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PROJECT TITLE: HUMAN RESOURCE MANAGEMENT SYSTEM FOR
HADIYA ZONE

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Acronyms	meaning
HRMS.....	human resource management system
SNNPR.....	South nation nationalities and people region
HR	human resource.
CSS.	cascading style sheet
PHP	Hypertext preprocessor
HTML	hypertext markup language
OOSD	Object oriented system development
OOA	Object oriented Analysis
OOD	Object oriented design

1.1. Introduction

As there are many problems that human beings face throughout their life, it is obvious that we can use computer to solve many of the problems. When saying this, as the computer is the modern technology and problem solver. Nowadays hadiya zone human resource management use manual system and they are facing difficulty in their daily activities. So we can solve this problem by developing new system for hadiya Zone human resource management system. The proposal we have prepared is also the precondition for solving many of the problems of Human Resource Management System for hadiya Zone that is currently handled manually. Therefore, this work that is performed manually needs to be automated to reduce the problems happened.

The proposal includes the profile of the office and also the systems performances are described. In addition, the conditions like the problems in the office, our objective and scope of the project clearly specified .Finally, the tools and techniques we will use and the schedule is summarized as possible as to finish the project in the given time by using these methodologies.

1.2. Background of organization

Hadiya Zone is established in 1920 E.C. It is located in southern nation and nationalities of peoples region. It is 160 km far from the Hawassa, SNNPR town and 232 km from Addis Ababa. Hadiya Zone human resource was established with the establishment of hadiya zone.

Hadiya Zone human resource has much responsibility like keeping record of every employee and other workers, posting notice to absorb new employee, etc. registering new employee, evaluation, placement, and update employee information are also included in their daily responsibility. That is the number of employees during its establishment was not as much the number of as current day employees. Therefore, keeping every record manually was not very difficult. However, currently, because of expansion of faculties, departments and other employees increased simultaneously. So, keeping every record manually became difficult and complex.

1.2.1. Background of the system

In the existing system, all information is recorded on the papers documentation formats manually. Therefore the current system of the organization needs not more attention to reduce the work overload for the office on registering new employee they go here and there office to office for registration. Searching the specific employees information is also another more tiredness work for the HR office since it needs checking when a modification, update, deleting and arranging in orders. The main functions of the system are:

- Registering new employee/hiring employee
- Vacancy notice
- Describe the employee placement
- Modify employee information
- Evaluation
- Reward
- Retirement
- Professional development
- Recruitment
- Managing payroll
- Tracking and managing employee benefits
- Discipline/punishment
- Leave management

1.3. Statement of the problem

Nowadays, the numbers of employee have been increasing all the time. So, these affect the overall performance of the data storing process. These imply data storing will have more complexity and difficulty for manage for employee data. The main problem of HR office of hadiya zone is dealing with their daily job manually. Doing manual has a side effect and has many problems throughout the work. For this reasons the problems that the office currently facing is:

- ❖ Difficulty of searching and modifying employee information if they need.

- ❖ Time consumption because of manual work for simple jobs.
- ❖ Mistakes happened since the work has done manually (lack of accuracy).
- ❖ Lack of reliability because of manual work.
- ❖ Since the work is done manually buying the paper, pen pencil and etc. needs more cost.
- ❖ There is redundancy of data
- ❖ Need large space to store file
- ❖ Human energy loss
- ❖ Loss of employee data due to natural disaster or human error
- ❖ Difficult for preparing to organize the report
- ❖ Security issue problem
- ❖ Less customer satisfaction.

1.4 objectives

1.4.1. General objective

General Objective of our project is to develop web-based online human resource management system for hadiya zone.

1.4.2. Specific objective

To achieve the general objective, the project will also address the following specific objectives:

- More securing the system from current system.
- To reduce the number of employees involved in the record office
- To Minimize cost wasted for manual work like paper and pen
- To make Managing employees easier
- To Minimize data redundancy
- To simplify work
- Inserting, Deleting, Updating and Searching employees in the system.

1.5. Proposed system

After carefully observing the current manual system and identifying all the problems that occurred during all activities of the existing system, the project team has decided to design a web-based system for them. Since the web-based system is fully flagged online at any time, it will solve the problem and limitation of the current manual system. And also the proposed project takes care of all the requirements of HR office and is capable to provide easy and effective storage of information related to employee.

The project uses information technology for managing all of the employee's data. That will make more performance and more reliability of data storing. Therefore, this project is best for the HR office to organize and simplify the access of data and easy modification of the records of employee.

Our proposed system would provide: -

- Very fast and accurate.
- No need of any extra manual effort.
- Reduce the loss of employee data.
- Just need a little knowledge to operate the system.
- Doesn't require any extra hardware device.
- Simplify work load of HR office.
- Saving time and cost.
- Minimizes most paper-based works
- Reducing human labor.
- It enables users to view their recorded information
- Features easy to update, delete, and edit of data
- It facilitates the working system of the HR office.

1.6. Literature review and related work.

We review more documents i.e. articles, business rules and proclamation that are important to our software projects from websites like retailing human resource

challenges, Hemanto RAO,-changing role of HR . The following are some of the articles from different websites:

The actual capital of the organization is the human abilities to utilize the human being as a capital.

Each organization has too much cash to commence the business but have not professional bodies to use them at the right pace and at the right time.

HR is strategic partner of the business which runs with the business and takes the business towards the success.

For good organizational growth employee should maintain their involvement to yield higher productivity. Employee's dedication helps him to achieve his target, and increases his quality of work. Organization should also help the employee in training him to develop his interpersonal skills. Both employer and employee should equally contribute each for individual's growth.

Hence the review of literature has concrete evidence about human resource practices in the organization. The HRM practices like recruitment, and selection , training and development, performance appraisal, reward and recognition helps the organization to achieve their targets and goals.

To get employee the departments who needs employee should write an application letter for their vacant position to personnel department.

To be employed applicants should bring a clearance letter from previous Employer.

1.7. Scope and Limitation.

1.7.1. Scope of project

This project focuses on HRMS for hadiya zone particularly on:

- Registering new Employee
- Updating Employee information
- Search employee information
- Generate reports
- Employee placement
- Vacancy notice

- Retirement
- Professional development
- Discipline/punishment
- Leave management

1.7.2. Limitation of project

Even though, this project is focus on hadiya zone HRMS, it doesn't include payroll system and other system which has relationship in Human Resource Management system. The system can only be accessed if there is a network connection.

1.8 Methods And Tools

Now days there are many tools and techniques available for developing software. But we are concerned on the programming courses and techniques we have learned.

This section discusses the use of software tools and techniques to alleviate the problems of development

1.8.1 Requirement gathering techniques/methods

Data collection methods are the most important part of our project to find the main requirements of system and how to understand the system works. To gather the information we use data collection methods that mentioned as following

- a) **Interview:** To determine the objective and scope of the system we have interviewed the HRM officer and those responsible employees for handling HRM and we will also interview for additional information.
- b) **Analyzing existing document (forms and queries):** In addition to the interview we have observed existing documents that include organizational rules form and queries for allocating and controlling resources used by the system and in future we will analyze the existing documents as need of our system.
- c) **Observing the working environment:** Finally we have observed the working environment to assure those requests gathered using the interview and existing document stated above.

1.8.2 System Analysis and Design Methods

In this project, our team planned to use object oriented system development methodology (OOSD) for the design.

This technique has several phases some of them are:

I. Object Oriented Analysis (OOA)

During this phase the team uses to model the function of the system (use case modelling), find and identify the business objects, organize the objects and identify the relationship between them and finally model the behavior of the objects in detail.

II. Object Oriented Design (OOD)

During this phase our team uses Microsoft Visio software and edrawmax software to refine the use case model and rational rose for designing the sequence, collaboration, activity diagrams and to model object interactions and behavior that support the use case scenario.

1.8.3 Requirement Validation and Verification

Validation: Are we building the right product?

Building the right product implies creating a requirement specification that contains the needs and goals of stakeholders of the software product. Our requirement is valid because we gather it from the organization directly.

Verification: Are we built the product right?

If you do not collect requirements correctly it increases the gap between expected and delivery output/outcome. so we are collect requirements directly from stakeholders(users) of the system. Therefore our requirement is verified.

1.8.4 System Implementation Method

Implementation is an understanding of a technical specification or algorithm as a program software component or other computer systems through computer programming and deployment. In our project, implementation exists for a given specification or standard. so the team is in a position of converting all documents

gathered and designed into the code so that the system would be implemented for the user to be used for the purpose it developed. To implement it, the organization must have a server on which the system would be hosted because this system can run on an internet site with connection available or internet connection.

Implementation is the phase where objectives of physical operations of the system turned into reality i.e. real working model. The process of converting as a new system into an operational one is known as system implementation. This includes all those activities that take place to convert from an old system to a new system. The model will be translated into source code, which includes implementing the attributes and methods of each object and integrating all the objects such that they function as a single system.

1.8.5 Development Environment and Programming Tools

The development environment is the environment that is responsible for developing the software. The development environment of this product will be net beans or eclipse to develop platform-independent software. Development Environments are:

Sublime text (visual studio)

Programming Tools are the programming languages that we will use to develop our system. These are

PHP: - for back end

XAMPP: - as server

HTML: - to describe the structure of the interface

Java script: - for form validation for the interface

CSS for:-

- Used to describe the presentation of documents
- Define sizes, spacing, fonts, colors, layout, etc.
- Improve content accessibility
- Improve flexibility.

1.9 Significance Of The Project

Currently, we are living in a world that most of the thing is handled by technology. So, our system also adding great value to overall working environment of hadiya zone human resource office. Therefore, HRM System for hadiya zone gives many purposes some of them are:-

- Reduce the workload in the present system.
- Reduce time wasted in the data processing.
- It increases popularity and attracts the employee.
- Facilitates accessibility of information.
- It creates the opportunity for giving different feedback
- It is used to give effective and efficient services to employee.
- It enables to decrease the duplication's of data inputs
- It allows creating a secure, comfortable and easy way of data storage
- It also proclaims for the employee if there is new things or messages through the system etc.

1.10 beneficiaries of the system

For HR Office: -

- ❖ Avoiding improper resource consumption like paper, pen...
- ❖ Avoiding data loss because of improper data storage
- ❖ Enhance security mechanisms to protect employee information.
- ❖ Simple process for posting job vacancy.
- ❖ To handle the applicant effectively and support the smooth functioning of the business.
- ❖ reduces work over load of the office

For Employee: -

- ❖ Can view notification send by the department and HR office from anywhere at any time
- ❖ Can be able to fill in leave application form in the appropriate fields online.
- ❖ Can also view their personal information through the system.

For Applicant: -

- ❖ Multiple channels to access services from the institution
- ❖ Simplified process for registering online
- ❖ Can view posted information's from anywhere at any time.

For Department: -

- ❖ Facilitates fast and efficient retrieval of data
- ❖ Avoiding improper resource consumption like paper, pen, ledger...
- ❖ Reduced workload of the office activities such as preparation of reports
- ❖ Simplified process for managing employee information.

For Developers:-

- The proposed system will enhance and deepen our knowledge of programming and system development. This will improve our skills in analyzing and solving problems which may we apply in the real world.
- It helps students to improve their practical skills related to interpersonal, problems solving, research and reporting as well as soft skills.
- The proposed system will benefit the future researchers by making this as their future reference in conducting similar studies.

1.11 Feasibility Study

The feasibility study is an evaluation and analysis of the potential of the proposed project which is based on extensive investigation and research to support the process of decision making.

1.11.1 Technical Feasibility study

The system is technically feasible; this is in the sense that the project team contains enough number of manpower and tools such as programmers, testers, debuggers and the programming tools. The proposed platform has sufficient capacity for future needs. The

system is to be developed by using technological system development techniques such as PHP, CSS and MySQL database to solve problems and the system is developed with skill enough capability to develop the project in addition to this if the system is damaged for different reasons it will be easily fixed by the employees of the organization and it does not. Therefore the system will be technically feasible.

1.11.2 Economic Feasibility study

Cost benefit analysis: The system which we are going to develop will have economic benefit. Those economic benefits may be tangible or intangible

- **Tangible benefit:** This means the concrete benefit that can be expressed in terms of dollars or birr. So the system proposed to develop will decrease a lot of birr that was expensive to buy the hard copy document material such as paper, pencil, rubber, and so on. Also reduce the loss of data that means if it reduces the loss of data it also reduces the cost of replacing the lost data. For example if the Zone have 1000 employees to handle these amount data there must be many people to manage the data and a lot of paper, pen ,and pencil will be bought. But after the system developed the data can be managed with one person and in one computer in very short time.
- **Intangible benefit:** Those benefits that cannot be expressed in terms of birr or dollar. e.g. time, knowledge... etc.

1.11.3 Operational Feasibility study

We are sure that the system we develop will really solve the existing system problems. The system normally automates the existing processing system. Those employees have somewhat computer knowledge workers hence they can easily understand and use our system. Therefore, the system will be designed to be operationally feasible. In addition the system is practical and applicable.

1.11.4 Legal Feasibility study

Assuming ourselves as someone that has full privileges to perform such activities, and having enough deep knowledge about the problem, the law cannot permit us to work with and giving solutions to such problems. So we could.

1.11.5 Political Feasibility study

Political feasibility is used to predict the probable outcomes of a proposed solution to a policy problem through examining the actors, events and environment involved in all stages of the policy-making process.

This project purposely develops for eliminating the drawbacks and limitation that exists in the previous system which is manual and to initiate the user's interest to use the system. So, there is no impact on political as well as legal issues. Our system is not conflicting with the government of the past and the current because our system is based on previous activities in the Hadiya Zone human resource management and is politically accepted.

1.11.6 Schedule Feasibility study

Schedule Feasibility study is all about the probability of a project to be completed within its scheduled time limit, by a planned due date. If a project has a high probability to be completed on time, then its schedule feasibility is appraised as high.

It enables our project to organizational deadlines; our project will be completed in four month.

We scheduled our project into two parts in terms of time.

Part one: From March 25, 2021 up to April 25, 2021 G.C chapter one to chapter three.

Part two: From April 26, 2021 up to July 23, 2021 G.C Chapter for up to six.

Depending on this schedule our project is definitely feasible.

1.12 Project Plan

1.12.1 Time Schedule

Anything that is done without plan and schedule is like the person that his eyes cannot see (blind). Therefore, the schedule is the eye of any project.

To finish our project in time we have planned it as follows.

Id	Task Name	Start Date (GC)	Finish Date (G.C)	Ma 24-25	Ma 26... Apr 05	Apr 06..25	Apr 26.. May20	Ma 21.. Ju 20	Ju 21 Jul15	Jul 16 Jul23
1	Project Proposal	Mar 24,21	Mar 25,21							
2	Requirement specification	Mar 26,21	April 05,21							
3	System analysis	April 06,21	April 25,21							
4	System Design	April 26,21	May 20,21							
5	Implementation	May 21,21	June 20,21							
6	Testing	June 21,21	July 15,21							
7	Deployment	July 16,21	July 23,21							

Table1. Time schedule

1.12.2 Budget Plan

The project we are planning to do needs some software and hard ware. And also require other material such as paper, pen, pencil, air time that are used when gathering the information, design our system manually and so on.

Generally, we can express in the following table.

Item	Quantity	Unit cost per item(birr)	Total cost(birr)
Printing	220 paper	2	440.00
Paper	1 mass	110	110.00
Pen	10	5	50.00

Mobile card	20	10	200.00
CD(RW)	5	25	125.00
Transport	5	80	400.00
Contingency			300.00
Pencil	10	2	20
Total			1645.00

Table3: Cost of project table