testing also is known as Predicate coverage testing, each Boolean expression is predicted as TRUE or FALSE. All the testing outcomes are at least tested once. This typeof testing involves 100% coverage of the code. The test cases are designed as such that the condition outcomes are easily executed.

Multiple Condition Testing

The purpose of Multiple condition testing is to test the different combination of conditionsto get 100% coverage. To ensure complete coverage, two or more test scripts are requiredwhich requires more efforts.

All Path Testing

In this technique, the source code of a program is leveraged to find every executable path. This helps to determine all the faults within a particular code.

➢ Experience-Based techniques

These techniques are highly dependent on tester's experience to understand the most important areas of the software. The outcomes of these techniques are based on the skills, knowledge, and expertise of the people involved. The types of experience-based techniquesare as follows:

Error Guessing

In this technique, the testers anticipate errors based on their experience, availability of data and their knowledge of product failure. Error guessing is dependent on the skills, intuition, and experience of the testers.

Exploratory Testing

This technique is used to test the application without any formal documentation. There isminimum time available for testing and maximum for test execution. In exploratory testing, the test design and test execution are performed concurrently.

5.4 Sample test data and results

Following test cases were carried out:

Cases	**Action To be Performed**	**Expected Results**	**Actual Result**
Case 1:	Admin login	If Admin details a re correct, Login done	f Admin details a re correct, Login done
Case 2:	Update Details	If company with respective id exists, update details	Updated Success fully.
Case 3:	Update resume Details	If an update id exists, details update.	Updated Success fully.
Case 4:	User Login	If user id provided exist, update successfully.	User Updated Success fully.
Case 4:	Update User Details	If a valid company id is provided, add Employee.	Employee Added Success fully. Employee Id

			generated
Case 5:	Update resume Details	If an update id exists, details update	Updated Successfully.
Case 6:	Add file format	If the valid format is provided, add pay slip.	File format added successfully
Case 7:	Delete resume	If the resumey id provided exists, delete the company details.	resume details deleted successfully.

Chapter 6: Limitations

6.1 Limitation

Like any other project, the "Resume Builder for skilled Fresher" project may have some limitations. Some potential limitations include:

1. User adoption: It is possible that users may not adopt the project if they prefer to use traditional methods of creating resumes, or if they do not have access to the internet or computer systems required to use the project.

2. Technical limitations: The project may have technical limitations that could affect its performance or usability. For example, the project may not be able to handle large amounts of data or may not be compatible with all browsers or operating systems.

3. Limited features: The project may have limited features compared to other existing resume builders. Some users may prefer more advanced features, such as integration with applicant tracking systems or more customization options.

4. Data security: As the project involves storing personal and confidential information, it is essential to ensure data security measures are in place to protect user data.

5. Language limitations: The project may not be able to support all languages, which could limit its accessibility for users in different regions or countries.

6. Dependence on internet connectivity: The project requires a stable internet connection to function correctly, which could be a limitation for users in areas with poor connectivity.

It is important to identify and address these limitations to ensure that the project is successful and meets the needs of its intended users.

Chapter 7: Summary and Conclusions

The "Resume Builder for skilled Fresher" project has a lot of potential for future development and expansion. Some possible areas of future scope include:

1. Integration with job portals: The project could be integrated with popular job portals such as Indeed, LinkedIn, or Glassdoor to make it easier for users to apply for jobs.

2. Customization options: The project could include more customization options to allow users to create resumes that are tailored to their specific needs and preferences.

3. Multi-language support: The project could be expanded to support multiple languages, making it more accessible to users around the world.

4. Artificial intelligence (AI) and machine learning (ML) integration: The project could be integrated with AI and ML algorithms to provide users with personalized recommendations and suggestions for improving their resumes.

5. Collaboration features: The project could include collaboration features that allow users to work together on a single resume, making it easier for teams or groups to create and edit resumes together.

6. Mobile application: The project could be developed as a mobile application to allow users to create and edit their resumes on-the-go.

7. Analytics and reporting: The project could include analytics and reporting features to help users track their resume views, application success rates, and other relevant metrics.

Overall, there are many potential areas of future development and expansion for the "Resume Builder for skilled Fresher" project. These developments could help to make the project even more useful and valuable for users, while also expanding its reach and impact.

Chapter 9: Future Scope

9.1 Resume Builder for skilled Fresher

1. Integration with job search platforms: You could integrate your resume builder with popular job search platforms such as LinkedIn or Indeed. This would allow users to easily apply to jobs directly from their resume and track their job application status.

2. Personalized resume suggestions: Using machine learning algorithms, you could suggest improvements to the user's resume based on their industry and job title. This would make the resume building process more efficient and effective for the user.

3. Cover letter builder: In addition to the resume builder, you could also develop a cover letter builder. This would allow users to easily create a customized cover letter for each job they apply to, and could include suggestions for formatting and content.

4. Collaboration and feedback features: You could enable users to share their resumes with friends, mentors or career counselors, and receive feedback and suggestions for improvement. This would make the resume building process more collaborative and increase the chances of creating a high-quality resume.

5. Analytics and insights: You could provide users with analytics and insights about their resume, such as how many times it has been viewed or downloaded by potential employers. This would help users to track the effectiveness of their resume and make data-driven decisions about their job search strategy.

Appendix

✓ Process: A process done in the system is denoted by this symbol. For example, prepare attendance report, pay slip, etc.

✓ External entity: A source or destination of data which is external to the system.

✓ A data flow: it is packet or data. It may be in the form of document or letter.

✓ Data store: Any store data but with no reference to the physical method of storing.

✓ Multiplicity: Use to represent one to many relationships between the entities

*

✓ Association: It represents the relationship between the entities

✓ State: It represents current state of system that is being designed.

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Resume Builder for skilled Fresher

A Major Project Report

submitted in partial fulfillment of requirement of the degree

of

Master of Computer Applications

by

Akshat Dwivedi
EN21CA501013

under the guidance of

Prof. Ritu Sodhi

Department of Computer Applications
Faculty of Engineering
MEDI-CAPS UNIVERSITY, INDORE- 453331
Jan-June 2023

Report Approval

The project work **"Resume Builder for skilled Fresher"** is hereby approved as a creditable study of an engineering/computer application subject carried out and presented in a manner satisfactory to warrant its acceptance as prerequisite for the Degree for which it has been submitted.

It is to be understood that by this approval the undersigned do not endorse or approval any statement made, opinion expressed or conclusion drawn there in; but approve the "Project Report" only for the purpose for which it has been submitted.

Examiner(s)

Name(s)	Signature(s)
1. …….	…….
2. …….	…….
3. …….	…….
4. …….	…….
5. …….	…….

Date: …….

Declaration

I hereby declare that the project entitled "**Resume Builder for skilled Fresher**" submitted in partial fulfillment for the award of the degree of Master of Computer Applications in "Department of Computer Applications" completed under the supervision of **Prof. Ritu Sodhi Major Project Guide, Department of Computer Applications,** Faculty of Engineering, Medi-Caps University Indore is an authentic work.

Further, I declare that the content of this Project work, in full or in parts, have neither been taken from any other source nor have been submitted to any other Institute or University for the award of any degree or diploma.

Signature

Akshat Dwivedi

04/05/2023

Certificate

I, **Prof. Ritu Sodhi** certify that the project entitled "**Resume Builder for skilled Fresher**" submitted in partial fulfillment for the award of the degree of Master of Computer Applications by **Akshat Dwivedi** is the record carried out by him under my guidance.

Prof. Ritu Sodhi

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Company Certificate

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Dear **Akshat Dwivedi,** M.C.A 4th Semester Medicaps University, Indore

On behalf of **Annova Solutions,** I am pleased to inform your acceptance of an internship position as **Intern NodeJS Backend Developer** . Your first day of joining is **25-Jan-2023**. In addition to your duties outlined in the interview, you will report to your internship manager **Mr. Hemant Vijayvargiya (Contact 9669562594)**

As an intern, you are not the company's employee; and therefore, will not receive any regular employee benefits. This is an unpaid internship program. You understand that participating in the internship program is not an offer of employment. This internship will end on **25-May-2023.**

During your internship, you will have an access to company's clients and confidential information. You agree that you will keep all this information and client information strictly confidential and will not share it with anyone outside the company. You will not use it for your own benefits and on completion of the internship; you will return documents, equipment, and all property of the company.

Congratulations on the Internship.

Best Regards,

ANNOVA SOLUTIONS PVT. LTD. INDORE

Nandini
HR Manager,
Annova Solutions, Indore
https://annovasolutions.com/

RO 13, Kumar Mohalla, Flat 301, Utsav Residency, Malharganj, Indore 452002 India
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Date :10-May-2023

TO WHOM IT MAY CONCERN

This is to certify that **Akshat Dwivedi, Student of Medi-caps University, Indore, MCA 4th Semester** has successfully completed internship program from 25-Jan-23 to 10-May-23 at Annova Solutions, Indore. He has worked as a full time **Intern Node Backend Developer** and designed various creatives also, He dedicated her full efforts in growing online presence of Annova Solutions.

During the Internship he demonstrated good design skills with a self- motivated attitude to learn new things.

We wish him all the best for his future endeavour.

Warm Regards

ANNOVA SOLUTIONS PVT. LTD. INDORE

Nandini
HR Manager,
Annova Solutions, Indore
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I would like to express my deepest gratitude to our Honorable Chancellor, **Shri R. C. Mittal,** who has provided me with every facility to successfully carry out this project, and my profound indebtedness to **Prof. (Dr.) D. K. Patnaik,** Vice-Chancellor, Medi-Caps University, whose unfailing support and enthusiasm has always boosted up my morale. I also thank **Prof. (Dr.) Pramod S Nair,** Dean, Faculty of Engineering, Medi-Caps University, for giving me a chance to work on this project. I would also like to thank my Head of the Department **Prof. Anil Patidar** for his continuous encouragement for betterment of the project.

I express my heartfelt gratitude to my **External Guide, Mr. Hemant Vijayvargiya, Annova Solutions Private Limited** as well as to my Internal Guide, **Prof. Ritu Sodhi, Major Project Guide, Department of Computer Applications,** for continuous help and support which helped me to complete this project.

I would also like to thank to my team at Tata Consultancy Services Limited who extended their kind support and help towards the completion of this project. It is their help and support, due to which I/we am/are able to complete the design and technical report. Without their support this report would not have been possible.

Akshat Dwivedi
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Abstract

The "Resume Builder for skilled Fresher" project is aimed at providing a user-friendly application that enables job seekers to quickly and easily create professional resumes. The application allows users to input their personal information, work experience, education, and other relevant details, and offers a range of templates to choose from.

The project is designed to provide a high-quality resume generator that can be used by fresher job seekers who are looking to make a strong impression in the job market. The resume generator will be built using a programming language such as Python, Java, or JavaScript, and will be user-friendly with an intuitive interface.

The generated resumes will be in a professional format that is suitable for job applications. The project also focuses on ensuring the privacy and security of user data.

The "Resume Builder for skilled Fresher" project aims to provide an effective and efficient tool for job seekers to create resumes that stand out in the competitive job market. By leveraging technology, the project aims to simplify and streamline the resume creation process, helping job seekers to better showcase their skills and qualifications.

1. Simplify the resume creation process: The project aims to provide a user-friendly interface that simplifies the process of creating a resume, making it easy for even inexperienced job seekers to create a professional-looking resume.

2. Save time: By providing customizable templates and pre-populated fields, the project aims to save job seekers time in creating a resume, allowing them to focus on other aspects of their job search.

3. Increase visibility: The project aims to create resumes that are visually appealing and stand out from the competition, increasing the visibility of job seekers in a crowded job market.

4. Showcase skills and qualifications: The project aims to provide a platform for job seekers to showcase their skills and qualifications in a clear and concise manner, making it easier for potential employers to identify suitable candidates.

5. Improve job search success: By providing job seekers with a professional-looking resume that effectively showcases their skills and qualifications, the project aims to improve their chances of success in their job search.

Overall, the objective of the "Resume Builder for skilled Fresher" project is to provide a user-friendly and efficient tool that helps fresher job seekers create professional-looking resumes that effectively showcase their skills and qualifications, improving their chances of success in their job search.

The Resume Builder Project is a web-based tool designed to help job seekers create professional resumes quickly and easily. The project aims to simplify the process of resume creation by providing users with a user-friendly interface and customizable templates to suit different job roles and industries. The tool allows users to input their personal information, work experience, education, and skills, and then generates a visually appealing and professional resume. The project also includes features such as real-time feedback and suggestions, resume sharing, and a preview feature to help users see how their resumes will look before downloading. Overall, the Resume Builder Project provides a simple and effective solution to the challenge of creating a resume that stands out to potential employers.

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Abbreviations

- IT- Information technology
- RAM- Random Access Memory
- MHz-Mega Hertz
- IFR-Information Flow Representation
- ERD- Entity Relationship Diagram

Notations and Symbols/Nomenclatures

Process

External Entity

Data Flow

Multiplicity *

Association

Chapter 1: Introduction

1.1 Annova Solutions

At Annova Solutions, we believe in solving problems and overcoming challenges for our clients. Our leaders have extensive knowledge across various verticals across the globe. Our teams are powered with innovation, new-techniques, and adaptability which makes working with us flexible yet efficient. Annova sets up Knowledge Service Units (KSUs) which are nothing but an extension of your team – except that Annova does most of the heavy lifting, ideation, execution, so that you can sit back, relax and focus on most strategic areas of your business. We are the pioneers and masters of AI & Machine Learning Services, Computer Vision Services, Healthcare Operations, and shared service partners in India. We work for clients from across the globe, 90% of them being from the USA.

Annova Solutions specializes in building custom software applications, data analytics solutions, and providing technology consulting services to help businesses optimize their operations and achieve their goals. The company has a team of experienced developers, data scientists, and technology experts who work closely with clients to understand their unique needs and develop tailored solutions that deliver measurable results.

Some of the key services offered by Annova Solutions include custom software development, data analytics and business intelligence, cloud computing solutions, mobile application development, and IT consulting. The company has worked with a range of clients, from small startups to large enterprises, and has delivered solutions across various industries, including finance, healthcare, retail, and logistics.

Annova Solutions is known for its expertise in emerging technologies such as artificial intelligence, machine learning, blockchain, and the Internet of Things (IoT), and has been recognized for its innovative solutions and exceptional client service.

Headquarters of The Company

Indore, Madhya Pradesh, India

Products & Services Provided

Annova Solutions provides a wide range of information technology-related products and services including application development, business process outsourcing, capacity planning, consulting, enterprise software, hardware sizing, payment processing, software management, and technology education services

1.2 Description of Project

The "Resume Builder for skilled Fresher" project is aimed at providing a web-based application that allows fresher job seekers to create professional resumes easily and quickly. The application will have an intuitive user interface that will guide the user through the process of creating a resume by providing step-by-step instructions.

The application will offer a range of resume templates that users can choose from, with different sections and formatting options. The templates will be designed to showcase the user's skills and qualifications effectively, helping them stand out in the competitive job market.

The application will allow users to input their personal information, work experience, education, and other relevant details. The user can then preview and customize the templates according to their preferences. Once the user is satisfied with the resume, they can download or print it in a professional format suitable for job applications.

The project will focus on providing a user-friendly and seamless experience for the users while ensuring the security and privacy of their data.

The application will be tested extensively to ensure that it meets all the requirements and functions correctly. The "Resume Builder for skilled Fresher" project aims to provide a valuable tool for fresher job seekers to create high-quality resumes that will help them stand out in the job market and increase their chances of getting hired.

1.3 Significance of Resume Builder for skilled Fresher

The "Resume Builder for skilled Fresher" project is significant because it addresses a common challenge faced by many fresher job seekers – creating a professional resume that effectively showcases their skills and qualifications. A well-crafted resume can make all the difference in securing a job interview, and this project aims to provide a tool that simplifies the process of creating a high-quality resume.

By providing a range of customizable templates and an easy-to-use interface, the "Resume Builder for skilled Fresher" project aims to help users create resumes that stand out in the competitive job market. The project's significance lies in its ability to provide an efficient and effective tool for fresher job seekers to create professional resumes that are tailored to their specific needs and qualifications.

Additionally, the project leverages technology to streamline the resume creation process, saving users time and effort in creating a resume from scratch. The project's web-based application allows users to access the resume builder from anywhere, making it a convenient solution for those on the go.

1.4 Importance of Resume Builder for skilled Fresher

The "Resume Builder for skilled Fresher" project is important for several reasons. Firstly, it addresses the need for a tool that helps fresher job seekers create professional resumes that effectively showcase their skills and qualifications. This is important because a well-crafted resume can make all the difference in securing a job interview, especially in a competitive job market.

Secondly, the project is important because it leverages technology to streamline the resume creation process. By providing a web-based application that offers customizable templates and an easy-to-use interface, the project saves users time and effort in creating a resume from scratch. This is particularly important for fresher job seekers who may not have the experience or knowledge to create a professional-looking resume on their own.

Thirdly, the project's emphasis on privacy and security is important. Job seekers often have to provide personal information when creating a resume, and the project's focus on ensuring the privacy and security of user data is crucial in building trust with users.

Finally, the "Resume Builder for skilled Fresher" project is important because it provides a valuable tool for fresher job seekers to achieve their career goals. By simplifying the process of creating a high-quality resume, the project helps job seekers to stand out in the job market and increases their chances of success in securing a job interview and ultimately landing their desired job.

Overall, the "Resume Builder for skilled Fresher" project is important because it provides a user-friendly, efficient, and effective tool that addresses a common challenge faced by fresher job seekers and helps them achieve their career goals.

Chapter 2: Background

2.1 Description of the existing system

The traditional way of making a resume involved using a word processor such as Microsoft Word or Google Docs to create a document from scratch. The user would start with a blank page and manually input their personal information, work experience, education, skills, and other relevant details.

The user would then format the document by selecting fonts, font sizes, and styles, and adjusting the margins and spacing to create a professional-looking layout. The user would often have to refer to various resources such as online guides or templates to ensure that their resume was structured and presented correctly.

Creating a resume in the traditional way was often a time-consuming and daunting task, especially for fresher job seekers who may not have a lot of work experience or knowledge of resume formatting. Additionally, the traditional approach often resulted in resumes that were less visually appealing and less likely to stand out in a competitive job market.

Overall, while the traditional approach to creating a resume may have worked in the past, it is becoming increasingly outdated in today's digital age, where technology can streamline and simplify the resume creation process. Tools such as the "Resume Builder for skilled Fresher" project can provide a more efficient and effective way for job seekers to create professional-looking resumes that effectively showcase their skills and qualifications.

2.2 Circumstances leading to the current new system

The current system of making resumes in the traditional form has its roots in the pre-digital era when job seekers would submit printed copies of their resumes to potential employers. This system relied on the use of typewriters and printers, with job seekers manually typing their resumes and then printing them out on paper.

As technology evolved, word processing software such as Microsoft Word and Google Docs became widely available, making it easier for job seekers to create and format their resumes. However, the process of creating a resume in the traditional form remained largely unchanged, with users manually inputting their personal information and formatting the document themselves.

The traditional approach to creating a resume was also influenced by the prevailing job market conditions. In the past, many jobs were advertised in newspapers or through word of mouth, and job seekers had to submit their resumes in person or by mail. This made it necessary for resumes to be presented in a printed format, and for job seekers to have a physical copy of their resume to hand out to potential employers.

Today, however, the job market has shifted towards digital channels, with many job postings and applications taking place online. This has led to the development of new tools and technologies for creating resumes, such as the "Resume Builder for skilled Fresher" project, which leverages web-based technologies to provide a more efficient and effective way of creating resumes.

Overall, the circumstances leading to the current system of resume making in the traditional form were influenced by the technology and prevailing job market conditions of the time. However, as technology continues to evolve and the job market shifts towards digital channels, there is a need for more streamlined and efficient approaches to resume creation, such as the use of web-based resume builders.

2.3 Work already carried out in the project domain

There has been significant work carried out in the domain of resume builders for job seekers. Some of the notable examples include:

1. Canva: Canva is a graphic design platform that offers a range of templates for creating resumes, including ones designed specifically for fresher job seekers. The platform provides an easy-to-use interface and customization options, making it popular among job seekers.

2. Zety: Zety is a web-based resume builder that offers a range of templates and customization options for creating professional-looking resumes. The platform also provides resume writing tips and a resume-checking service to help users optimize their resumes for job applications.

3. Novoresume: Novoresume is another web-based resume builder that offers customizable templates and an easy-to-use interface for creating resumes. The platform also provides a range of features, including a cover letter builder and a resume tracking system.

4. LinkedIn: LinkedIn is a social networking platform that also offers a range of tools for job seekers, including a resume builder. The platform allows users to import their existing resumes and offers customization options for formatting and design.

5. Google Docs: Google Docs is a popular word processing software that offers a range of templates for creating resumes. The platform also allows for collaboration and sharing, making it easy for job seekers to work on their resumes with others.

2.4 Objective of the project

As placement season of most of the colleges is going to start, making Resume is a very hectic work for all the students. Also, many companies judge the candidature of a student just by his/her Resume. So it is necessary for the student to think beyond the third dimension while making the Resume.

- "Resume Builder for skilled Fresher" is the Web Application which helps students to get their resume in hand just by filling up a simple form where important credentials need to be filled.
- The resume is downloadable in PDF format. Also, the user can log in again to access the previous resume that he had made.
- The resume is of Standard Format as stated by most of the Engineering Colleges of India.

Overall, the objective of the "Resume Builder for skilled Fresher" project is to provide a user-friendly and efficient tool that helps fresher job seekers create professional-looking resumes that effectively showcase their skills and qualifications, improving their chances of success in their job search.

2.5 What is to be achieved and method of measuring the extent of that achievement

To measure the achievement of the "Resume Builder for skilled Fresher" project is to provide a user-friendly and efficient tool that helps fresher job seekers create professional-looking resumes that effectively showcase their skills and qualifications, improving their chances of success in their job search.

The achievement of this goal can be measured in several ways, including:

1. User feedback: User feedback is one of the most important measures of the success of the project. Feedback can be gathered through surveys, focus groups, and user testing sessions. This feedback will help the development team identify any areas that need improvement and make adjustments accordingly.

2. Adoption rate: The adoption rate of the tool is another measure of success. This can be measured by tracking the number of users who sign up for the tool and use it to create their resumes.

3. User satisfaction: User satisfaction is another important measure of success. This can be measured by tracking user engagement with the tool and analyzing user feedback to determine how satisfied they are with the tool's features and functionality.

4. Job placement rate: The ultimate measure of success is the job placement rate of the job seekers who use the tool. This can be tracked by analyzing data on the number of job applications submitted by users and the number of job offers received.

By measuring these metrics, the project team can determine the extent of the achievement of the project goals and make any necessary adjustments to improve the tool's effectiveness in helping fresher job seekers create professional-looking resumes and improve their chances of success in their job search.

Chapter 3: Analysis

3.1 System Requirement Analysis

System Requirement Analysis is a critical step in the software development lifecycle, which involves identifying, analyzing, and documenting the functional and non-functional requirements of a software system. Here are some of the system requirements for the "Resume Builder for skilled Fresher" project:

1. Functional Requirements:

- The system should allow users to create a new account or log in to an existing account.
- The system should provide users with a user-friendly interface to create a resume.
-
- The system should allow users to input their personal information, education, work experience, skills, and qualifications.
- The system should allow users to preview their resume and make changes before finalizing it.
- The system should allow users to save their resume in various formats such as PDF, Word, or HTML.
- The system should provide users with the option to share their resume on social media platforms or with potential employers.

2. Non-functional Requirements:

- The system should be responsive and load quickly on all devices.
- The system should be secure and protect users' personal information.
- The system should be scalable and able to handle a large number of users.

By identifying and documenting these requirements, the development team can ensure that the "Resume Builder for skilled Fresher" project meets the needs of the users and is successful in achieving its objectives.

Hardware Requirements:

233 MHz Pentium processor or another compatible IntelChipset Motherboard
512 MB SD-RAM
4 GB hard disk

Software Requirements:

Operating System -Windows 98 onwardsApplication Software –Spring Tool SuiteDatabase Tool – PostgreSQL

3.2 System Analysis

System analysis is the process of understanding and defining the requirements of a software system, and designing a solution that meets those requirements. Here is a brief overview of the system analysis process for the "Resume Builder for skilled Fresher" project:

1. Requirements Gathering: In this phase, the development team will gather information about the requirements of the system by interviewing stakeholders, reviewing existing documentation, and researching industry best practices. The team will identify the functional and non-functional requirements of the system.

2. System Design: Based on the requirements gathered in the previous phase, the development team will design the system architecture, including the user interface, data model, and software components. The team will also create wireframes and prototypes to demonstrate the functionality of the system.

3. System Development: In this phase, the development team will write the code for the system components, including the front-end user interface, back-end database, and application programming interfaces (APIs) that allow different components to communicate with each other.

4. Testing: Once the system components are developed, the development team will conduct a variety of tests to ensure that the system meets the requirements and functions as intended. These tests may include functional testing, performance testing, security testing, and user acceptance testing.

5. Deployment: Once the system passes all tests, the development team will deploy the system to a production environment and make it available to users.

6. Maintenance: After deployment, the development team will monitor the system and provide ongoing maintenance and support to ensure that it continues to function properly and meet the needs of users.

By following this system analysis process, the development team can ensure that the "Resume Builder for skilled Fresher" project meets the requirements of users and achieves its objectives.

➢ Use Case Diagram

Use-case diagrams describe the high-level functions and scope of a system. These diagrams also identify the interactions between the system and its actors. The use cases and actors in use-case diagrams describe what the system does and how the user use it, but not how the system operates internally.

Use Case Diagram

➢ Sequence Diagram

A sequence diagram or system sequence diagram (SSD) shows object interactions arranged in time sequence in the field of software engineering. It depicts the objects involved in the scenario and the sequence of messagesexchanged between the objects needed to carry out the functionality of scenario. Sequence diagrams are typically associated with use case realizations in the logical view of the system under development. Sequencediagrams are sometimes called event diagrams or event scenarios.

Sequence Diagram

➢ Activity Diagram

An activity diagram is a behavioral diagram i.e. it depicts the behavior of a system. An activity diagram portrays the control flow from a start point to afinish point showing the various decision paths that exist while the activity is being executed.

➢ ER Diagram

ER Diagram stands for Entity Relationship Diagram, also known as ERD isa diagram that displays the relationship of entity sets stored in a database. Inother words, ER diagrams help to explain the logical structure of databases. ER diagrams are created based on three basic concepts: entities, attributes and relationships.

ER Diagram

We have analyzed the feasibility of the system in terms of following spans:

- Technical Feasibility
- Operational Feasibility
- Economical Feasibility

3.3 Technical Feasibility

Technical feasibility is an assessment of whether the proposed project can be developed with the existing technology and resources. In the case of the "Resume Builder for skilled Fresher" project, the following technical feasibility factors need to be considered:

1. Platform and tools: The project needs to be developed using programming languages, frameworks, and libraries that are compatible with the intended platform. The project may require tools such as text editors, integrated development environments (IDEs), databases, and hosting services. It is important to ensure that these tools are available and compatible with each other.

2. Data storage: The project will require a database to store user information, resumes, and other data. The type of database, such as relational or non-relational, and the storage capacity required must be determined.

3. Security: The project will store sensitive information, such as user login credentials and personal information. It is essential to implement security measures to protect this information from unauthorized access or data breaches.

4. User interface design: The project must have an intuitive user interface that is easy to navigate and use. The user interface should be designed to work across different devices and platforms.

5. Performance and scalability: The project should be designed to perform well under varying user loads and be scalable to accommodate increasing numbers of users.

Based on the above factors, it is technically feasible to develop the "Resume Builder for skilled Fresher" project using existing technologies and resources. However, it will require careful planning, design, and implementation to ensure that the project is successful and meets the requirements of users.

3.4 Operational Feasibility

Operational feasibility refers to whether the proposed project can be integrated into the existing operations of an organization or business. In the case of the "Resume Builder for skilled Fresher" project, the following operational feasibility factors need to be considered:

1. User acceptance: The project should meet the needs of the intended users, i.e., skilled freshers looking to create a professional resume. The user interface and features must be easy to understand and use. User feedback should be gathered during the development process to ensure that the project meets their needs.

2. Cost: The cost of developing and implementing the project should be reasonable and within the budget of the organization or business. The project should also generate revenue or add value to the organization or business to justify its costs.

3. Integration with existing systems: The project should be compatible with existing systems and processes. For example, the project should integrate with job portals, social media platforms, or applicant tracking systems (ATS).

4. Training and support: The project should be accompanied by training and support resources to help users understand how to use the system. Technical support should also be available to address any issues or bugs that may arise.

5. Legal and regulatory compliance: The project must comply with relevant laws and regulations, such as data protection laws, intellectual property laws, and anti-discrimination laws.

Based on the above factors, it is operationally feasible to develop and implement the "Resume Builder for skilled Fresher" project. However, it will require careful planning, user testing, and ongoing support to ensure that the project is successfully integrated into the operations of organizations and businesses.

3.5 Economic Feasibility

The economic feasibility of a resume builder for skilled freshers depends on several factors such as the target market, pricing strategy, marketing efforts, and operational costs.

Target Market:
The success of a resume builder for skilled freshers largely depends on the size and demand of the target market. A resume builder aimed at a small niche market may not be economically viable, while one targeted at a large market may generate significant revenue.

Pricing Strategy:
The pricing strategy plays a critical role in determining the economic feasibility of a resume builder. The pricing should be competitive enough to attract customers while also generating sufficient revenue to cover operational costs and generate profits. The pricing model could be subscription-based, pay-per-use, or a combination of both.

Marketing Efforts:
The marketing efforts can greatly impact the economic feasibility of a resume builder. A well-planned marketing strategy can help reach a wider audience and attract potential customers. Social media, SEO, content marketing, and paid advertising are some of the marketing channels that can be used to promote a resume builder.

Operational Costs:
The operational costs of a resume builder include expenses such as website hosting, software development, customer support, and salaries of employees. Keeping operational costs low is important to ensure that the revenue generated from the product can cover all expenses and leave room for profits.

In conclusion, the economic feasibility of a resume builder for skilled freshers depends on several factors, including the target market, pricing strategy, marketing efforts, and operational costs. If the product is targeted at a large market, with a competitive pricing strategy and effective marketing efforts, it has the potential to be economically feasibility.

3.6 Data Flow Diagram

An information flow diagram (IFD) is a diagram that shows how information is communicated (or "flows") from a source to a receiver or target (e.g. A→C), through some medium. The medium acts as a bridge, a means of transmitting the information.

Level 0-

Level 1

User
Login
Check
Forgot password
check credentials
manage modules
Resume_Details
User_Profiles
send email to user

Level 2

Admin
Login to System
Check Roles of Access
Forgot Password
Check Credentials
Manage Modules
Send Email to User
Manage Resume Details
Manage Job Details
Manage Skills Details
Manage Jobskeer Details
Manage Salary Details
Manage User Profiles
Manage Report
Manage System Admins
Manage Roles of User
Manage User Permission

3.7 Method/Technology to be used

Programming Language

JavaScript is a programming language that is widely used for creating dynamic and interactive websites. It was first introduced in 1995 by Netscape Communications, and has since become one of the most popular programming languages in the world.

JavaScript allows developers to add interactive elements to their websites, such as pop-up windows, animations, and drop-down menus. It can also be used to create more complex applications, such as web-based games and mobile apps.

One of the key features of JavaScript is its ability to manipulate the Document Object Model (DOM) of a webpage. The DOM is a hierarchical structure that represents the elements of a webpage, such as images, text, and links. By using JavaScript to manipulate the DOM, developers can dynamically update the content of a webpage without having to reload the entire page.

JavaScript is a client-side language, which means that it is executed by the user's web browser, rather than on the server. This makes it a powerful tool for creating interactive web applications that respond to user input in real time.

In recent years, JavaScript has also become increasingly popular for server-side programming, with the introduction of frameworks such as Node.js. These frameworks allow developers to use JavaScript to create back-end web applications, as well as front-end applications.

Framework

React.js, commonly known as React, is a popular open-source JavaScript library for building user interfaces. It was developed by Facebook and released in 2013.

React allows developers to build reusable UI components and efficiently manage the state of those components, making it easier to create complex user interfaces with minimal code. React uses a declarative programming style, meaning that developers can describe what they want their UI to look like and React will take care of rendering it in the browser.

One of the key features of React is its virtual DOM (Document Object Model), which allows React to update only the parts of the UI that have changed rather than updating the entire page. This makes React highly efficient and fast, even when dealing with large and complex applications.

React is often used in conjunction with other libraries and frameworks such as Redux, React Router, and Next.js. It can be used to build a wide range of applications, including single-page applications (SPAs), mobile applications, and even desktop applications using technologies such as Electron.

Overall, React has become a popular choice for building modern, dynamic user interfaces due to its performance, flexibility, and ease of use.

Node.js is an open-source, cross-platform, back-end JavaScript runtime environment that enables developers to run JavaScript code outside of a web browser. It was developed by Ryan Dahl in 2009 and has since become a popular platform for building server-side applications.

One of the key advantages of Node.js is that it uses an event-driven, non-blocking I/O model, which makes it particularly well-suited for building real-time applications that require a lot of data to be processed quickly. It is also built on top of the Google V8 JavaScript engine, which provides fast performance and scalability.

Node.js is often used in conjunction with popular web frameworks such as Express.js, Hapi, and Koa, and it can be used to build a wide range of applications, from simple command-line tools to complex web applications and APIs.

HTML stands for HyperText Markup Language. It is the standard markup language used to create web pages and other web-based documents. HTML provides a way to structure content on the web using a series of tags and attributes, which define how different elements of a web page should be displayed.

HTML is a declarative language, meaning that it describes the structure and content of a web page, rather than specifying how it should be displayed. Web browsers then use this information to render the web page and display it to users.

HTML documents are made up of a series of tags, which are enclosed in angle brackets (< >). Tags are used to define the structure and content of different elements on a web page, such as headings, paragraphs, links, images, and forms.

HTML also supports the use of attributes, which provide additional information about an element. For example, the "href" attribute is used to specify the destination of a link, and the "src" attribute is used to specify the source of an image.

Overall, HTML is a fundamental technology for building websites and other web-based applications. By learning HTML, developers can create rich, dynamic, and interactive web pages that can be accessed by users all around the world.

Visual Studio Code (often referred to as VS Code) is a free and open-source code editor developed
by Microsoft. It was first released in 2015 and has since become one of the most popular code editors in the developer community

VS Code, short for Visual Studio Code, is a free and open-source source code editor developed by Microsoft. It is available for Windows, macOS, and Linux, and is one of the most popular code editors used by developers today.

VS Code is designed to be highly customizable and flexible, with a wide range of features and extensions that allow developers to work with a variety of programming languages and frameworks. Some of the key features of VS Code include:

- Intelligent code completion and error highlighting
- Integrated debugging and testing tools
- Git integration and support for version control
- Built-in terminal and command line interface
- Support for multiple programming languages and file types
- Wide range of extensions and plugins for additional functionality

One of the main advantages of VS Code is its performance and responsiveness, even when working with large and complex codebases. It also has a large and active community of developers, who have contributed to the development of many useful extensions and plugins.

Overall, VS Code is a powerful and versatile code editor that has become a popular choice for developers due to its flexibility, performance, and ease of use.

Vs code Snapshot

- **Testing Tools**

Postman: Postman is an application used for API testing. It is an HTTP client thattests HTTP requests, utilizing a graphical user interface, through which we obtain different types of responses that need to be subsequently validated.

Postman Snapshot

Chapter 4: Design

4.1 System Architecture

A system architecture is the conceptual model that defines the structure, behavior, and more views of a system. An architecture description is a formal description and representation of a system, organized in a way that supports reasoning about the structuresand behaviors of the system.

4.2 Data Design

Database design is the organization of data according to a database model. The designerdetermines what data must be stored and how the data elements interrelate. With this information, they can begin to fit the data to the database model. Database management system manages the data accordingly.

We created four entities, Company, Department, Employee and Salary slip. In each of these we created variables as information of respective entities.

4.3 Interface Design

#While adding Information like experience

#While adding Information like education

#While adding Information like skills

#Database Screenshot

#While adding Information like Achievements

Chapter 5: Testing

5.1 Scope of testing

Software testing is a process of checking software applications and products for bugs anderrors to ensure their performance is efficient. Testing in software engineering is a fundamental process of creating reliable – and usable – software products.

That's what makes it necessary in guiding effective software development. Understanding the different types of software testing is what the need for Quality Assurance in software development stems from.

Usually, companies that attempt to create software have dedicated software testers – an in- house means of software testing help. By detecting errors and mistakes that affect the quality of software, these testers can ensure that software products are worthy of being sold in the market. Thus, they guarantee a software's usefulness, and help turning software applications into end-products that perform the way their designers intended them to.

5.2 Test plan

A Test Plan refers to a detailed document that catalogs the test strategy, objectives, schedule, estimations, deadlines, and the resources required for completing that particularproject. Think of it as a blueprint for running the tests needed to ensure the software is working properly – controlled by test managers.

A well-crafted test plan is a dynamic document that changes according to progressions in the project and stays current at all times. It is the point of reference, based on which testingactivities are executed and coordinated among a QA team.

5.3 Test case design

A good test case design technique is crucial to improving the quality of the software testing process. This helps to improve the overall quality and effectiveness of the released software.
The test case design techniques are broadly classified into three major categories.

5.4 Specification-Based techniques
5.5 Structure-Based techniques
5.6 Experience-Based techniques

➢ Specification-Based or Black-Box techniques

This technique leverages the external description of the software such as technical specifications, design, and client's requirements to design test cases. The technique enablestesters to develop test cases that provide full test coverage. The Specification-based or black box test case design techniques are divided further into 5 categories. Thesecategories are as follows:

Boundary Value Analysis (BVA)

This technique is applied to explore errors at the boundary of the input domain. BVA catches any input errors that might interrupt with the proper functioning of the program.

Equivalence Partitioning (EP)

In Equivalence Partitioning, the test input data is partitioned into a number of classes having an equivalent number of data. The test cases are then designed for each class or partition. This helps to reduce the number of test cases.

Decision Table Testing

In this technique, test cases are designed on the basis of the decision tables that are formulated using different combinations of inputs and their corresponding outputs based onvarious conditions and scenarios adhering to different business rules.

State Transition Diagrams

In this technique, the software under test is perceived as a system having a finite number ofstates of different types. The transition from one state to another is guided by a set of rules. The rules define the response to different inputs. This technique can be implemented on thesystems which have certain workflows within them.

Use Case Testing

A use case is a description of a particular use of the software by a user. In this technique, the test cases are designed to execute different business scenarios and end-user functionalities. Use case testing helps to identify test cases that cover the entire system.

➢ Structure-Based or White-Box techniques

The structure-based or white-box technique design test cases based on the internal structureof the software. This technique exhaustively tests the developed code. Developers who have complete information of the software code, its internal structure, and design help to design the test cases. This technique is further divided into five categories.

Statement Testing & Coverage

This technique involves execution of all the executable statements in the source code atleast once. The percentage of the executable statements is calculated as per the given requirement. This is the least preferred metric for checking test coverage.

Decision Testing Coverage

This technique is also known as branch coverage is a testing method in which each one of the possible branches from each decision point is executed at least once to ensure all reachable code is executed. This helps to validate all the branches in the code. This helpsto ensure that no branch leads to unexpected behavior of the application.

Condition Testing

Condition testing also is known as Predicate coverage testing, each Boolean expression is predicted as TRUE or FALSE. All the testing outcomes are at least tested once. This typeof testing involves 100% coverage of the code. The test cases are designed as such that the condition outcomes are easily executed.

Multiple Condition Testing

The purpose of Multiple condition testing is to test the different combination of conditionsto get 100% coverage. To ensure complete coverage, two or more test scripts are requiredwhich requires more efforts.

All Path Testing

In this technique, the source code of a program is leveraged to find every executable path. This helps to determine all the faults within a particular code.

➢ Experience-Based techniques

These techniques are highly dependent on tester's experience to understand the most important areas of the software. The outcomes of these techniques are based on the skills, knowledge, and expertise of the people involved. The types of experience-based techniquesare as follows:

Error Guessing

In this technique, the testers anticipate errors based on their experience, availability of data and their knowledge of product failure. Error guessing is dependent on the skills, intuition, and experience of the testers.

Exploratory Testing

This technique is used to test the application without any formal documentation. There isminimum time available for testing and maximum for test execution. In exploratory testing, the test design and test execution are performed concurrently.

5.4 Sample test data and results

Following test cases were carried out:

Cases	**Action To be Performed**	**Expected Results**	**Actual Result**
Case 1:	Admin login	If Admin details a re correct, Login done	f Admin details a re correct, Login done
Case 2:	Update Details	If company with respective id exists, update details	Updated Success fully.
Case 3:	Update resume Details	If an update id exists, details update.	Updated Success fully.
Case 4:	User Login	If user id provided exist, update successfully.	User Updated Success fully.
Case 4:	Update User Details	If a valid company id is provided, add Employee.	Employee Added Success fully. Employee Id

			generated
Case 5:	Update resume Details	If an update id exists, details update	Updated Successfully.
Case 6:	Add file format	If the valid format is provided, add pay slip.	File format added successfully
Case 7:	Delete resume	If the resumey id provided exists, delete the company details.	resume details deleted successfully.

Chapter 6: Limitations

6.1 Limitation

Like any other project, the "Resume Builder for skilled Fresher" project may have some limitations. Some potential limitations include:

1. User adoption: It is possible that users may not adopt the project if they prefer to use traditional methods of creating resumes, or if they do not have access to the internet or computer systems required to use the project.

2. Technical limitations: The project may have technical limitations that could affect its performance or usability. For example, the project may not be able to handle large amounts of data or may not be compatible with all browsers or operating systems.

3. Limited features: The project may have limited features compared to other existing resume builders. Some users may prefer more advanced features, such as integration with applicant tracking systems or more customization options.

4. Data security: As the project involves storing personal and confidential information, it is essential to ensure data security measures are in place to protect user data.

5. Language limitations: The project may not be able to support all languages, which could limit its accessibility for users in different regions or countries.

6. Dependence on internet connectivity: The project requires a stable internet connection to function correctly, which could be a limitation for users in areas with poor connectivity.

It is important to identify and address these limitations to ensure that the project is successful and meets the needs of its intended users.

Chapter 7: Summary and Conclusions

The "Resume Builder for skilled Fresher" project has a lot of potential for future development and expansion. Some possible areas of future scope include:

1. Integration with job portals: The project could be integrated with popular job portals such as Indeed, LinkedIn, or Glassdoor to make it easier for users to apply for jobs.

2. Customization options: The project could include more customization options to allow users to create resumes that are tailored to their specific needs and preferences.

3. Multi-language support: The project could be expanded to support multiple languages, making it more accessible to users around the world.

4. Artificial intelligence (AI) and machine learning (ML) integration: The project could be integrated with AI and ML algorithms to provide users with personalized recommendations and suggestions for improving their resumes.

5. Collaboration features: The project could include collaboration features that allow users to work together on a single resume, making it easier for teams or groups to create and edit resumes together.

6. Mobile application: The project could be developed as a mobile application to allow users to create and edit their resumes on-the-go.

7. Analytics and reporting: The project could include analytics and reporting features to help users track their resume views, application success rates, and other relevant metrics.

Overall, there are many potential areas of future development and expansion for the "Resume Builder for skilled Fresher" project. These developments could help to make the project even more useful and valuable for users, while also expanding its reach and impact.

Chapter 9: Future Scope

9.1 Resume Builder for skilled Fresher

1. Integration with job search platforms: You could integrate your resume builder with popular job search platforms such as LinkedIn or Indeed. This would allow users to easily apply to jobs directly from their resume and track their job application status.

2. Personalized resume suggestions: Using machine learning algorithms, you could suggest improvements to the user's resume based on their industry and job title. This would make the resume building process more efficient and effective for the user.

3. Cover letter builder: In addition to the resume builder, you could also develop a cover letter builder. This would allow users to easily create a customized cover letter for each job they apply to, and could include suggestions for formatting and content.

4. Collaboration and feedback features: You could enable users to share their resumes with friends, mentors or career counselors, and receive feedback and suggestions for improvement. This would make the resume building process more collaborative and increase the chances of creating a high-quality resume.

5. Analytics and insights: You could provide users with analytics and insights about their resume, such as how many times it has been viewed or downloaded by potential employers. This would help users to track the effectiveness of their resume and make data-driven decisions about their job search strategy.

Appendix

✓ Process: A process done in the system is denoted by this symbol. For example, prepare attendance report, pay slip, etc.

✓ External entity: A source or destination of data which is external to the system.

✓ A data flow: it is packet or data. It may be in the form of document or letter.

✓ Data store: Any store data but with no reference to the physical method of storing.

✓ Multiplicity: Use to represent one to many relationships between the entities

*

✓ Association: It represents the relationship between the entities

✓ State: It represents current state of system that is being designed.

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