

PAYROLL MANAGEMENT SYSTEM

**A Project Report Submitted in Partial
Fulfilment of the Requirements for the
Degree of**

BACHELOR OF TECHNOLOGY
in
Computer Science & Engineering

by

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2022 – 23**

DECLARATION

We hereby declare that this submission is our own work and that, to the best of our knowledge and belief, it contains no material previously published or written by another person or material which to a substantial extent has been accepted for the award of any other degree or diploma of the University or other institute of higher education, except where due acknowledgement has been made in the text.

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CERTIFICATE

This is to certify that the Project Report entitled “**Leaf Detection Using ML**” is submitted by **Rajnish Kumar (190013135066), Jatin Kashyap (190013135037), Nitish Kumar (190013135056)** in partial fulfilment of the requirement for the award of the degree **Bachelor of Technology in Computer Science and Engineering** of **UNIVERSITY OF LUCKNOW** for the academic year 2019-2023

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ACKNOWLEDGEMENT

We thank our Project Mentor **Dr. Jaswant Kumar** and head of department of Computer Science and Engineering **Er. Zeeshan Ali Siddiqui** for their proper guidance and suggestion. We are indebted to other faculty member of Computer Science and Engineering department for giving us opportunity to do this internship.

We also thank our friends and family members who directly or indirectly help us to complete this seminar successfully on time.

We will be failing in duty if we do not acknowledge with grateful thanks to the authors of the references and other literatures referred to in this internship.

And last but not the least, we thank God Almighty for his blessing without which completion of this Project would not have been possible.

Thanking You
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ABSTRACT

“Payroll Management System” is designed to make the existing manual system automatic with the help of computerised equipment and full-edged computer software, fulfilling their requirements, so that their valuable data and information can be stored for a longer period with easy access and manipulation of the same. The required software is easily available and easy to work with. This web application can maintain and view computerised records without getting redundant entries. The project describes how to manage user data for good performance and provide better services for the client.

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CHAPTER- 1

INTRODUCTION

1.1 Introduction

A user friendly based software “**Payroll Management System**” has been developed for organization, keeping in view the requirements of employees to prepare salary. The objective of the project was to computerize the payroll system which was earlier being handle manually every precaution has been taken at each process involved in the complex of the salary preparation. By computerization it implies all the process handling in the entirely being done by computer. All the record necessary for the processes involved in the salary calculation are stored in a computer based record keeping system using a back-end tool. All the process handling is done at the frontend by using a front-end. The project provides sample facilities to its users. The most important of the facilities are the report generation and printing which provides user with the hard copies of the data also.

Payroll management is very simple, flexible and user friendly management software. That takes care all of your requirements relating to accounting and management of employees’ payroll.

Payroll stores complete records of the employee generate play-slips and e attendance register, computes all allowance and deductions and generates all statutory reports. Payroll is the only one software processing with good and wide-industry range of clients. It offers very high flexibility in defining various allowances, deductions; leave rules etc. for the employees and all formula for P.F etc. are definable and changeable for user’s end. Payroll application has been designed for the purpose of the maintaining details of various allowances and deductions that need to be given to the employee of the organization. Also, it generates the salary sheet of employee of organization that assists the accounts department in many ways.

The electronic and computerized payroll system will no only offer exact calculations and accurate data of designated employees but it will also implement security measures and confidentiality of the files and accordingly arrange documents provided by an ingenious and quick-witted database that will indeed construct a paperless environment. With the aspiring technologies been thought up today, this minimize the burden and heavy loads of labor of the employees designated in the human resource management office of a certain company or institution As businesses grow, employee management becomes complex. What you need is a Payroll Management System that is easy to use, employee-centric and HR effective. Whatever stage of business cycle you are in, payroll services is sure to benefit you. HR outsourcing companies offers a new age Payroll Management System to manage new-age workforce. The Payroll Management System allows you to take your human resources management to a higher level. Even the top payroll providers in Bangladesh understand the importance of errorfree payroll management activities. With extensive range of services, your organization can enjoy a payroll process which is timely and accurate. Payroll software often requires very little input from the employer. The employer is required to input employee wage

information and hours— then the software uses the information to perform calculations and deduct withholdings automatically. Most payroll software is automatically updated whenever a tax law changes and will remind employers when to file various tax forms.

For small businesses, payroll system software can mitigate errors in the payroll process and reduce the amount of effort involved in calculating employee hours, wages, and tax withholdings. Payroll software is easy to use and often times very affordable for small businesses. In some cases, small businesses may save money by using payroll processing software instead of other alternatives. Small business owners can purchase an affordable system accessible on their local computer or via a cloud service, using a pay-as-you-go model in many cases. Purchasing software eliminates the expense of hiring an in-house accountant for payroll processing. Companies can also avoid working with a third party for payroll processing, keeping the information in-house. Lastly, small business owners can maintain more control of the payroll process by using software. Using payroll software allows the business to compile reports at whatever pace they desire and to make changes quickly if the need arises. This can be more efficient than trying to manually create reports or get in contact with a third party payroll company to make changes.

1.2 Existing Systems

This organization is maintaining most of their day-to-day transaction data in the registers. The employees of the organization are doing the whole work manually. All the work is done manually so different employees are appointed for the maintenance of registers containing all the information related to the organization. It is very consuming and it is not also error free in some situations. In existence manual system databases calculations are difficult to perform so report generates as very much difficult.

Gusto Launched in 2012, to simplify complex business processes such as payroll, benefits, and

HR for its customers. Its software is being implemented by more than 60,000 firms nationwide. The platform automates the calculation, payment, and filing of a firm's federal, state, and local payroll taxes. Plus, it enables enterprises to pay via check or direct deposit, automate payroll processes to minimize errors, and save time in managing bookkeeping.

OnPay is based in Atlanta. It automates payment workflows and tax filing, and streamlines payroll processes. Entering essential payroll info such as hours, tips, bonuses, and reimbursements is seamlessly performed. Plus, it manages unlimited payroll runs for 1099 contract workers and W-2 employees. OnPay takes care of calculating your federal and state payroll taxes, and filing of tax forms. They are very confident of their accuracy and are willing to take responsibility in case there are any errors in tax calculation and filing.

ADP Workforce now, The parent company ADP provides payroll, global HCM, and outsourcing services in 113 countries. ADP Workforce Now is an online HR software designed for midsize companies. This platform collects and automates your company's HR processes in a single dashboard. Top features include benefits management, payroll, talent management, and time and attendance. You can use this effective tool to manage your staff members' holidays and benefits, and effortlessly generate insightful reports. The vendor provides video tutorials, demo, and online support to help you make good use of the software.

Xero is based in New Zealand and was founded in 2006. This accounting software is popular in the US, UK, European, and Australian markets. From modest beginnings, the company has grown worldwide and currently has 20 offices around the globe. This software is easy to launch and use, and doesn't need complex training. It simplifies tedious financial operations from data entry to deep accounting, and helps you save the time spent on searching voluminous records. Users can manage all contacts and transactions from the same page. Key features include GST returns, fixed assets, multi-currency, inventory, and financial reporting.

Dayforce HCM is a product of Ceridian which is a global human capital management (HCM) software company. Dayforce HCM is its flagship product and this cloud-based solution offers capabilities such as HR management, talent management, document management, benefits, analytics, payroll and tax, and workforce management. The platform provides businesses access to real-time data on all elements of HCM. You can use it to find the best talent, process pay, manage benefits and compliance, maintain HR records, schedule employees with work-life balance and more. This software doesn't provide a user interface and offers one user experience.

Wave, was founded in 2010 in Canada and it has built an impressive track record since then. The company boasts 3 million customers and has recorded more than \$200 billion in income and expenses tracked, \$77 million in investments, and \$20 billion in invoices sent annually. Wave is a free app that offers accounting, receipt scanning, and invoicing features that are ideal for small businesses and self-employed professionals such as consultants, freelancers, and entrepreneurs. The platform is simple to set up and use, and presents an easily navigable dashboard that displays all you need to view. It simplifies invoicing and accounting processes, and enables you to effortlessly manage employees and taxes, chase payments, and track expenses.

Zenefits, was founded in San Francisco in 2013. Today, the company boasts over 10,000 small to midsize business clients located in all 50 states, greater than 500,000 employees onboarded, and more than 500 employees in its offices in the US, India, and Canada. The software simplifies HR administration and complex payroll processes, and helps businesses make good use of their limited resources. Key features include payroll sync, insurance benefits, employee directory, business intelligence, mobile optimization, ACA compliance, hiring and onboarding, customer support and more. The platform integrates all HR solutions in a single easy-to-use dashboard which gives companies greater control and more confidence in their compliance as well as better access for their employees.

Intuit Payroll, develops and sells accounting, financial, and tax preparation software products for small businesses, individual users, and accountants. Intuit Payroll offers affordable yet robust packages that can suit the needs of budgets of different types of companies. They can use this application to pay their staff members on time and accurately, while saving time doing this process. With this platform, you can automate payroll tax calculations, generate unlimited paychecks and more. The vendor is renowned for providing top notch support from live specialists. Main features include step-by-step assistance with

setup, compliance service, workers' compensation, hiring tips and tools, and online chat with a payroll expert.[9]

1.3 Motivation

A challenge all NZ small-medium businesses who employ staff go through is how to keep their employees motivated, happy and performing at their best.

As the employer, your treatment and support of workers can mean the difference between them feeling valued or not.

1. Making sure everyone on the Payroll is happy

Keep morale high by maintaining a cheerful, positive attitude yourself. A boss that arrives to the workplace with a confident walk, smile and greeting to everyone will influence others to adopt the same attitude.

2. Your payroll should feel important

In fact, feeling like an essential part of the team is as important as good pay, job enjoyment and career development.

3. Employees need to know what's expected of them in the business

A big problem employees can encounter is not being fully aware of what's expected of them in their role. This doesn't simply mean providing a job description and objectives but rather ongoing communication about what needs to be achieved, ensuring your employee is on the same page.

4. Feedback to staff is a huge motivator

The single most useful tool to put employees in a great, hardworking mood is to provide feedback – regularly. A quick positive comment or email when an employee does a good job will drive them to keep performing at a high level.

5. Retaining staff on the payroll

If you need some ideas around how to motivate staff, you can check out [Motivate & Retain Staff](#) from the Department of Labor.

6. Training

DoL recommend investing time (and sometimes money) in planned staff training and development. This can range from helping develop career plans to one-on-one training and even delegating new duties to workers to help build a sense of responsibility.

7. Flexibility and Work/Life Balance

Your staff has their own lives to lead. If you can work with them to create a work schedule that ensures the role's duties are completed while allowing the employee to satisfy family commitments, your staff will likely be loyal and motivated to work hard for you.

8. Motivation is more than just dollars and cents

Remember staff motivation doesn't come from just competitive pay. When staff are working 40 hours a week, the people, environment and job satisfaction all play vital parts in retaining a productive, happy team.[1]

1.4 Objectives of the project

The primary objective of the Payroll System (PR System) by Léger Systems is to process payroll information in an online environment, so specific online procedures can be performed in seconds rather than the hours required by traditional batch methods of computer processing. This PR system performs the basic payroll objectives by providing a complete and accurate record of all payroll transactions affecting each hourly and salaried employee. Specific employee payroll features and objectives of this business software application are highlighted below:

Maintain a Labor Detail Record on the number of hours worked and the types of work done by hourly employees during a payroll period, as well as the associated general ledger account distribution information for labor expense.

Calculate gross pay for hourly employees based on the hours worked including overtime, if any. The gross pay for salaried employees is predefined for each payroll period in their Employee Master Record.

Automatically calculate required federal and state payroll taxes, such as income tax withholding, Medicare, FICA and unemployment tax, for both employee and employer. The results are stored in a Payroll Period Record for each pay period.

Print payroll checks with stubs on preprinted forms showing current period and year-to-date (YTD) dollar earnings and deductions. These same multi-purpose check forms can be used by the Accounts Payable System. Pay checks can be printed for a single employee or for a specified group of employees.

Print payroll reports, such as Labor Edit Report, Hours Distribution Report and Payroll Register, to provide an audit trail of payroll data entered into the system, so adequate audit control is maintained.

Print generalized payroll reports with the capability to extract specific payroll information from the online database, such as "List the total FICA withheld this quarter for each employee".

Enable the user to change the federal and state tax rates used in calculating payroll withholding and deductions by storing payroll tax rates in separate Payroll Rates Records by calendar year.

Define an Active-Flag to prohibit the current online entry of labor transactions for an inactive employee, yet keep that old code for historical reporting purposes. [2]

1.5 Contribution

Payroll Software is programmed to enable HR professionals for managing the data and information of the company's employees on the regular basis. The easy information regarding the employees is including of contact details, investment details, attendance, salary data and much more.

Feature of Payroll software-

Accuracy: Your payroll system must be able to accommodate your employees and their various working hours. Once a good system is in place, you will have an accurate record of the working hours of your employees. An automated system minimizes the possibility of human error, as the only real factor is whether employees remember to clock in and out.

Deductions: Payroll systems do not simply record work hours and pay. They must be set up for more complex operations, such as deductions for tax and benefits purposes. Between state and federal taxes, Medicare and Social Security, plus whatever benefit plan each employee contributes to, a substantial amount of calculations are needed.

Record-Keeping: Another feature of a payroll system is that it can be used to keep detailed and accurate records. These records can be stored in a main database on site, online or in an outside record-keeping facility. Record-keeping can help you monitor trends such as how much overtime you're paying and how many employees participate in your company retirement plans.

Streamlining: An automated payroll system can help eliminate busywork by streamlining the whole process of scheduling, record-keeping and payment. Employees can access their records, print pay stubs and, in some cases, put in requests for time off through an automated payroll system.

Time Importation: Many employers use a timekeeping system, such as time clock, to track employees' work hours. A manual system requires tracking employee time by hand, but a computerized payroll system has the ability to automatically transmit employee entries from the timekeeping system into the payroll system.

Automatic Calculations: Computerized payroll systems can round employee work hours into quarter-hour segments and accurately calculate the total hours worked and to be paid, thereby saving time spent on manual calculations.

Paycheck Processing: A manual payroll system requires you to print paychecks on a typewriter or by hand. A computerized payroll system has direct-deposit capability, which saves money spent on live checks and reconciliation. Additionally, computerized printing of paychecks and pay stubs occurs quickly, regardless of volume.

Report Generation: A computerized payroll system generates payroll reports that allow you to double-check the payroll before printing paychecks or pay stubs. Computerized systems help ensure payroll tax compliance by generating tax reports, including quarterly and annual wage statements and employee W-2 forms. [3]

1.6 Organization of report

In chapter 2 explains existing system, existing or supporting literature and analysis of existing system. In existing system, we will discuss about the history of payroll management and how payroll management has started in Bangladesh. Moreover, in this part we will also discuss about the many types of existing payroll system and functionalities of the existing payroll system. In supporting literature, we will describe about the all types of tools that we have used in our system. From analysis of existing system, we will come to know proses and cons of payroll system.

Chapter 3 consists of the feasibility study, requirement analysis, system design and implementation. In feasibility study part we will discuss technical feasibility, economical feasibility, operational feasibility, behavioral feasibility and legal feasibility. In this chapter next part is requirement analysis. Here, we will discuss about the functional and nonfunctional requirements. Then next part is system design. In this part we will describe how we have designed our system. In implementations part of this chapter we will discuss about front end, forms design, report design, back end, database design.

Chapter 4 explains about the experimental results of our project and analysis of the result and also discuss about the applications of our project. In result analysis part we will discuss about the report or output of our system. In application part we will describe about the real time uses and financial benefits of our system.

Chapter 5 discusses about the system requirements, user interfaces or the screenshots of our system. In system requirements part we will discuss about the hardware requirements and software requirements for client and server. In user interfaces part we will give all the screenshots of our system.

Chapter 6 concludes the report of our system. In this chapter we will discuss about limitation and future works. In limitation part we will discuss about the limitation of our system. In future works we will discuss about the modules which we will develop in future.

1.7 Conclusions

Payroll Management System” software developed for a company has been designed to achieve maximum efficiency and reduce the time taken to handle the Payroll activity. It is designed to replace an existing manual record system thereby reducing time taken for calculations and for storing data. The system uses Asp .Net as front end and Microsoft SQL as a backend for the database. The system is strong enough to withstand regressive daily operations under conditions where the database is maintained and cleared over a certain time of span. The implementation of the system in the organization will considerably reduce data entry, time and also provide readily calculated reports. Payroll is the process by which employers pay an employee for the work they have completed. Any business with employees should have a payroll process established; payroll is often the largest expense for a business. An effective and efficient payroll process will ensure that employees are paid accurately and

consistently, keeping them satisfied with this aspect of employment and allowing HR to focus on other areas. Payroll seems simple at its core, but becomes complicated because of the various deductions that come into play. Employers must withhold taxes from each paycheck and make sure accurate funds are paid to the correct government agency. Employers may also be responsible for deducting and paying premiums for insurance and depositing funds into retirement accounts or to selected charities. Payroll processing duties can create a huge burden and unwanted stress for small business owners and can be overwhelming for large businesses. A missed deadline or incorrect filing of taxes can result in fines or jail time. To avoid these issues, small, middle-sized, and large businesses can all benefit from using payroll systems. For small businesses, payroll system software can mitigate errors in the payroll process and reduce the amount of effort involved in calculating employee hours, wages, and tax withholdings. Payroll software is easy to use and often times very affordable for small businesses. In some cases, small businesses may save money by using payroll processing software instead of other alternatives. In future we will work more in our system. We will do our system more user friendly so that customer can easily order the product from our online electronic store. Though in our system now only cash on delivery system is available in future we will implement the online payment system. We will also implement the comparison between two or more products. Small business owners can purchase an affordable system accessible on their local computer or via a cloud service, using a pay-as-you-go model in many cases. Purchasing software eliminates the expense of hiring an in-house accountant for payroll processing. Companies can also avoid working with a third party for payroll processing, keeping the information in-house. Lastly, you'll likely want a payroll processing system that will allow you to still have control and the option of viewing reports and historical information. While payroll processing software is less susceptible to errors than manual systems, the potential exists for malfunctions and glitches. It can be helpful to be able to review information and make corrections manually at times.[4].

CHAPTER -2

EXISTING SYSTEMS

2.1 Introduction

The pre-existing system for this purpose is offline so doesn't require any device or internet connection. Previously all the information was written on the papers and the employees are hired to manage the paperwork of the company. All this work will be depended on the individual's working speed. All the employees have to synchronize the paper work manually by communicating each other. This paper work takes a lot of time and requires more space to store safely and all the additional resources required to ensure the safety. In this system, there is no surety or reliability as the humans are likely to make an error.

Everything is done on the paper and these are highly prone to damages and requires a good amount of security and space to store. Required Buying of goods more frequent as compared to the online system. Likely to have an error. Lack of storage space for the documents. If these files are less in number than it is not a that big problem but if the number increases then searching for a particular document can give a personal nightmare as these are more prone to damages and even it gets the searching job done the time required to do the job is not ideal at all. Require more physical work and man power. Editing is another level of problem in those paper documents the only option is to make new documents if any correction needs to be made that is not a good at all for the environmental credentials. No backup of the information. Where all the drawbacks of the pre-existing system have been overcome in the proposed system. It definitely improves the speed by automating most of the task required to be done manually previously. The automated systems are more reliable and efficient now a day for these types of work. Improvements in the proposed system: Does not require paper work Only Human error while entering the information Not required much space Automatically search and sort the information require less physical work and man power Editing is a lot easier Have backup option While the proposed system offers a lot of improvement over the pre-existing but it will be at one time cost there will be a requirement of storage devices and access devices like a computer but it still has enough advantages to cover those by reducing the man power. It will also help in generating the report of the employee and evaluating the performance through the automated system. Although this provides the safety and security from any kind of disaster and also the authorization authentication scheme provides more flexibility for the end user of the system. A payroll system is software designed to organize all the tasks of employee payment and the filing of employee taxes. These tasks can include keeping track of hours, calculating wages, withholding taxes and deductions, printing and delivering checks, completing direct deposit, paying premiums to insurance carriers, and paying employment taxes to the government.

2.2 Existing Systems

The pre-existing system for this purpose is offline so doesn't require any device or internet connection. Previously all the information was written on the papers and the employees are hired to manage the paperwork of the company. All this work will be depended on the individual's working speed. All the employees have to synchronize the paper work manually by communicating each other. Some existing payroll system is describing below.

Gusto: Gusto is a powerful platform that combines payroll, benefits administration, HR and compliance functionalities in a single, simplified package. It won our **Expert's Choice Award for 2017** as well as the **Supreme Software Award** for the same year. Designed for small businesses in the United States, Gusto makes it easy for these companies to stay on top of their workforce's core HR needs. The app also delivers a solid set of payroll features, coupled with an unusually well-designed user interface, and innovation and automation functionalities that impress even experts. Plus, businesses get to use it at a fair price tailored to their exact needs. Gusto states that the company's mission is to simplify complicated business processes such as HR, benefits, and payroll for modern companies. This company's software is used by more than 60,000 companies nationwide and it has offices in San Francisco and Denver.

Why use Gusto?

The key advantage of this system is automated payroll management, as users can set up and schedule payments, and let the system handle the rest. With this feature in place, all employees will be paid on time, and the process will become independent from human interaction and thus less prone to mistakes. Gusto Payroll also supports the campaign for paperless transactions as digital paystubs are delivered via email in an effort to reduce paper waste. The platform is also capable of automating the calculation, payment, and submission of a company's local, state and federal payroll taxes. At the same time, businesses are allowed to pay through direct deposit or check. Employees who are feeling generous can even set up their accounts to donate to charitable institutions straight from their paychecks. Integration with the widely used accounting systems makes Gusto a flexible platform, especially when it comes to bookkeeping which falls completely under the system's competence.

Overview of Gusto Features:

Lifetime Accounts for Employees

Digital Paystubs

Easy Charitable Donations

Employee Self-Enrollment

Automated New Hire Reporting

Automatic Payroll Tax Processing

Contractor Payments

Unlimited Payroll

- Cancel Payroll
- Flexible Schedules
- Detailed Payroll Reports
- Multiple Pay Rates
- Multipl Pay Schedules
- Hourly and Salary-based Computations

User Satisfaction of Gusto:

We realize that when you make a decision to buy Payroll Software it's important not only to see how experts evaluate it in their reviews, but also to find out if the real people and companies that buy it are actually satisfied with the product. That's why we've created our behavior-based Customer Satisfaction Algorithm™ that gathers customer reviews, comments and Gusto reviews across a wide range of social media sites. The data is then presented in an easy to digest form showing how many people had positive and negative experience with Gusto. With that information at hand you should be equipped to make an informed buying decision that you won't regret.[10]



OnPay:OnPay is an easy-to-use yet comprehensive payroll software that provides scalable solutions for small and medium-sized businesses. This cloud-based service streamlines payroll processes and automates tax filing and payment workflows. Entering payroll information such as hours, tips, reimbursements, and bonuses is done seamlessly. It also incorporates other responsibilities including benefits (health insurance and 401(k) retirement) and compensation insurance for pay-as-you-go workers. It's one of the most affordable and cost-effective solutions in the niche as it takes care of unlimited payroll runs for W-2 employees and 1099 contract workers monthly. They offer paying employees through check or direct deposit. However, direct deposit is not available for all employers. Only those who apply for the feature and pass the risk assessment conducted by OnPay can use it. Handling payroll taxes is also optimized by the software as it calculates your state and federal payroll taxes. They do the withholding, tax payments, and filing of tax forms. OnPay abides by its accuracy guarantees which means they will take responsibilities if there are any errors in the tax filing. While others find it too basic, it's also one of the software's strengths because it's able to deliver its core services straightforwardly and effectively. It suits the budget and requirements of small businesses that need a simple yet robust software to do the functions it needs without too many features crowding the system that they won't use. With key features like employee management, payroll compliance, and HR tools, OnPay delivers in terms of effectiveness and value for money.

Overview of OnPay Benefits: Payroll is a crucial business aspect as the people that consists an organization must be compensated accurately and on time. Choosing a software that automates certain operations and tasks, handles payrolls fast, and accurately stores relevant information is crucial. OnPay offers a wide array of features with valuable benefits for your payroll processes.

Efficient employee management: Online Access and Employee Self On-boarding enables your employees to enter their own personal data, make changes, and retrieve their own paystubs and tax forms. This saves your time so you can focus on your high-level tasks. If you have new hires, the software also takes care of reporting it to the government for you.

Streamline payroll processes: One of the software's most valuable features is allowing unlimited pay runs. It's the software's endeavor to allow businesses to run their payrolls according to their arrangements without having to face extra charges. This includes making corrections and canceling a pay run.

Fortify payroll compliance: OnPay has been in the business for three decades so they already know the dos and don'ts in handling payroll taxes. They take care of IRS and your state when running payroll, calculating taxes, paying them, and filing all tax forms. In fact, they have faith in their platform not to make errors that if they mess up, they pledge to be held liable and cover the fines for you. For any questions, they offer Certified Payroll Professionals whom you can call from 9 AM to 8 PM ET on weekdays to handle and answer your inquiries so you'll avoid inaccuracies and oversights in your payroll taxes.

Cost-effective solution: OnPay has an inexpensive price point for their subscription plans while not neglecting on features with a multitude of integrations and government compliance. It's also scalable when your business grows which lets you only pay for features that you actually need at a certain time. It doesn't charge fees for changing plans, cancellations, annual fees, direct deposits, debit cards, and personal check printing, and withholding, remitting, and filing payroll taxes.

Overview of OnPay Features:

- Unlimited pay runs
- Automated tax filings
- Automated tax payments
- No charge for cancellations
- Print checks on site
- Pay by direct deposit
- Pay by debit card
- Employee self-onboarding
- Free data migration and setup
- Custom payroll reports
- Export payroll data
- Online employee portal
- Multiple permission levels

User Satisfaction: We realize that when you make a decision to buy Payroll Software it's important not only to see how experts evaluate it in their reviews, but also to find out if the real people and companies that buy it are actually satisfied with the product. That's why we've created our behavior-based Customer Satisfaction Algorithm™ that gathers customer reviews, comments and OnPay reviews across a wide range of social media sites. The data is then presented in an easy to digest form showing how many people had positive and negative experience with OnPay. With that information at hand you should be equipped to make an informed buying decision that you won't regret.[11]



ADP Workforce Now:ADP Workforce Now is a web-based human resources (HR) application designed especially for midsize businesses. This app gathers and automates all of your company's HR processes into a single dashboard. You can create additional user permissions for your employees to help them coordinate and manage multiple HR functions. It also allows you to manage all your employees' benefits, holidays and easily generate insightful reports. The app comes with a demo, video tutorials, and online support.ADP Workforce Now offers core HR capabilities including time and attendance, talent management, payroll, and benefits management. It also provides a benefit plan creation wizard, which can be configured according to the on-boarding processes of your company. The app's COBRA events can trigger notifications to employees and other beneficiaries to meet qualifying event requirements under COBRA.The benefits administration features are all compliant with annual reporting requirements for IRS forms 1094 and 1095. This feature offers a dashboard for all reporting statuses. Users can also get status and confirmation reports with detailed information on premiums, deductions, beneficiaries, covered dependents, coverage levels, and enrollments.

Overview of ADP Workforce Now Benefits: There are many HR benefits that can be associated with ADP Workforce Now. Here are some examples

Payroll and HR management: ADP Workforce Now coordinates your workforce management in a single dashboard. The app is fully transparent and helps you manage payroll, benefits, bonuses, commissions, time and attendance, employee health statistics, and talent management.

Usability and optimization:ADP Workforce Now can be accessed on smartphones and tablets. The vendor offers mobile apps for Android and iOS that are fully synced with the webbaseddashboard. This gives you full visibility of statistics and reports, and enables you to manage your HR anytime, anywhere.

Analytics and cloud-based storage: The software displays analytics in real-time and you can create customized spreadsheets, graphs, charts, and reports. The app is fully web based and offers hosting along with your package, featuring server audits and regular security backups.

Cloud-based software: You will get access to integrated tools and insights for your business anytime, anywhere thanks to a full cloud integration of the app.

Payroll and tax filing made easy: You can minimize administrative duties and errors with realtime payroll calculations. Plus, it's possible to leverage the help of compliance experts to get more peace of mind.

Time and attendance: The software allows you to improve productivity with automated time tracking, reporting features, and employee self-service that is accessible on mobile devices.

Overview of ADP Workforce Now Features:

ACA administration
Analytics
Benefits administration
Cloud-based storage
Create user permissions
Employee wellness
Global human capital management
HR outsourcing services
Human resource management
Manager and employee self-service
Mobile friendly
Multi-lingual service
Online support
Time and attendance

User Satisfaction: We realize that when you make a decision to buy HR Software it's important not only to see how experts evaluate it in their reviews, but also to find out if the real people and companies that buy it are actually satisfied with the product. That's why we've created our behavior-based Customer Satisfaction Algorithm™ that gathers customer reviews, comments and ADP Workforce Now reviews across a wide range of social media sites. The data is then presented in an easy to digest form showing how many people had positive and negative experience with ADP Workforce Now. With that information at hand you should be equipped to make an informed buying decision that you won't regret.[12]



Xero:Xero is one of the market's favorite financial collaboration apps (or the beautiful accounting software as its developers like to call it) listed high on our list of leaders in the accounting category. It won our **Expert's Choice Award for 2017**. This system is designed to meet the requirements of small businesses regardless of their industry, and is often qualified by accountants as the 'handiest asset for managing financial activities'. As far as our experts are concerned, Xero is friendly and usable, and collates only top rank features that help close important accounting gaps.

Many interesting comments can be read about Xero's business value, including such that target it as 'the system which wrote the best chapter in digital accounting history'. Companies, the same as sole proprietors, like how Xero branches out the exact functions they need, developed with user experience in the first plan. Even users with no accounting knowledge find it easy to manage, as it transforms some of most standardized and complex financial concepts into an enjoyable journey. Double bookkeeping, for instance, can be traced back to the origins of business as a whole, but Xero managed to break the stigma of it not being conductible by nonexpert users. The logic and the terminology remain the same, but operations get just as complex as your business niche needs them to be. Being completely frank about it, it is usability that attached most of the top star rankings the company praises with, in parallel with the fact that Xero does a better accounting job than most prominent names in this industry. If you fear not having an experienced bookkeeper to move the wheel, feel free to rely on Xero's certified advisors' guidance.

So far, 475,000 business and sole accountants have confirmed Xero to be a worthy contender, mostly because of the fact that its advanced suite resembles enterprise-grade functionality. Partnered with a number of accounting systems and third-party apps, Xero gives you the opportunity to extend its usefulness from all possible aspects, and to use it regardless of your software history. Knowing how difficult exporting sensitive customer data can be, we have no choice but to admire this product, and appreciate the opportunity to use it for as little as \$20 per month. Yet, professional plans are also available, the main difference between them being the number of bills, invoices and quotes, and availability of payrolls and multi-currency functionalities. You can explore the features using the product's free trial, and decide which plan is the most suitable for you.

Overview of Xero Benefits:Briefly explained, Xero is a competent accounting management system that works in line with businesses' rules and priorities, and manages money in and out of their budgets in a way that will coincide with their goals and long-term missions. But how will your actual encounter with this system look like? Moreover, what should you expect from it? **Painless setup:**Sounds like a romantic fairytale when translated to accounting terms, but launching Xero won't require overtimes and complex trainings. From data entry to deep accounting, Xero is designed to facilitate the already cumbersome financial operations, and reduce the time spent scrambling voluminous records. Once pulled inside the system, all transactions and contacts are governed from the same page, and that's exactly where Xero's charm becomes most visible.

Simplified transactions: Xero is quite generous in the configuration sense, and transaction forms allow users to experience how that really feels. All purchase files can be edited within seconds, in particular the ready templates offered by the system for those who prefer to skip drafting individual ones. If you're not that much of a creative person, open the template, and check/uncheck just as many data fields as necessary to make the documents feel personal. Choosing a payroll system that best fits your business is essential. It may be difficult to decide which system to choose, but there are some factors to keep in mind when deciding. First, analyze the size of your business and decide how much you are willing to spend on payroll processing.

Overview of Xero Features:

- Bank reconciliation
- Contacts – Keep track of suppliers and customers
- Files – Attach documents to your financial data
- Financial reporting
- Free, unlimited email support
- Invoicing – Create and send invoices automatically
- Log in from anywhere
- Mobile apps (Android, iPhone/iPad)
- Multi-currency
- Online accounting – Access Xero anytime, anywhere
- Smart lists – Segment contacts based on purchase history

User Satisfaction: We realize that when you make a decision to buy Accounting Software it's important not only to see how experts evaluate it in their reviews, but also to find out if the real people and companies that buy it are actually satisfied with the product. That's why we've created our behavior-based Customer Satisfaction Algorithm™ that gathers customer reviews, comments and Xero reviews across a wide range of social media sites. The data is then presented in an easy to digest form showing how many people had positive and negative experience with Xero. With that information at hand you should be equipped to make an informed buying decision that you won't regret.[13]



Dayforce HCM:Dayforce HCM is a cloud-based platform for workforce management, payroll and tax, analytics, benefits, document management, talent management, and HR management. It is a single app that provides companies complete access to real-time data across all aspects of human capital management (HCM). Dayforce HCM offers no user interfaces and one user experience. Organizations can use the app to find and hire the right talent, manage compliance, schedule staff with work-life balance, maintain HR records,

process pay, and manage benefits enrollment. Dayforce HCM's single employee record consolidates all HCM processes. Dayforce HCM helps employees check work-related transactions and information. Managers can get access to real-time reports that have embedded analytics. Executives can use the app to get important data across applications and departments. Dayforce HCM uses only one record for each employee, which minimizes errors and redundancy.

Overview of Dayforce HCM Benefits:

Ceridian's Dayforce HCM offers complete HCM features in a unified suite. You can use the app to manage core human resources, on-boarding, benefits administration, payroll and more. Dayforce HCM is web-based and flexible, and compatible with all popular browsers. Dayforce HCM helps employees check work-related transactions and information. Managers can get access to real-time reports that have embedded analytics. Executives can use the app to get important data across applications and departments. Dayforce HCM uses only one record for each employee, which minimizes errors and redundancy. Ceridian's experts help with garnishments, tax filings, and other payroll-related activities. The vendor also offers multicurrency and multi-language support as well as additional help for international personnel tracking. You can seamlessly integrate Dayforce HCM with other platforms to make use of the few HR applications that are not offered by this app such as video interviewing.

Overview of Dayforce HCM Features:

Payroll

Time & Attendance

Workforce Management

Human Resources

Performance Management

Document Management

Mobile App

Touch Time Clock

User Satisfaction: We realize that when you make a decision to buy HR Software it's important not only to see how experts evaluate it in their reviews, but also to find out if the real people and companies that buy it are actually satisfied with the product. That's why we've created our behavior-based Customer Satisfaction Algorithm™ that gathers customer reviews, comments and Dayforce HCM reviews across a wide range of social media sites. The data is then presented in an easy to digest form showing how many people had positive and negative experience with Dayforce HCM. With that information at hand you should be equipped to make an informed buying decision that you won't regret.[14]



Wave: Wave Apps is a free and well-integrated business platform that combines accounting, invoicing, and receipt scanning into one compact and straightforward package. Wave Apps is an excellent option for small businesses (less than 10 employees) that are still starting as well as self-employed professionals including entrepreneurs, freelancers, and consultants. The system is easy to set up and use. It comes with a simple and very navigable dashboard with everything you need is in view and easy to access. With Wave, accounting and invoicing processes are simplified, enabling users to get rid of distractions that comes with monitoring expenses, chasing payments, and managing employees and taxes. The system helps users create and send out professional looking invoicing, estimates, and receipts in a matter of moments. Tracking capabilities ensures that you are on top of your processes.

Overview of Wave Benefits: The best thing about Wave is that it the software is free. There are no hidden charges and undeclared fees. This makes Wave an ideal accounting and invoicing tool for small startups, freelancing professionals, and consultants. The software comes with a very clean and friendly dashboard, where everything you need is within a click of a mouse. With Wave, creating professional looking invoices, estimates, and receipts is a smooth process. From this software, you can monitor the status of all your invoices and payments. The system also enables users to accept payments via credit cards, giving you and your customers unparalleled convenience. Wave comes with capabilities that simplifies incoming and expense tracking. It also have receipt scanning tools and bank connections. The software takes out manual data entry from the equation, significantly streamlining the process without compromising accuracy. The system also prepares your business for tax season without the hassle.

With Wave's automatic billing and invoicing, users will definitely save a lot of time. Other timesaving features include recurring bills and invoices. Users can configure reminders to remind you of paid and unpaid items. Wave also allows you to pay your team from anywhere with the right amount. You can conveniently use online pay stubs or choose direct deposits to deliver your team their payment.

Overview of Wave Features:

Accounting

Invoicing

Payroll

Receipts

Tax Calculations and Deductions

Yearly Record Keeping

Direct CreditCard Payments

Direct Deposit

Integrations

User Satisfaction: We realize that when you make a decision to buy Accounting Software it's important not only to see how experts evaluate it in their reviews, but also to find out if the real people and companies that buy it are actually satisfied with the product. That's why we've created our behavior-based Customer Satisfaction Algorithm™ that gathers customer

reviews, comments and Wave reviews across a wide range of social media sites. The data is then presented in an easy to digest form showing how many people had positive and negative experience with Wave. With that information at hand you should be equipped to make an informed buying decision that you won't regret.[15]



Zenefits: Zenefits is an online platform that provides human relations services for small and medium businesses. It aims to be a platform that will help eliminate the stress and complexity of HR administration for the business and its employees without having to spend much on its limited resources, and to take over complex payroll management processes. Top features include: business intelligence, employee directory, insurance benefits, payroll sync, customer support, hiring and onboarding, ACA compliance, mobile optimization, and many others. Zenefits integrates all of the company's HR offerings into an easy-to-use online dashboard, giving the business owner greater control, its employees greater access, and the business greater confidence in its compliance. Best of all, the platform itself is free for use, providing value especially to startups who are looking for an optimal HR service solution that is affordable for the small business, startups, or even individual HR managers who want to keep track of their team.

Overview of Zenefits Benefits: Zenefits effortlessly manages all aspects of employee insurance online. As a business owner or HR professional you have the option to keep your existing plans or choose from an extensive selection of new benefits options available in the system. In addition, you are assured that your business will be able to comply easily with the complexities of the Affordable Care Act, be able to report on employee benefit eligibility and coverage status, as well as be able to quickly e-file taxes with the IRS. Zenefits also streamlines hiring, onboarding, and employee records management. Any changes to be made are applied across the platform, ensuring your HR data is always up-to-date. In addition, its payroll feature connects with everything else you manage in Zenefits, automatically updating itself whenever changes are made. With Zenefits, you are able to do time entry and approval processes, reduce errors, and ensure that your hourly employees are paid accurately and on time. Thanks to a simple database, you are also able to easily track and manage employee paid time off. There is also the opportunity to streamline requests and approvals, and gain expansive visibility into PTO usage across your entire company for greater efficiency and management. All of these benefits are most probably the reason why over 20,000 small and mid-sized businesses around America are using the services of Zenefits. With Zenefits, you are able to do time entry and approval processes, reduce errors, and ensure that your hourly employees are paid accurately and on time.

Overview of Zenefits Features:

HR Management

Hiring & Onboarding

ACA Compliance
Business Intelligence
Employee Directory
Customer Support
Mobile App
Insurance Benefits (Medical, Dental, Vision)
Payroll Sync

User Satisfaction: We realize that when you make a decision to buy Payroll Software it's important not only to see how experts evaluate it in their reviews, but also to find out if the real people and companies that buy it are actually satisfied with the product. That's why we've created our behavior-based Customer Satisfaction Algorithm™ that gathers customer reviews, comments and Zenefits reviews across a wide range of social media sites. The data is then presented in an easy to digest form showing how many people had positive and negative experience with Zenefits. With that information at hand you should be equipped to make an informed buying decision that you won't regret.[16]



Intuit Payroll:Intuit Payroll is a powerful yet affordable payroll solution that comes in three packages to suit various business needs and budgets. Each package has its limitations except the top tier product, the Full Service Payroll in which all payroll and tax processes are handled by the software. With Intuit Payroll, companies can easily pay their employees on time and accurately without becoming really engrossed in the process.With Intuit Payroll, businesses now have it easy about how to settle payments with their employees efficiently and accurately. Users can generate unlimited paychecks while automating payroll tax calculations and more. The system is also lauded for its top class support from live experts.

Overview of Intuit Payroll Benefits: Intuit Payroll is loaded with features and automation that let you pay your employees faster and without hassles. The system can instantly generate unlimited paychecks; perform payroll taxes calculations automatically and works well with QuickBooks, another Intuit product. The top package also offers a “No Penalty” guarantee, meaning you don't have to worry about non-compliance and missing deadlines.The Intuit Payroll service offers more than just payroll tools and functionalities. It is also built with all the features you need to effectively manage your employees. The system also keeps up with existing mandatory policies, including poster compliance in accordance with Federal and State labor laws.The system comes with hiring tools and tips to help businesses access valuable business advice as well as guides to help them attract and acquire top talents. Intuit Payroll also helps in improving the cash flow of your business by ensuring that you compensate your workers accurately. With the system's integrated workers' compensation payment service, you only pay what you owe your employees.Many businesses as well as business experts have concluded that Intuit Payroll is a must-have for small businesses that are looking to establish their presence and expand their operations.Intuit

Payroll is also known for its high quality support. Whether you need top class expertise on complicated matters or just someone to guide you through the initial setup, Intuit Payroll fields a team of specialists to get you through.

Overview of Intuit Payroll Features:

- Create unlimited paychecks instantly
- Calculate payroll taxes automatically
- Avoid tax penalties, guaranteed
- Works with or without QuickBooks
- Call for free support from live experts
- Get step-by-step help with set up
- Chat online with a payroll specialist
- Hiring tips and tools
- Workers' compensation
- Poster compliance service

User Satisfaction: We realize that when you make a decision to buy Accounting Software it's important not only to see how experts evaluate it in their reviews, but also to find out if the real people and companies that buy it are actually satisfied with the product. That's why we've created our behavior-based Customer Satisfaction Algorithm™ that gathers customer reviews, comments and Intuit Payroll reviews across a wide range of social media sites. The data is then presented in an easy to digest form showing how many people had positive and negative experience with Intuit Payroll. With that information at hand you should be equipped to make an informed buying decision that you won't regret. [17]



2.3 Supporting Literature

An existing online shopping system consists of many web tools, algorithms and models. There are many web tools for developing an online shopping system such as PHP, ASP.Net, JAVA, jQuery, Java Script, IIS (Internet Information Services)/WAMP, XAMPP server, MySQL server etc. Some of the tools are describing below.

2.3.1 Hyper Text Markup Language

HTML is the web's core language for creating documents and applications for everyone to use, anywhere. It is standardizing system for tagging text files to achieve font, color, graphic and hyperlink effects on World Wide Web pages. HTML elements form the building blocks of all websites. The markup tells the web browsers how to display web pages. Web browsers can read HTML files and render them into visible or audible web pages. Browsers do not

display the HTML tags and scripts, but use them to interpret the content of the page. HTML describes the structure of websites. The extension of HTML file must be “.html”

Basic form of HTML

```
<!DOCTYPE html>
<html>
<head>
<title>This is a title</title>
</head>
<body>
<p>Hello world!</p>
</body> </html>
```

2.3.2Cascading Style Sheet

CSS stands for Cascading Style Sheet. CSS is a simple mechanism for adding style (e.g. fonts, colors, spacing etc.) to web documents. CSS defines how HTML elements are displayed. CSS is a cornerstone technology used by most websites to create visually engaging web pages, user interfaces for web application and user interfaces for many mobile applications. CSS is designed primarily to enable the separation of document content from document presentation, including elements such as the layout, colors and fonts. This separation can improve content accessibility, provide more flexibility. This separation of formatting and content makes it possible to present the same markup page in different styles for different rendering methods. The importance of CSS is given below.

Web pages loads easier and they use less bandwidth. CSS is designed primarily to enable the separation of document content from document presentation, including elements such as the layout, colors and fonts.

CSS is compatible with every web browser. CSS defines how HTML elements are displayed. CSS makes content moveable. CSS is designed primarily to enable the separation of document content from document presentation, including elements such as the layout, colors and fonts.

CSS saves a lot of works. The CSS code allows web developers to take control of many aspects of website, such as fonts, colors, positioning and styling of data.

2.3.3 Hypertext Preprocessor

PHP (recursive acronym for PHP: Hypertext Preprocessor) is a widely-used open source generalpurpose scripting language that is especially suited for web development and can be embedded into HTML. PHP is a server scripting language, and a powerful tool for making dynamic and interactive Web pages. PHP code is interpreted by a web server with a PHP processor module, which generates the resulting web page: PHP commands can be embedded directly into an HTML source document external file to process data. It has also evolved to include a commandline interface capability and can be used in standalone graphical applications.

PHP stands for Hypertext Preprocessor and is a server-side programming language. There are many reasons to use PHP for server-side programming; firstly it is a free language with no licensing fees, so the cost of using it is minimal. A good benefit of using PHP is that it can interact with many different database languages including MySQL. We work with MySQL at Blue line media since this is also a free language so it makes sense to use PHP. Both PHP and MySQL are compatible with an Apache server which is also free to license. PHP can also run on Windows, Linux and UNIX servers. Due to all these languages being free it is cheap and easy to setup and create a website using PHP. PHP also has very good online documentation with a good framework of functions in place. This makes the language relatively easy to learn and very well supported online. There are countless forums and tutorials on various PHP methods and problems so it is usually very easy to find help if you need it. Due to PHP being so accessible and cheap to setup there are a lot of people who know how to use the language which makes finding new employees proficient in this language less challenging. Those are the main reasons we use PHP at Blue line media.

2.3.4 MySQL

MySQL is currently the world's most popular and widely used open source database technology and data storage system. MySQL offers great reliability and ease of use. MySQL is a freely available open source Relational Database Management System (RDBMS) that uses Structured Query Language (SQL) [2]. MySQL runs on virtually all platforms, including Linux, UNIX, and Windows. MySQL is developed, supported and marketed by MySQL AB. The database is available for free under the terms of the GNU General Public License (GPL) or for a fee to those who do not wish to be bound by the terms of the GPL. MySQL is used for the following reasons.

- I. Scalability and Flexibility. MySQL offers great reliability and ease of use. MySQL is a freely available open source Relational Database Management System (RDBMS)

High Performance

High Availability

Web and Data Warehouse Strength

Strong Data Protection

Comprehensive Application Development

Management Ease

Open Source Freedom and 24 x 7 Support IX. Very fast, reliable, and easy to use

X. Ideal for both small and large applications

2.3.5 XAMPP

XAMPP stands for Cross-Platform (X), Apache (A), MySQL (M), PHP (P) and Perl (P). It is a simple, lightweight Apache distribution that makes it extremely easy for developers to create a local web server for testing purposes. Everything needed to set up a web server – server application (Apache), database (MySQL), and scripting language (PHP) – is included in a simple extractable file. XAMPP is also cross-platform, which means it works equally well on Linux, Mac and Windows. Officially, XAMPP's designers intended it for use only as a

development tool, to allow website designers and programmers to test their work on their own computers without any access to the Internet. To make this as easy as possible, many important security features are disabled by default. XAMPP has the ability to serve web pages on the World Wide Web. A special tool is provided to password-protect the most important parts of the package. XAMPP also provides support for creating and manipulating databases in Maria DB and SQLite among others. Once XAMPP is installed, it is possible to treat a local host like a remote host by connecting using an FTP client. Using a program like FileZilla has many advantages when installing a content management system (CMS) like Joomla or Word Press. It is also possible to connect to local host via FTP with an HTML editor.

2.3.6 JavaScript

JavaScript is a powerful and popular language for programming on the web. JavaScript also known as ECMAScript is a dynamic programming language. It is most commonly used as part of web browsers, whose implementations allow client-side scripts to interact with the user, control the browser, communicate asynchronously, and alter the document content that is displayed. JavaScript can be placed in the <body> and the <head> sections of an HTML page. In HTML, JavaScript code must be inserted between <script> and </script> tags.

Importance of JavaScript

All browsers have JavaScript interpreters built in. No other languages have this tremendous advantage.

It's free and easy to set up. III. It's easy to debug.

IV. It has more powerful and free frameworks and libraries.

2.3.7 JQuery

JQuery is a fast, small, and feature-rich JavaScript library. It makes things like HTML document traversal and manipulation, event handling, animation, and Ajax much simpler with an easy-touse API that works across a multitude of browsers. With a combination of versatility and extensibility, jQuery has changed the way that millions of people write JavaScript.

JQuery includes the following features:

Events

Effects and Animations

AJAX

Importance of jQuery

There are lots of other JavaScript frameworks out there, but jQuery seems to be the most popular, and also the most extendable. Many of the biggest companies on the Web use jQuery, such as Google, Microsoft, IBM, and Netflix.

JQuery is more important because:

JQuery is a lightweight library.

JQuery supports cross browser.

Easy Dom traversing.

JQuery elements display even when JavaScript is disabled. V. JQuery makes animated applications just like Flash.

JQuery pages load faster.

JQuery can be SEO friendly.

2.3.8 Internet Information Services

IIS is a set of Internet based services for Windows machines. Originally supplied as part of the Option Pack for Windows NT, they were subsequently integrated with Windows 2000 and Windows Server 2003). The current (Windows 8) version is IIS 8.0 and includes server for FTP (a software standard for transferring computer files between machines with widely different operating systems), SMTP (Simple Mail Transfer Protocol, is the de facto standard for email transmission across the Internet) and HTTP/HTTPS (is the secure version of HTTP, the communication protocol of the World Wide Web). IIS stands for "Internet Information Services" is a web server software package designed for Windows Server. It is used for hosting websites and other content on the Web. Microsoft's Internet Information Services provides a graphical user interface (GUI) for managing websites and the associated users. It provides a visual means of creating, configuring, and publishing sites on the web. The IIS Manager tool allows web administrators to modify website options, such as default pages, error pages, logging settings, security settings, and performance optimizations. IIS can serve both standard HTML webpages and dynamic webpages, such as ASP.NET applications and PHP pages. When a visitor accesses a page on a static website, IIS simply sends the HTML and associated images to the user's browser. When a page on a dynamic website is accessed, IIS runs any applications and processes any scripts contained in the page, and then sends the resulting data to the user's browser. While IIS includes all the features necessary to host a website, it also supports extensions (or "modules") that add extra functionality to the server. For example, the Win Cache Extension enables PHP scripts to run faster by caching PHP processes. The URL Rewrite module allows webmasters to publish pages with friendly URLs that are easier for visitors to type and remember. A streaming extension can be installed to provide streaming media to website visitors. IIS is a popular option for commercial websites, since it offers many advanced features and is supported by Microsoft. However, it also requires a commercial license and the pricing increases depending on the number of users. Therefore, Apache HTTP Server, which is open source and free for unlimited users, remains the most popular web server software.

2.3.9 Entity Relationship Diagram

An entity-relationship (ER) diagram is a specialized graphic that illustrates the relationships between entities in a database. ER diagrams often use symbols to represent three different types of information. Boxes are commonly used to represent entities. Diamonds are normally used to represent relationships and ovals are used to represent attributes.

An E-R diagram constitutes of following Components:

1.Entity:- Any real-world object can be represented as an entity about which data can be stored in a database. All the real world objects like a book, an organization, a product, a car, a person are the examples of an entity. Any living or non-living objects can be represented by an entity. An entity is symbolically represented by a rectangle enclosing its name. Entities can be characterized into two types:

Strong entity: A strong entity has a primary key attribute which uniquely identifies each entity. Symbol of strong entity is same as an entity.



Fig 2.1: Strong Entity

Weak entity: A weak entity does not have a primary key attribute and depends on other entity via a foreign key attribute.

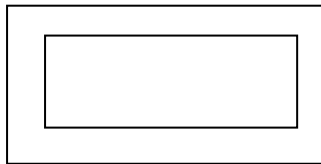


Fig 2.2: Weak Entity

2.Attribute:- Each entity has a set of properties. These properties of each entity are termed as attributes. For example, a car entity would be described by attributes such as price, registration number, model number, color etc. Attributes are indicated by ovals in an e-r diagram. An attribute can be characterized into following types:

Simple attribute:- An attribute is classified as a simple attribute if it cannot be partitioned into smaller components. For example, age and sex of a person. A simple attribute is represented by an oval.

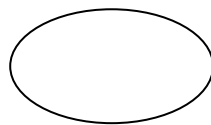


Fig 2.3: Simple Attribute

Composite attribute:- A composite attribute can be subdivided into smaller components which further form attributes. For example, 'name' attribute of an entity "person" can be broken down into first name and last name which further form attributes. 'name' is the composite attribute in this example.

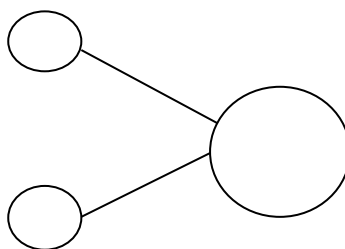


Fig 2.4: Composite Attribute

Multi valued attribute:— An attribute which can hold more than one value, it is then termed as multi-valued attribute. For example, phone number of a person. Symbol of multi-valued attribute is shown below

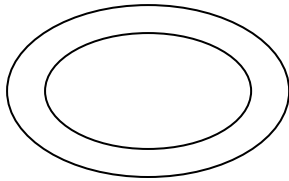


Fig 2.5: Multivalued Attribute

3.Relationships:- A relationship is defined as bond or attachment between 2 or more entities. Normally, a verb in a sentence signifies a relationship.

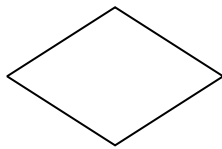


Fig 2.6: Relationship

2.3.10 Data Flow Diagram

A Data Flow Diagram (DFD) is a structured analysis and design tool that can be used for flowcharting. A DFD is a network that describes the flow of data and the processes that change or transform the data throughout a system. This network is constructed by using a set of symbols that do not imply any physical implementation. It has the purpose of clarifying system requirements and identifying major transformations. So it is the starting point of the design phase that functionally decomposes the requirements specifications down to the lowest level of detail. DFD can be considered to an abstraction of the logic of an information oriented or a processoriented system flow-chart. For these reasons DFD's are often referred to as logical data flow diagrams

Components of DFD: DFDs only involve four symbols. They are:

1.Processes: Processes are the essential activities, carried out within the system boundary, that use information. A process is represented in the model only where the information which provides the input into the activity is manipulated or transformed in some way, so that the dataflowing out of the process is changed compared to that which flowed in. The activity may involve capturing information about something that the organization is interested in, such as a customer or a customer's maintenance call. It may be concerned with recording changes to this information, a change in a customer's address for example. It may require calculations to be carried out, such as the quantity left in stock following the allocation of stock items to a customer's job; or it may involve validating information, such as checking that faulty equipment is covered by a maintenance contract.

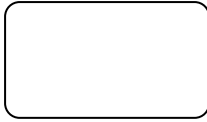


Fig 2.7: Processes

2.Data-flows: A data-flow represents a package of information flowing between two objects in the data-flow diagram. Data-flows are used to model the flow of information into the system, out of the system, and between elements within the system. Occasionally, a data-flow is used to illustrate information flows between two external entities, which is, strictly speaking, outside of the system boundaries. However, knowledge of the transfer of information between external entities can sometimes aid understanding of the system under investigation, in which case it should be depicted on the diagram.

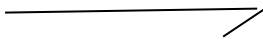


Fig 2.8: Data Flows

3.Data stores: A data store is a place where data is stored and retrieved within the system. This may be a file, Customer Contracts file for example, a catalogue or reference list, Options Lists for example, a log book such as the Job Book, and so on.

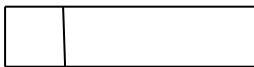


Fig 2.9: Data Stores

4.External Entities:External entities are entities outside of the system boundary which interact with the system, in that they send information into the system or receive information from it. External entities may be external to the whole organization as in Customer and Supplier in our running example; or just external to the application area where users' activities are not directly supported by the system under investigation. Accounts and Engineering are shown as external entities as they are recipients of information from the system. Sales also provide input to the system. External entities are often referred to as sources and sinks. All information represented within the system is sourced initially from an external entity. Data can leave the system only via an external entity.



Fig 2.10: External Entity

2.3.11 Use Case Diagram

The requirements of a system can be captured by Use Case Diagram. They are modeled to capture the intended behavior of the system. Use case interacts with the human and actors that use the system accomplish some work. They define a set of sequence of actors that a system performs to yield observable result of value to an actor. An actor represents a rule that a human a hardware device or another system with another system. Use Cases are used to come to a common understanding with the system end user and domain experts. There are two components of use case diagram:

1. Actors: An actor portrays any entity (or entities) that perform certain roles in a given system. The different roles the actor represents are the actual business roles of users in a given system. An actor in a use case diagram interacts with a use case. For example, for modeling a banking application, a customer entity represents an actor in the application.

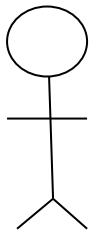


Fig 2.11: Actor

2. Use case: A use case in a use case diagram is a visual representation of a distinct business functionality in a system. The key term here is "distinct business functionality." To choose a business process as a likely candidate for modeling as a use case, you need to ensure that the business process is discrete in nature. As the first step in identifying use cases, you should list the discrete business functions in your problem statement. Each of these business functions can be classified as a potential use case. Remember that identifying use cases is a discovery rather than a creation. As business functionality becomes clearer, the underlying use cases become more easily evident. A use case is shown as an ellipse in a use case diagram.

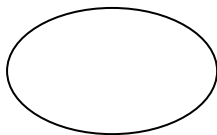


Fig 2.12: Use Case

2.4 Conclusion

In this study a comprehensive database PMS system for the DIPAS employees is introduced. The study elaborates the system analysis, software and database design and system development. PMS is able to store huge data of the employees and generate reports according to the need. In addition, PMS effectively controls the data in a user-friendly manner. It also enables the user to access, update and delete data in a flexible manner. Payroll Management System” software developed for a company has been designed to achieve maximum efficiency and reduce the time taken to handle the Payroll activity. It is designed to replace an existing manual record system thereby reducing time taken for calculations and for storing data. The system uses Asp .Net as front end and Microsoft SQL as a backend for the database. The system is strong enough to withstand regressive daily operations under conditions where the database is maintained and cleared over a certain time of span. The implementation of the system in the organization will considerably reduce data entry, time and also provide readily calculated reports. Payroll is the process by which employers pay an employee for the work they have completed. Any business with employees should have a payroll process established; payroll is often the largest expense for a business. An effective and efficient payroll process will ensure that employees are paid accurately and consistently, keeping them satisfied with this aspect of employment and allowing HR to focus on other areas Payroll seems simple at its core, but becomes complicated because of the various deductions that come into play. Employers must withhold taxes from each paycheck and make sure accurate funds are paid to the correct government agency. Employers may also be responsible for deducting and paying premiums for insurance and depositing funds into retirement accounts or to selected charities. Payroll processing duties can create a huge burden and unwanted stress for small business owners and can be overwhelming for large businesses. A missed deadline or incorrect filing of taxes can result in fines or jail time. To avoid these issues, small, middle-sized, and large businesses can all benefit from using payroll systems. For small businesses, payroll system software can mitigate errors in the payroll process and reduce the amount of effort involved in calculating employee hours, wages, and tax withholdings. Payroll software is easy to use and often times very affordable for small businesses. In some cases, small businesses may save money by using payroll processing software instead of other alternatives. Determining your budget and the size classification of your business will narrow down the list of payroll software vendors, making your selection that much easier. Compare the offerings of these remaining vendors and read reviews from some of their current customers. If available, request demos and see for yourself how easy the software is to work with and how well it fits with your business. While it is possible for smaller businesses to handle payroll duties in-house through a manual process, much time can be wasted while attempting to calculate everything correctly. One miscalculation and the business owner could find themselves in legal or financial trouble. Mid-sized companies with up to 100 employees benefit greatly by investing in a payroll system and for large businesses, it's a no-brainer. Choosing a payroll system that best fits your business is essential. It may be difficult to decide which system to choose, but there are some factors to keep in mind when deciding. First, analyze the size of your business and decide how much you are willing to spend on payroll processing.

Chapter-3

Proposed Model

3.1 Introduction

One of the major tasks for any business is keeping track of employee work hours and compensating all workers accurately. In the old days, timekeeping had to be done manually with physical punch cards and timesheets. Now, many of these manual operations are computerized. The manual methods still exist, but there are numerous advantages to using a computerized payroll system. A computerized payroll system performs the same functions that manual methods of payroll do. It stores employee data, such as names, addresses, social security numbers, pay rates and withholding allowances of each person. It calculates payroll taxes and deductions and keeps all data up-to-date after each pay period. With a computerized system, the employee clocks in and out on the authorized computer station. There is no punch card or timesheet to use. The system keeps track of the hours worked each day and can provide updated information on the total hours worked to date with just a click. It can even calculate the gross pay at the same time. Any exceptions like breaks and overtime can be entered and accounted for as well. This saves a great deal of payroll processing time every pay period.

A user friendly based software “**Payroll Management System**” has been developed for organization, keeping in view the requirements of employees to prepare salary. The objective of the project was to computerize the payroll system which was earlier being handle manually every precaution has been taken at each process involved in the complex of the salary preparation. By computerization it implies all the process handling in the entirely being done by computer. All the record necessary for the processes involved in the salary calculation are stored in a computer based record keeping system using a back-end tool. All the process handling is done at the frontend by using a front-end. The project provides sample facilities to its users. The most important of the facilities are the report generation and printing which provides user with the hard copies of the data also. Payroll management is very simple, flexible and user friendly management software. That takes care all of your requirements relating to accounting and management of employees’ payroll

3.2 Feasibility Study

The objective of feasibility study is to determine whether or not the proposed system is feasible. A feasibility study is a preliminary investigation of a proposed system to decide whether the system can run smoothly with the organization, will the organization realize the benefits that are expected and to decide will the organization go for it. Feasibility is defined as the practical extent to which a project can be performed successfully. To evaluate feasibility, a feasibility study is performed, which determines whether the solution considered to accomplish the requirements is practical and workable in the software. Information such as resource availability, cost estimation for software development, benefits of the software to the organization after it is developed and cost to be incurred on its maintenance are considered during the feasibility study. The objective of the feasibility study is to establish the reasons

for developing the software that is acceptable to users, adaptable to change and conformable to established standards. Various other objectives of feasibility study are listed below.

To analyze whether the software will meet organizational requirements Feasibility is defined as the practical extent to which a project can be performed successfully. To evaluate feasibility, a feasibility study is performed.

To determine whether the software can be implemented using the current technology and within the specified budget and schedule A feasibility study is a preliminary investigation of a proposed system to decide whether the system can run smoothly with the organization.

To determine whether the software can be integrated with other existing software.

benefits that are expected and to decide whether the organization will go for it. Three Types of feasibility study

Technical Feasibility.

Operational Feasibility.

Economical Feasibility.

3.2.1 Technical feasibility

In this, one has to test whether the system can be developed using existing technology or not. It is evident that necessary hardware and software are available for development and implementation of proposed system. We acquired the technical knowledge of working in languages, and then only we have started designing our project. The system is self-explaining and does not need any entire sophisticated training. A system has been built by concentrating on the graphical user interface concepts, the application can also be handled very easily with a novice user. The overall time that a user needs to get trained is less than 15 minutes. The system has been added with features of menu device and button interaction methods, which makes him the master as he starts working through the environment. As the software that were used as developing this application are very economical and are readily available in the market the only time that is lost by the customer is just installation time. Technical feasibility performs following tasks.

Analyzes the technical skills and capabilities of the software development team members. In this, one has to test whether the system can be developed using existing technology or not. It is evident that necessary hardware and software.

Determines whether the relevant technology is stable and established. The system has been added with features of menu device and button interaction methods, which makes him the master as he starts working through the environment.

Ascertains that the technology chosen for software development has a large number of users so that they can be consulted when problems arise or improvements are required.

It mentions computer with new configuration requirements of proposed system. It mentions new software requirements of the proposed system.

3.2.2 Economical Feasibility

Economic feasibility is a measure of the cost-effectiveness of a project or solution. As a part of this, the costs and benefits associated with the proposed system are compared and the project is economically feasible only if tangible and intangible benefits outweigh the cost. The cost for proposed online shopping system is outweighing the cost and efforts involved in maintaining the registers, books, files and generation of various reports. The system also reduces the administrative and technical staff to do various jobs that single software can do. So, this system is economically feasible. Economical feasibility also performs following tasks.

Cost incurred on software development to produce long-term gains for an organization. Economic feasibility is a measure of the cost-effectiveness of a project or solution. As a part of this, the costs and benefits associated.

Cost required to conduct full software investigation (such as requirements elicitation and requirements analysis). The system also reduces the administrative and technical staff to do various jobs that single software can do.

Cost of hardware, software, development team, and training. Feasible only if tangible and intangible benefits outweigh the cost. The cost for proposed online shopping system is outweighing the cost and efforts involved in

Cost involves in purchase or rental of equipment the cost for proposed online shopping system is outweighing the cost and efforts involved.

Cost of phones & mobile communication equipment

Cost of Salaries of Employees.

Cost of maintenance of equipment

3.2.3 Operational Feasibility

Operational feasibility means how much the system is user interactive. In this project, the management will know the details of each project where he may be presented and the data will be maintained as decentralized and if any inquires for that particular contract can be known as per their requirements and necessities. Operational feasibility also performs following tasks.

Determines whether the problems anticipated in user requirements are of high priority.

Determines whether the solution suggested by the software development team is acceptable.

Analyzes whether users will adapt to a new software

Determines whether the organization is satisfied by the alternative solutions proposed by the software development team.

It finds if any job reconstruction is required or not?

Watches the feelings of the customers as well as user.

System should provide right & accurate information to user or customer at right place as well as at right time[25]

3.4.2 Data Flow Diagram

A Data Flow Diagram (DFD) is a structured analysis and design tool that can be used for flowcharting. A DFD is a network that describes the flow of data and the processes that change or transform the data throughout a system. This network is constructed by using a set of symbols that do not imply any physical implementation. It has the purpose of clarifying system requirements and identifying major transformations. So it is the starting point of the design phase that functionally decomposes the requirements specifications down to the lowest level of detail.

DFD can be considered to an abstraction of the logic of an information oriented or a processoriented system flow-chart. For these reasons DFD's are often referred to as logical data flow diagrams. A DFD shows what kind of information will be input to and output from the system, how the data will advance through the system, and where the data will be stored. It does not show information about process timing or whether processes will operate in sequence or in parallel, unlike a traditional structured flowchart which focuses on control flow, or a UML activity workflow diagram, which presents both control and data flows as a unified model. Data flow diagrams are one of the three essential perspectives of the structured-systems analysis and design method SSADM. The sponsor of a project and the end users will need to be briefed and consulted throughout all stages of a system's evolution. With a data flow diagram, users are able to visualize how the system will operate, what the system will accomplish, and how the system will be implemented. The old system's data flow diagrams can be drawn up and compared with the new system's data flow diagrams to draw comparisons to implement a more efficient system. Data flow diagrams can be used to provide the end user with a physical idea of where the data they input ultimately has an effect upon the structure of the whole system from order to dispatch to report. How any system is developed can be determined through a data flow diagram model. A logical DFD captures the data flows that are necessary for a system to operate. It describes the processes that are undertaken, the data required and produced by each process, and the stores needed to hold the data. On the other hand, a physical DFD shows how the system is actually implemented, either at the moment (Current Physical DFD), or how the designer intends it to be in the future (Required Physical DFD)

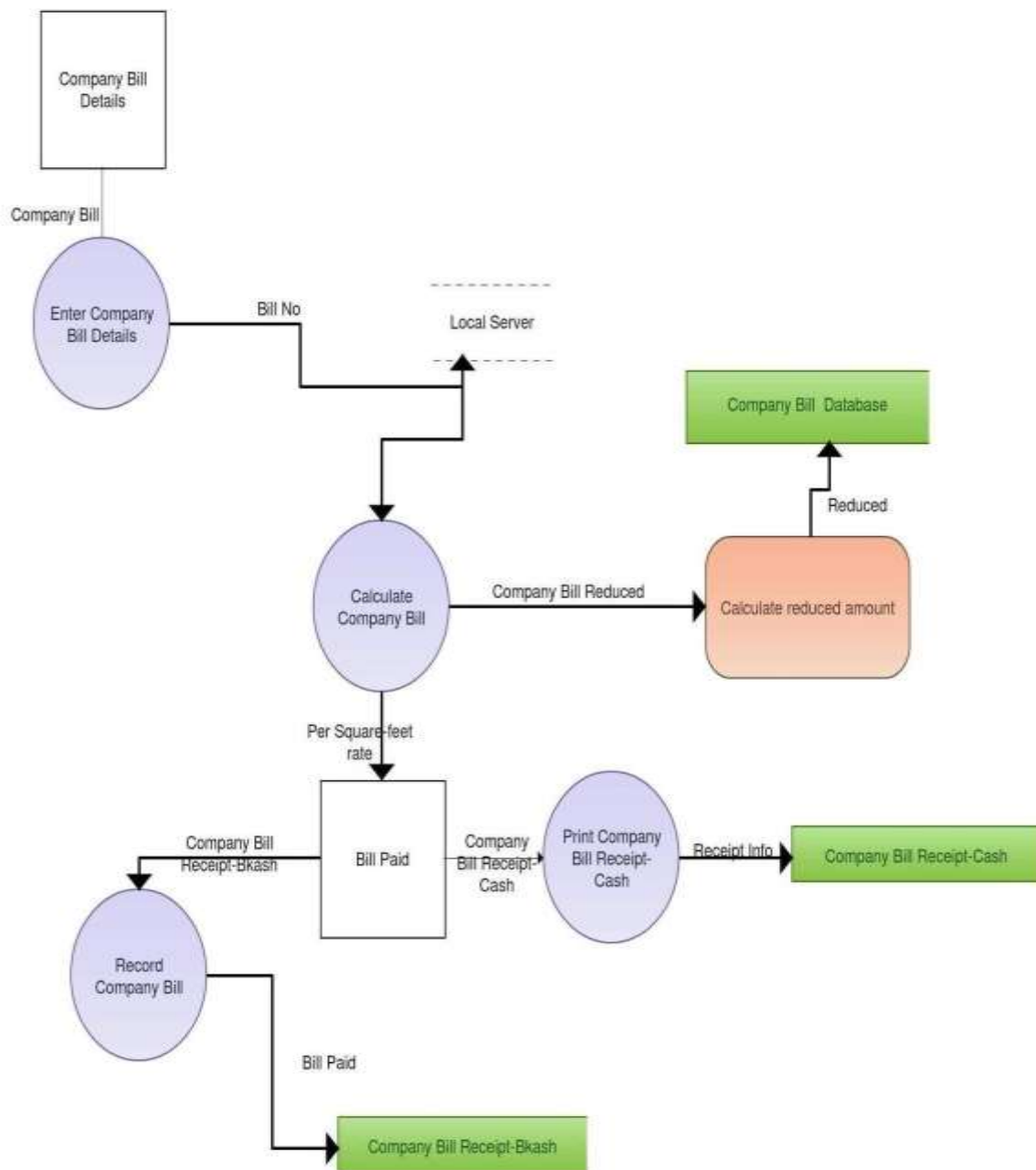


fig 3.2: Data flow diagram for company

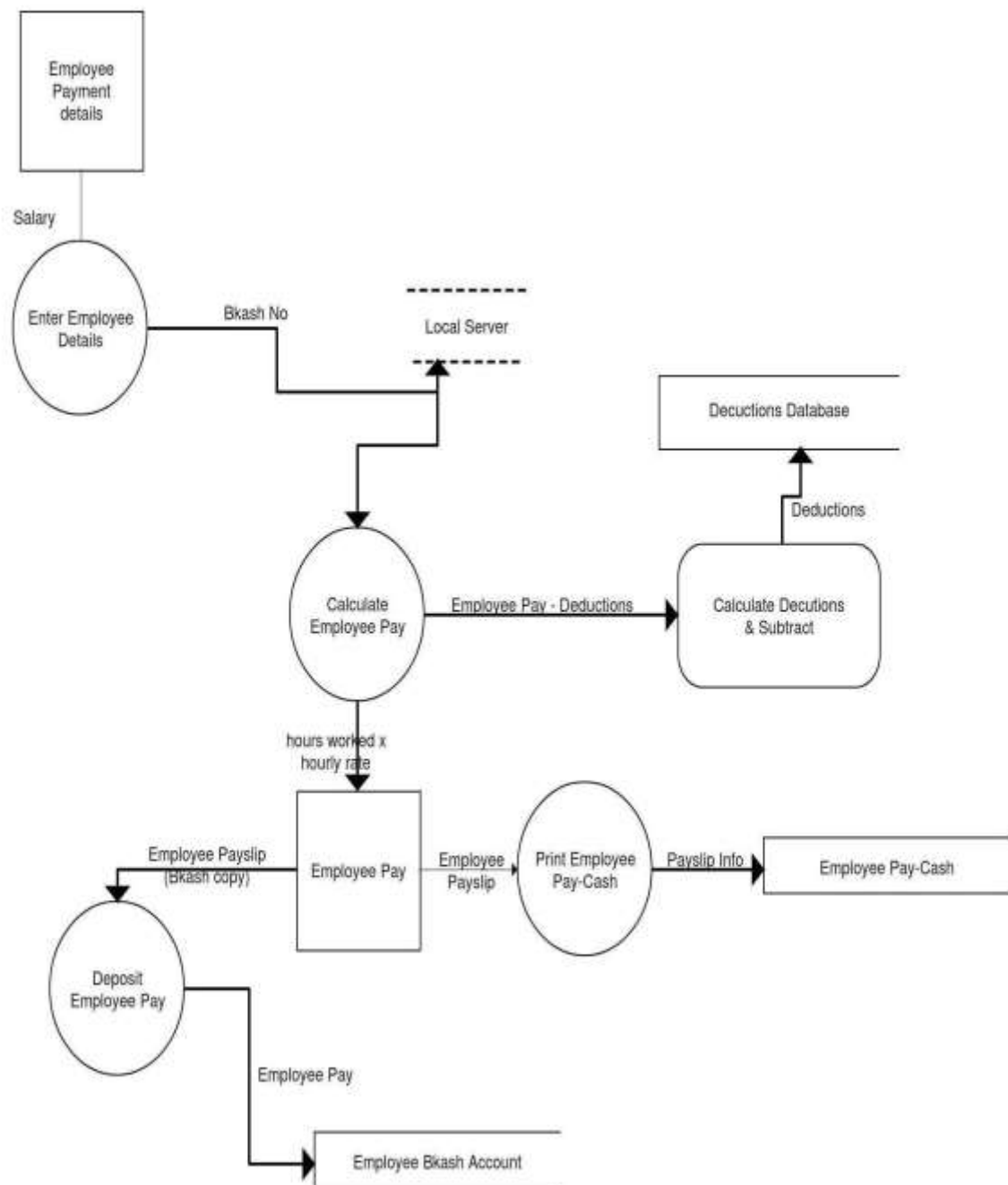


fig 3.3: Data flow diagram for employee

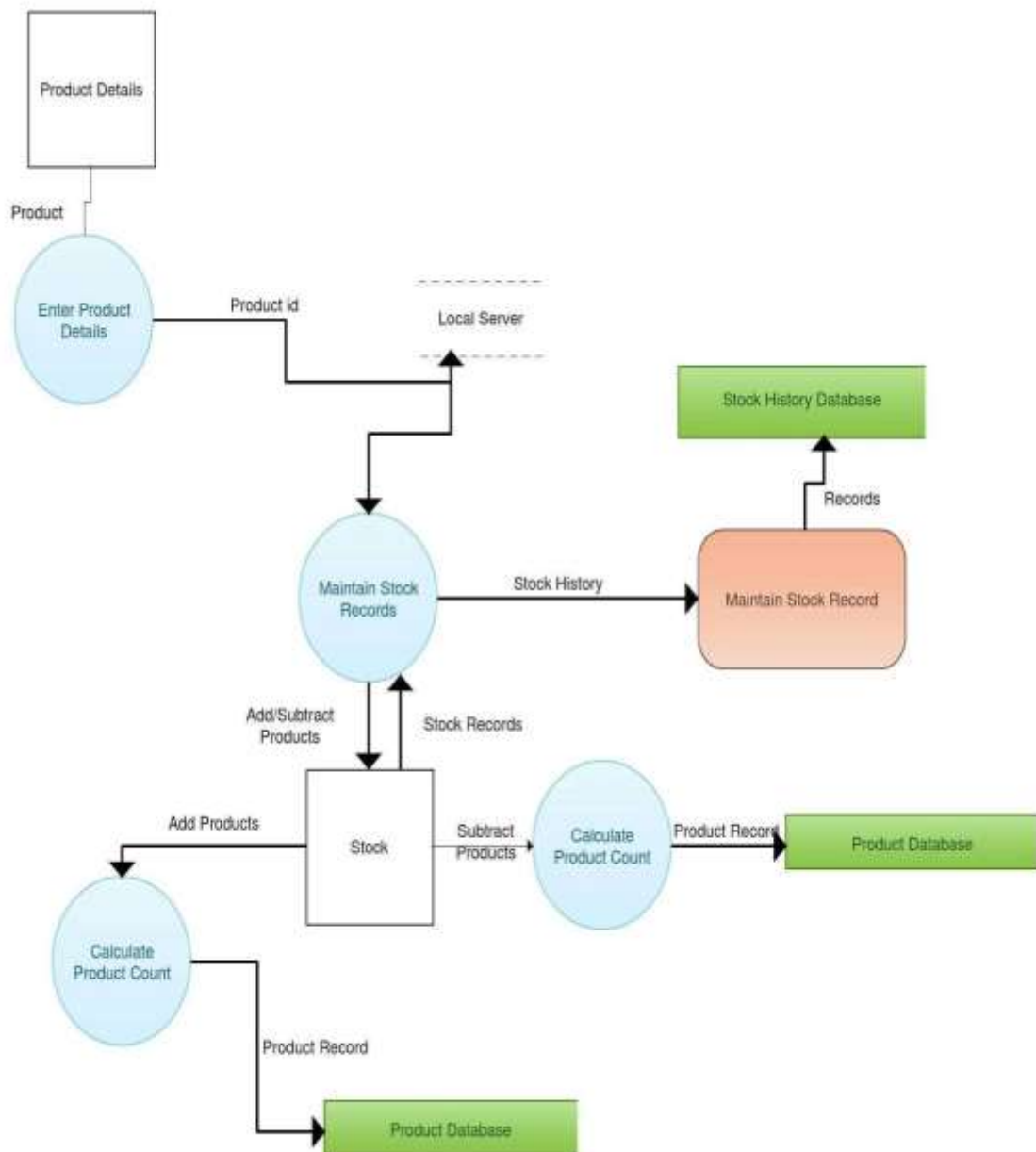


Fig 3.4: Data flow diagram for stock record

3.4.3 Use Case Diagram

The requirements of a system can be captured by Use Case Diagram. They are modeled to capture the intended behavior of the system. Use case interacts with the human and actors that use the system accomplish some work. They define a set of sequence of actors that a system performs to yield observable result of value to an actor. An actor represents a role that a human a hardware device or another system with another system. Use Cases are used to come to a common understanding with the system end user and domain experts.

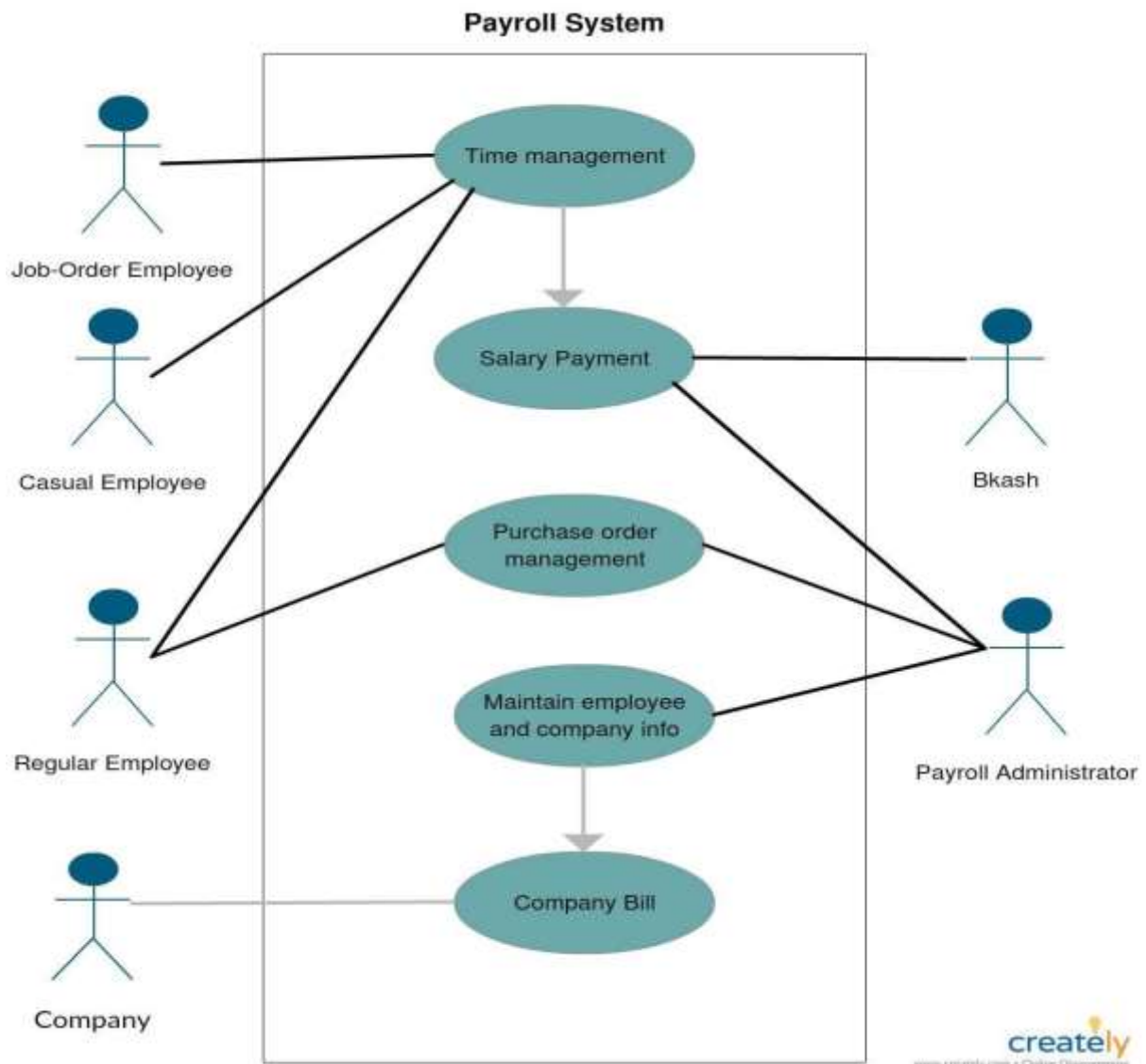


Fig 3.5: Use case diagram

3.5 Implementations

Implementation is the stage where the theoretical design is turned into a working system. The most crucial stage in achieving a new successful system and in giving confidence on the new system for the users that it will work efficiently and effectively. The system can be implemented only after through testing is done and if it is found to work according to the specification. It involves careful planning, investigation of the current system and its constraints on implementation, design of methods to achieve the changeover and an evaluation of change over methods a part from planning. Two major tasks of preparing the implementation are education and training of the users and testing of the system. The more complex the system being implemented, the more involved will be the systems analysis and

design effort required just for implementation. The implementation phase comprises of several activities. The required hardware and software acquisition is carried out. The system may require some software to be developed.

3.5.1 Front End

The front end part, comprising of pages which users can view, is created by using templates so that it can expedite design and loading processes. This part, in the appearance, the main menu is consistent, thus it is easy to use. Considered as the most frequently access when comparing with other parts of the website, front end pages have to use template, and in turn, saving bandwidth and number of database accesses. For database operation issue, aiming for minimizing number of accesses, it needs just four queries to display all details. Those queries consist of jointed SQL statements, which inquire merely main information from the database. This part is consists of HTML, CSS, JavaScript, JQuery etc.

In front end we have developed and designed many function modules such as admin login form, price range module, brand filtering module, checkout form, add to cart form etc. by using html, css, java script, jquery, bootstrap etc. We have also designed many pages for showing our electronics product by their category. We have designed our project from a template. Our project has the same style of all pages. The same kind of user operations is within a single interface to complete. Clicking muse can easily realize commodity, purchase, orders, query and other functions. It is easy to understand, and to use. If anyone enters into our project at first he can see the home page. In home page admin can see all of informations of employees,.He can query the particular employee and browse information. We have developed all the products information individually. Moreover, we have developed more pages for this project. All the pages can be seen from home page. Steps of home page design are add the website logo area, add a navigation menu bar, on the left add product classification, add to cart page, contact us page etc.

3.5.2 Back End

This part provides facility for each store owner to edit and modify information in his own store. Providing validation check for member and store identification, the back end system can securely protect users' proprietary information. In addition, all page views employ session variables to deter manually defined variables by users. Applying user friendly approach, and focusing on web programming inexperience, the user can effortlessly manage his back end information. Inside the back end, users can control and view all store information. Besides that, using content management design, the back end part encompasses with these modules: product management, shop information management, web board management, shopping cart management, member management, promotion management, banner management, plaza management, poll management, currency management and article management. This part is consists of MySQL, XAMPP Server, PHP, IIS etc.

In back end part each function module in system background uses the same design scheme, which involves management functions of goods, product reports, product categories and orders to add, delete, update and check. They all have adopted the front end page requests

sent to the controller action, invoke the service of business processing module, the last action to deal with the results back to the view layer, and the service layer is call one or more DAO methods for data processing. We have developed admin login module for management of our system. Inorder to enter background management system, administrator must log into our system by providing username and password. When the administrator input correct user name and password, he can enter the main interface of the system background. In background of the system admin can manage the product information, order information, product category, sales report, and product report. All the background system are developed by using MySQL, XAMPP server and PHP. We have handled the database by using MySQL, and also handled server by XAMPP and scripting server and making dynamic and interactive web pages by PHP. We have developed product management option for an admin so that he can add, delete and update product information. Admin can also add, delete and update the product category. Apart from admin can add, delete and update the brand name of our shop. We have developed order management for the administration. Order management enables administrators to easily see all the order information, change the orders and delete the order. We have implemented customer management so that admin can see all the information of a customer. Moreover, back end part consists of report management. Admin can see the sales report and product report so that admin can know about how much products are sold and also know about the quantity of the product. Our system has also the option for the admin to see the weekly, monthly and yearly report of the sales report by date picker option. Apart from we have developed search option for admin so that he can find information about any product. That's all about the back-end development of our system

Chapter – 4

Experimental Results

4.1 Introduction

The purpose of testing is to discover errors. Testing is the process of trying to discover every conceivable fault or weakness in a work product. It provides a way to check the functionality of components, sub-assemblies, assemblies and/or a finished product it is the process of exercising software with the intent of ensuring that the Software system meets its requirements and user expectations and does not fail in an unacceptable manner. There are various types of test. Each test type addresses a specific testing requirement. A computerized payroll system performs the same functions that manual methods of payroll do. It stores employee data, such as names, addresses, social security numbers, pay rates and withholding allowances of each person. It calculates payroll taxes and deductions and keeps all data up-to-date after each pay period. With a computerized system, the employee clocks in and out on the authorized computer station. There is no punch card or timesheet to use. The system keeps track of the hours worked each day and can provide updated information on the total hours worked to date with just a click. It can even calculate the gross pay at the same time. Any exceptions like breaks and overtime can be entered and accounted for as well. This saves a great deal of payroll processing time every pay period.

A user friendly based software “Payroll Management System” has been developed for organization, keeping in view the requirements of employees to prepare salary. The objective of the project was to computerize the payroll system which was earlier being handle manually every precaution has been taken at each process involved in the complex of the salary preparation. By computerization it implies all the process handling in the entirely being done by computer. All the record necessary for the processes involved in the salary calculation are stored in a computer based record keeping system using a back-end tool. All the process handling is done at the frontend by using a front-end. The project provides sample facilities to its users. The most important of the facilities are the report generation and printing which provides user with the hard copies of the data also. . Payroll seems simple at its core, but becomes complicated because of the various deductions that come into play. Employers must withhold taxes from each paycheck and make sure accurate funds are paid to the correct government agency. Employers may also be responsible for deducting and paying premiums for insurance and depositing funds into retirement accounts or to selected charities. Payroll processing duties can create a huge burden and unwanted stress for small business owners and can be overwhelming for large businesses. A missed deadline or incorrect filing of taxes can result in fines or jail time. To avoid these issues, small, middle-sized, and large businesses can all benefit from using payroll systems.

4.2 Application

Many employers use a timekeeping system, such as time clock, to track employees' work hours.

A manual system requires tracking employee time by hand, but a computerized payroll system has the ability to automatically transmit employee entries from the timekeeping system into the payroll system. Such a system can separate regular hours from overtime hours worked, although employees may occasionally need to make adjustments.

Computerized payroll systems can round employee work hours into quarter-hour segments and accurately calculate the total hours worked and to be paid, thereby saving time spent on manual calculations. These systems calculate all pay frequencies, such as weekly, biweekly, semimonthly and monthly, based upon the input data received.

A computerized payroll system automatically calculates employee statutory deductions, such as taxes and wage garnishments, and voluntary deductions, such as parking fees, 401(k) contributions and medical benefits. The payroll person simply enters the data upon which the deductions are based, such as Form W-4 information for federal income tax withholding.

A manual payroll system requires you to print paychecks on a typewriter or by hand. A computerized payroll system has direct-deposit capability, which saves money spent on live checks and reconciliation. Additionally, computerized printing of paychecks and pay stubs occurs quickly, regardless of volume.

A computerized payroll system generates payroll reports that allow you to double-check the payroll before printing paychecks or pay stubs. The U.S. Department of Labor requires employers to retain payroll records for at least three years. A computerized system enables hardcopy printing of payroll registers pertaining to each pay period, and also saves the information in the system indefinitely.

Computerized systems help ensure payroll tax compliance by generating tax reports, including quarterly and annual wage statements and employee W-2 forms. These systems provide the company's accountants with the data necessary to handle the company's payroll tax and reconciliation duties and print the necessary reports. Furthermore, these systems track benefit days, such as vacation and personal time, that are taken and paid.

Take a look at your company's filing cabinets. The amount of paperwork may seem small, but it adds up quickly. You have to keep records of your crew's time and payments for at least three years. So how can you make better use of storage space?

With a digital system, you won't have a need for paperwork. Instead, you can keep payroll records on your computer or online. That means you won't have to deal with endless stacks of paper or cabinets full of documents.

An electronic system also offers more storage space. Your office may only have space for a few thousand documents. However, you can save millions of records on most computers. That means you'll never have to worry about running out of storage space again.

Salary and wage deductions are a necessary part of payroll processing. The employer must take mandatory withholding from employee paychecks, including federal income tax, Social Security tax, Medicare tax and usually state income tax. These taxes can be time-consuming and perplexing to compute manually. A number of rules are attached to withholding tax calculations.

With an automated payroll system, the software has the tax rates hard-coded in the system. It calculates the withholding tax for each employee based on the withholding conditions data input. This reduces the likelihood of payroll tax errors, which can result in fees from the IRS and the state taxation agency.

The IRS requires employers to keep employment tax records for a minimum of four years. Furthermore, the U.S. Department of Labor requires payroll records to be kept for at least three years. The manual system requires filing the necessary payroll data by hand, which consumes time and increases clutter. Payroll software generates and stores payroll and employment tax data.

4.3 Conclusions

In this chapter we have discussed about the experimental results of our project. Here, we have analyzed the employees report. Apart from, we have analyzed different types of chart in this chapter. Here we have drawn many types of chart from the data table of our system. Moreover we can see the weekly report chart, daily report chart, monthly report chart and yearly report chart. We have also know about the report chart of the different types of chart. Moreover, we have discussed about the application, financial benefits and advantages of payroll system. That's all about the experimental results. Payroll seems simple at its core, but becomes complicated because of the various deductions that come into play. Employers must withhold taxes from each paycheck and make sure accurate funds are paid to the correct government agency. Employers may also be responsible for deducting and paying premiums for insurance and depositing funds into retirement accounts or to selected charities. Payroll processing duties can create a huge burden and unwanted stress for small business owners and can be overwhelming for large businesses. A missed deadline or incorrect filing of taxes can result in fines or jail time. To avoid these issues, small, middle-sized, and large businesses can all benefit from using payroll systems. For small businesses, payroll system software can mitigate errors in the payroll process and reduce the amount of effort involved in calculating employee hours, wages, and tax withholdings. Payroll software is easy to use and often times very affordable for small businesses. In some cases, small businesses may save money by using payroll processing software instead of other alternatives. Payroll seems simple at its core, but becomes complicated because of the various deductions that come into play. Employers must withhold taxes from each paycheck and make sure accurate funds are paid to the correct government agency. Employers may also be responsible for deducting and paying premiums for insurance and depositing funds into retirement accounts or to selected charities. Payroll processing duties can create a huge burden and unwanted stress for small business owners and can be overwhelming for large businesses. A missed deadline or incorrect filing of taxes can result in fines or jail time. To avoid these issues, small, middle-sized, and large businesses can all benefit from using payroll systems.

Chapter – 5

User Manual

5.1 Introduction

To be used efficiently, all computer software needs certain hardware components or the other software resources to be present on a computer. These pre-requisites are known as (computer) system requirements and are often used as a guideline as opposed to an absolute rule. Most software defines two sets of system requirements: minimum and recommended. With increasing demand for higher processing power and resources in newer versions of software, system requirements tend to increase over time. Industry analysts suggest that this trend plays a bigger part in driving upgrades to existing computer systems than technological advancements. A computerized payroll system performs the same functions that manual methods of payroll do. It stores employee data, such as names, addresses, social security numbers, pay rates and withholding allowances of each person. It calculates payroll taxes and deductions and keeps all data up-to-date after each pay period. With a computerized system, the employee clocks in and out on the authorized computer station. There is no punch card or timesheet to use. The system keeps track of the hours worked each day and can provide updated information on the total hours worked to date with just a click. It can even calculate the gross pay at the same time. Any exceptions like breaks and overtime can be entered and accounted for as well. This saves a great deal of payroll processing time every pay period.

A user friendly based software “**Payroll Management System**” has been developed for organization, keeping in view the requirements of employees to prepare salary. The objective of the project was to computerize the payroll system which was earlier being handle manually every precaution has been taken at each process involved in the complex of the salary preparation. By computerization it implies all the process handling in the entirely being done by computer. All the record necessary for the processes involved in the salary calculation are stored in a computer based record keeping system using a back-end tool. All the process handling is done at the frontend by using a front-end. The project provides sample facilities to its users. The most important of the facilities are the report generation and printing which provides user with the hard copies of the data also. . Payroll seems simple at its core, but becomes complicated because of the various deductions that come into play. Employers must withhold taxes from each paycheck and make sure accurate funds are paid to the correct government agency. Employers may also be responsible for deducting and paying premiums for insurance and depositing funds into retirement accounts or to selected charities. Payroll processing duties can create a huge burden and unwanted stress for small business owners and can be overwhelming for large businesses. A missed deadline or incorrect filing of taxes can result in fines or jail time. To avoid these issues, small, middle-sized, and large businesses can all benefit from using payroll systems.

5.2 System Requirements

Hardware Requirement: The most common set of requirements defined by any operating system or software application is the physical computer resources, also known as hardware. A hardware requirements list is often accompanied by a hardware compatibility list (HCL), especially in case of operating systems. An HCL lists tested, compatibility and sometimes incompatible hardware devices for a particular operating system or application. The following sub-sections discuss the various aspects of hardware requirements.

Hardware Requirements for Server

Processor : Intel dual Core, Core i3

Ram : 1 GB

Hard Disk : 80 GB

CPU Speed : 2.6 GHz

Monitor : EGA / SVGA (display), 800 × 600 24 bits True Color.

Processor: The “brains” of a server, most servers contain multi-core processors so they can attack computing tasks with greater speed and efficiency. In general, the faster our processors, and the more threads that are devoted to our server instance, the better our complex programs and applications will run

Ram: HTML or Hypertext Markup language files are the basic programming files of our website. The optimum size of the HTML file may not be more than 25 – 30 KB, so if our website has hundred pages, the size goes to 2.5 to 3 MB. Now let us add some image files of 12 KB each, let us say 30 in number, it will contribute to our website’s space by another 3.6MB. Let us add on 5 MB more for CSS, JavaScript files, and email accounts. After considering future scaling options, we have arrived at 13 MB website space. The space will vary if it is a flash website.

Hard Disk: A disk space is the amount of storage space which is required for our website. The disk space is offered in different ways by web hosting provider, it can primarily be on the dedicated server or on shared server or you can also opt for virtual private server (VPS). Bandwidth is the amount of data which is transferred through the website at one time. Bandwidth has a user attribute attached wherein the disk space requirement is solely based on the website owner’s perspective.

CPU Speed: If we’re on a shared hosting package, then these CPU resources will be split. The requests will be processed in the order they are received. However, the CPU will be able to process multiple requests at once, and can use time slicing to ensure the requests are handled very quickly. Still, CPUs can get overloaded. If there’s a large surge in traffic, or a huge amount of scripting requests, then the performance of our site will suffer. If we have a large, or high traffic site, we recommend choosing a hosting plan with higher CPU such as a VPS or dedicated server plan

5.2.2 Software Requirement

Software Requirements deal with defining software resource requirements and pre-requisites that need to be installed on a computer to provide optimal functioning of an application. These

requirements or pre-requisites are generally not included in the software installation package and need to be installed separately before the software is installed.

Software Requirements for Server

Pleasant Password Server will operate in a virtualized environment (VMWare or Hyper-V). You can run Pleasant Password Server on the same machine as other applications. Pleasant Password Server will require sufficient RAM and CPU to operate normally, however (see the next point), For maximum security, you should install Pleasant Password Server on a dedicated system or at least on a system with applications serving the same level of security/sensitivity. Access to these systems should then be restricted. While all sensitive data in Pleasant Password Server is either securely hashed or encrypted, it is a best practice for security to limit any opportunities for foul play.

5.3 Conclusions

In this chapter we have discussed about the system requirements. From there anyone can know about the hardware requirements and software requirements. Then we have putted the screenshot of our projects interface and described about the functionalities of our screen shotted pages. Apart from here we can know about the uses of our system. Our interface is very user interactive. So users can use it very easily and order any product without any hesitation. This project helps in understanding the creation of an interactive web page and technologies user to implement it. During the course of the project, we have across the wide variety of problems and difficulties. We have learned the appropriate intricate working behind the dynamic website, how tricky data manipulation can be occurred sometimes but we have done everything. Payroll seems simple at its core, but becomes complicated because of the various deductions that come into play. Employers must withhold taxes from each paycheck and make sure accurate funds are paid to the correct government agency. Employers may also be responsible for deducting and paying premiums for insurance and depositing funds into retirement accounts or to selected charities. Payroll processing duties can create a huge burden and unwanted stress for small business owners and can be overwhelming for large businesses. A missed deadline or incorrect filing of taxes can result in fines or jail time. To avoid these issues, small, middle-sized, and large businesses can all benefit from using payroll systems. For small businesses, payroll system.

Chapter-6

Conclusions

The Internet has become a major resource in modern business, thus computerized payroll system has gained significance not only from the entrepreneur's but also from the employee's point of view. Automated payroll system enables the employer to process its payroll through a computerized system. A manual payroll system requires that the payroll be processed by hand and is therefore a considerably slower procedure than an automated system. The former makes payroll processing simpler, and reduces errors, which are more likely with the manual system. Hourly workers are paid according to hours worked during the pay period. The employer uses a time-keeping system to track hours and pay hourly employees accordingly. It is critical, therefore, that each employee's time is computed accurately.

Many employers use a time clock to track work hours. A manual payroll system requires computing the time clock data by hand; this increases the likelihood of mistakes. The automated time-keeping system allows the employer to import time clock data into payroll software. Specifically, the employee uses a swipe card or badge, or the hand print or fingerprint method, to clock in and out. Once the entries are transported into the payroll software, the software computes the time worked. All the payroll staff member has to do is ensure the time is transported appropriately and make the necessary edits. Successfully, the system has been designed in response to the system analysis. All possible error in the program have been eliminated. Necessary validation techniques have been used and normal, abnormal and extremely data was used to test the system. However, doing this project has been a good boost to our confidence as the future IT member of our global village. Payroll seems simple at its core, but becomes complicated because of the various deductions that come into play. Employers must withhold taxes from each paycheck and make sure accurate funds are paid to the correct government agency. Employers may also be responsible for deducting and paying premiums for insurance and depositing funds into retirement accounts or to selected charities. Payroll processing duties can create a huge burden and unwanted stress for small business owners and can be overwhelming for large businesses. A missed deadline or incorrect filing of taxes can result in fines or jail time. To avoid these issues, small, middle-sized, and large businesses can all benefit from using payroll systems. For small businesses, payroll system software can mitigate errors in the payroll process and reduce the amount of effort involved in calculating employee hours, wages, and tax withholdings. Payroll software is easy to use and often times very affordable for small businesses. In some cases, small businesses may save money by using payroll processing software instead of other alternatives.. However, doing this project has been a good boost to our confidence as the future IT member of our global village. Payroll seems simple at its core, but becomes complicated because of the various deductions that come into play. Payroll seems simple at its core, but becomes complicated because of the various deductions that come into play. Employers must withhold taxes from each paycheck and make sure accurate funds are paid to the correct government agency.

6.2 Limitations

Though we have tried our level best to make our system flawless and user friendly by using the modern technologies, some minor functional and design inconsistencies exist in our

system due to time constraint, design of prototype and cost constraints. The limitations of our system are:

Constant Archiving - Mountains of information are collected with each payroll cycle, and most payroll software programs are designed to keep up. But, that information needs to be archived continuously. And, this daily process needs the help of a human hand. In a busy operation, setting aside this particular slice of time in a workday can become a slight hassle.

Limited Access - In most instances, payroll software is loaded onto one computer and that data can only be accessed from that machine. This can be a hassle, especially if the payroll processing computer goes off the rails. The result could be that whole payroll process goes with it, which can cause headaches throughout the business.

Added Weight to Overhead - Implementing payroll software may also call for a fulltime employee to take on the responsibilities of doing payroll in-house. With an added employee comes the cost of an additional salary and benefits. Also to be considered is the cost of technical support when the inevitable software glitches occur.

Risk of Under withholding - The Internal Revenue Service notes that some payroll software systems are unable to distinguish additional voluntary withholding amounts from regular withholding when calculating catch-up withholding for the current tax year. This kind of glitch does not apply to all payroll software programs, but if not identified or accounted for, a business can be fined for underwith holding.

Security Concerns - Since online payroll services rely on a third party to process and store payroll information, sensitive information about employees and the hours that they work doesn't remain solely within the walls of one's workplace. In an ideal world, all online payroll services would remain very secure and be guaranteed against leaks, but this may not always be the case. Before working with a vendor, be sure to ask about security measures.

Potential for Extra Charges-If you're not converting all your HR processes to an online platform, you may find yourself paying for some unnecessary services. Some payroll vendors package their offerings, potentially giving you access to services currently handled by other third parties or that you manage in house using other systems.

There may also be extra charges for things like report generation or support services.

Payroll processing software programs have their limitations, but they also have their benefits. The technology pros as WiseGeek.org point out the fact that payroll processing software helps to streamline the entire payroll process for a business. What's more, using payroll processing software enables a company to not only calculate wages due to employees, but also helps a business organize and archive important records. Even such things as reimbursing employees for expenses may be easier when payroll software is used.

6.3 Future Works

Our system is developed based on demand of user's satisfaction and facilities. In our system we have used the modern web technologies to make our system fast, convenient and efficient for all of the personnel mentioned. Due to time and cost constraint it was not possible to fulfill all requirements and functionalities those were planned. But in future these planned

functionalities and more improvement will be possible to pursue. The functionalities to be implemented are

More Accessible Payroll Solutions

People working from home are making up a greater percentage of the workforce. Many payroll professionals work on location mainly because that's where their payroll software is housed. With new technology advances, payroll data entry can be done from anywhere, so why not from home? To do this, all you need is an Internet connection and a Web browser. Using a Web-based payroll solution has many advantages. By working with a Web browser, users don't have to worry about loading software onto their computers. Instead, a Web server delivers logic and data required to process payroll to you. Payroll professionals can work at home or spread out the processing to multiple locations. That means offices in Denver, Dallas, and Seattle can all process their own payroll, helping to eliminate check distribution problems, correction of lastminute time entries and setup issues. Because the Web-server is managed centrally by the IT staff -- either a home office if using an in-house solution or by the vendor if using an outsourced solution-- IT resources are usually reduced. There are no client computers to update or fix, and because the payroll system runs on a Web server, only the server needs to be updated and maintained.

Paperless Payroll

Sometimes distributing the payroll process can cause difficulties with actually delivering paychecks to employees. Many employees electronically transfer funds directly into their bank accounts, but some employees do not have bank accounts. According to some estimates, 65 percent of the population are "un-banked" workers, some of whom opt for paper checks and often pay high cashing fees as a result. Recently, as an alternative to checks, payroll cards (sometimes called stored-value-cards) have helped to alleviate some of the problems for these "un-banked" workers. Funds are electronically transferred to an employee's payroll card account instead of a checking account. Fees and rules for these cards vary widely, making it difficult to know which card offers the most value for an organization and its employees. As with most technologies, this industry will also be transformed in coming years. Smart-card technologycards with electronic chips embedded in them-will offer more value to the card holder but also a greater threat to personal information. For example, the credit industry is already examining how to use payment, account balance and purchasing habit information to learn more about the card holder. This information may help supplement poor credit score information with "living" financial information.

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