ERP for Winsoft

Abstract

ERP

An enterprise resource planning (ERP) project is a large enterprise program, both from a business and technology point of view. It implements new systems and their integration with existing systems. It organizes and co-ordinates the different departments like HR (Human Resource), Accounts, Purchase and Inventory etc. of an organization. An ERP is a companywide computer software system, and functions of a business from shared data stores. An ERP system has a service-oriented architecture with MODULAR hardware and software units and "services" that communicate on a local area network. ERP relates to the integrated software infrastructure that supports the entire company business process. ERP refers to a view of a company and all its parts as connected whole, rather than small units of activity. A multi-module application software that help a company manage the important parts of its business in an integrated fashion. Different sections in the industry are given below

1. HR Module

The function of the human resources department involves tracking employee histories, skills, abilities, salaries, and accomplishments. Replacing certain processes with various levels of HRMS systems can distribute information management responsibilities so that the bulk of information gathering is not delegated strictly to HR. By allowing employees to update personal information and perform other tasks, information is kept more accurate and HR professionals are not bogged down.

Each module performs a separate function within the HRMS that helps with information gathering or tracking. HRMS modules can assist with:

- Managing payroll
- Recruitment and onboarding
- Gathering, storing, and accessing employee information
- Keeping attendance records and tracking absenteeism
- Performance evaluation
- Benefits administration
- Learning management
- Employee self-service
- Employee scheduling
- Analytics and informed decision making

1.1 . **HIRING**

This project is aimed at developing a web-based and central recruitment Process system for the HR Group for a company. Some features of this system will be creating vacancies, storing application data, and Interview process initiation, Scheduling interviews, storing Interview results for the applicant and finally Hiring of the applicant. Reports may be required to be generated for the use of the HR group.

This project 'Winsoft ERP' is an online website in which jobseekers can register themselves and then attend the exam. Based on the outcome of the exam the jobseekers will be short listed. For fresher, the exam will be conducted at some venue after short listing of the preliminary Aptitude Test. The details of the examination, venue & Date of the examination will be made available to them through the website.

1.2. PAYROLL

Payroll is a list of employees who get paid by the company. Payroll also refers to the total amount of money employer pays to the employees. As a business function, it involves:

- Developing organization pay policy including flexible benefits, leave encashment policy, etc.
- o Defining pay slip components like basic, variable pay, HRA, and LTA
- o Gathering other payroll inputs (e.g., organization's food vendor may supply information about the amount to be recovered from the employees for meals consumed)
- The actual calculation of gross salary, statutory as well as non-statutory deductions, and arriving at the net pay
- o Releasing employee salary
- o Depositing dues like TDS, PF, etc. with appropriate authorities and filing returns

Types of users

- Admin
- Candidates
- Employee

System overview

Comparing with existing system.

Finally the comparison is made between the existing system as well as our proposed system, from that some advantages are found in the proposed system. The advantages of the proposed system over the existing system are listed clearly in the following table:

Proposed System	Existing System
Dynamic web pages.	Static web pages.
Automation process.	Manual work load.
No data loss.	Data loss.
High Security.	No Security.

Development

Front end: HTML, CSSBack end: MySQL

• Server side Scripting Language : PHP

Table Design

1) <u>login</u>

Field Name	Type	Size	Description
login_id	Integer	5	Store login-id, Primary Key
emp_id	Integer	5	Store Employee id Foreign key

c_email	Varchar	25	Store company email
			address
password	Varchar	25	Store user password
status	Boolean		Store admin/user
			status

2)registration

Field Name	Type	Size	Description
reg_id	Integer	5	Store Registration-id,
name	Varchar	25	Store name of user
dob	Date		Store user Date Of Birth
home	Varchar	60	Store the flat/home name of user
city	Varchar	60	Store city of user
postoffice	Null		Store post office name
district_id	Integer	10	Store district, foreign key
state_id	Integer	10	Store user state, foreign key
Country_id	Integer	10	Store user Country, foreign key
pin	Integer	6	Store pin number.
email	Varchar	20	Store email
mobile	Integer	10	Store Contact number
apply_date	Date		Date of application applied.

3)documents

Field Name	Type	Size	Description
doc_id	Integer	50	Store document id, Primary key
reg_id	Integer	50	Foreign key reff- Registration.
photo	Varchar	200	Upload photo
resume	Varchar	255	Upload resume
sslc	Varchar	200	Upload SSLC certificate
plus2	Varchar	200	Upload Plus2 Certificate
graduation	Varchar	200	Upload Graduation certificate
postgraduation	Varchar	200	Upload PG certificate.

4) qualifications

Field Name	Type	Size	Description
q_id	Integer	10	Store Qualification id, Prmary key
reg_id	Integer	10	Foreign key reff- redistration
sslc_percent	Integer	10	Store sslc percent
sslc_passdate	Date		Store course completion date
sslc_board	Varchar	25	Store current status
sslc_institution	Varchar	100	Institution name where course done
plus2_percent	Integer	10	Percent/cgpa earned.
plus2_passdate	Date		Store course completion date
plus2_board	Varchar	25	University/Board of course
plus2_institution	Varchar	100	Institution name where course done

degree_cgpa	Integer	10	Percent/cgpa earned.
degree_passdate	Date		Store course completion date
degree_university	Varchar	25	University/Board of course
degree_institution	Varchar	100	Institution name where course done
pg_cgpa	Integer	10	Percent/cgpa earned.
pg_passdate	Date		Store course completion date
pg_university	Varchar	25	University/Board of course
pg_institution	Varchar	100	Institution name where course done

5) Designation

Field Name	Type	Size	Description
des_id	Integer	10	Store designation id, Primary key
des_name	Varchar	20	Store designation
			name
utype_id	Integer	10	Foreign key reff-
			Usertype.
status	Boolean	10	Store current status

6) Department

Field Name	Type	Size	Description
dep_id	Integer	10	Store department id,
dep_name	Varchar	20	primary key Store department
	, u. s		name
status	Boolean	10	Store current status

7) usertype

Field Name	Type	Size	Description
utype_id	Integer	10	Store user type id
utype	Varchar	20	Store user type name

8) employee

Field Name	Type	Size	Description
emp_id	Integer	10	Store employee-id, Primary Key
reg_id	Integer	10	Store registration id Foreign key
des_id	Varchar	10	Store designation id Foreign Key
dep_id	Varchar	10	Store department id Foreign Key
doj	Date		Store date of joining.

9) countries

Field Name	Type	Size	Description
country_id	Integer	10	Store country id, primary key
country_name	Varchar	20	Store country name

10)states

Field Name	Type	Size	Description
state_id	Integer	10	Store state id, primary key
country_id	Integer	10	Foreign key ref- Countries.
state_name	Varchar	20	Store State name

11)district

Field Name	Type	Size	Description
district_id	Integer	10	Store district id, primary key
state_id	Integer	10	Foreign key ref- states.
district_name	Varchar	20	Store district name

PAYROLL

12)deductions

Field Name	Type	Size	Description
ded_id	Integer	10	Store deduction id, primary key
ded_name	Varchar	20	Store deduction name

13) allowances

Field Name	Type	Size	Description
allow_id	Integer	10	Store allowance id, primary key
allow_name	Varchar	20	Store allowance name

14)Emp_deduction

Field Name	Type	Size	Description
emp_ded_id	Integer	10	Store employee allowance id, primary key
Emp_id	Integer	10	Foreign key ref- employee

ded_id	Integer	10	Foreign key ref-
			deductions
ded_amount	Integer	12	Store deduction
			amount

15)emp_allowances

Field Name	Туре	Size	Description
emp_allow_id	Integer	10	Store employee allowance id, primary key
emp_id	Integer	10	Foreign key ref- employee
allow_id	Integer	10	Foreign key ref-
allow amount	Integer	12	allowances Store deduction
allow_amount	Integer	12	amount

13) leave_type

Field Name	Туре	Size	Description
leavetype_id	Integer	10	primary key
leavetype_name	Varchar	20	Store leave type name.

14)leave

Field Name	Type	Size	Description
leave_id	Integer	10	Store employee allowance id, primary key
leavetype_id	Integer	10	Foreign key ref- leavetype
emp_id	Integer	10	Foreign key refemployee

dateofleave	date	Store date

15)overtimes

Field Name	Type	Size	Description
overtime_id	Integer	10	Store overtime id,
			primary key
overtime_type	Varchar	10	Overtime type
			Day/Night
amountperhour	Integer	10	Store amount per
			hour

16)emp_overtime

Field Name	Type	Size	Description
emp_overtime_id	Integer	10	Store employee
			overtime id, primary
			key
overtime_id	Integer	10	Foreign key ref-
			overtime
extrahours	Integer	10	Extra hours employee
			worked

17) emp_ac_details

Field Name	Type	Size	Description
emp_ac_id	Integer	10	Store employee account id, primary key
emp_id	Integer	10	Foreign key ref- employee
Bank_name	Varchar	20	Store bank name
branch	Varchar	20	Store branch name of bank
bankcode	Varchar	10	Store Bank code
ac_number	Varchar	12	Store account number

ifsc_code	Varchar	12	Store ifsc code

18) salary

Field Name	Type	Size	Description
sal_id	Integer	10	Store salary id, primary key
des_id	Integer	10	Foreign key refdesignation.
basic	Integer	10	Store basic salary

19) emp_salary

Field Name	Type	Size	Description
emp_salary_id	Integer	10	Store employee allowance id, primary key
emp_ded_id	Integer	10	Foreign key refemp_deduction
emp_allow_id	Integer	10	Foreign key ref- emp_allowance
emp_overtime_id	Integer	12	Foreign key ref- emp_overtime
sal_id	Integer	12	Foreign key ref- salary.
dateofpay	Date		Date of payment
time	Time		Time of payment

20) complaints

Field Name	Type	Size	Description
complaint_id	Integer	10	Store login-id, Primary Key
emp_id	Integer	10	Store Employee id Foreign key

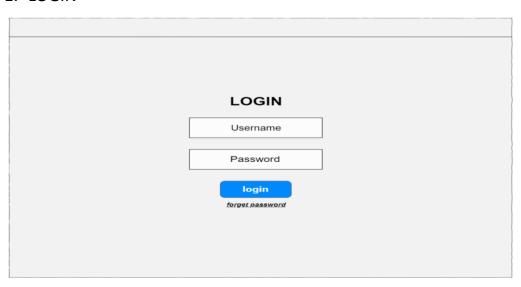
description	Varchar	200	Store complaint
			description
status	Varchar	10	Store status of
			complaint
date	Date		Store date of
			complaint.

21) attendance

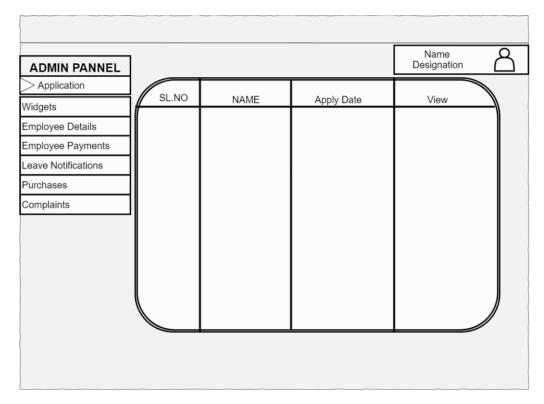
Field Name	Туре	Size	Description
Attendance_id	Integer	10	Store login-id, Primary Key
emp_id	Integer	10	Store Employee id Foreign key
status	Bit		Store status of Attendance
date	Date		Store date of complaint.

FORM DESIGNS

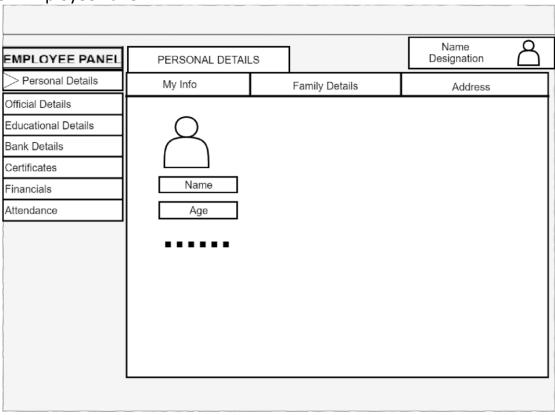
1. LOGIN



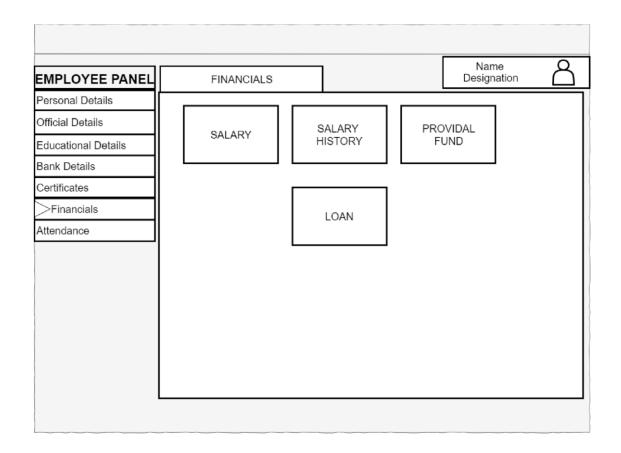
2. Admin Panel



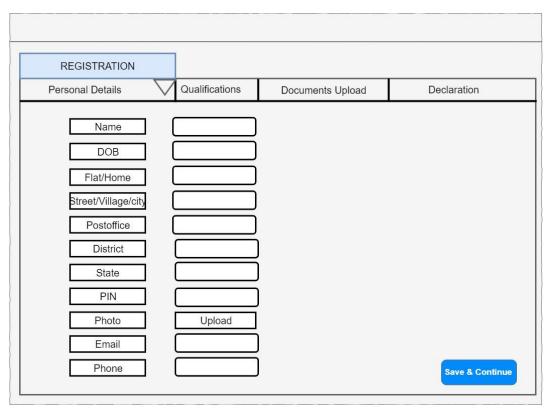
3. Employee Panel



4. Financials



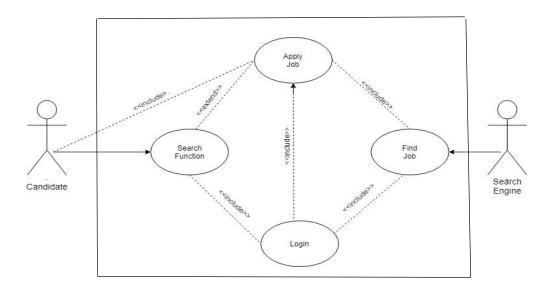
5. Registration



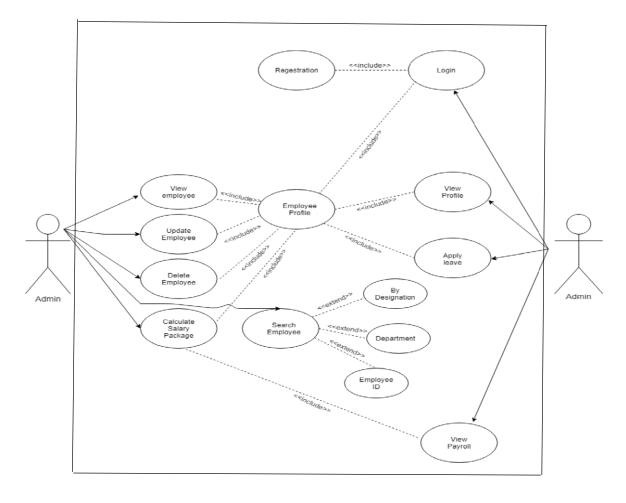
UML DIAGRAMS

USE CASE DIAGRAMS

1:

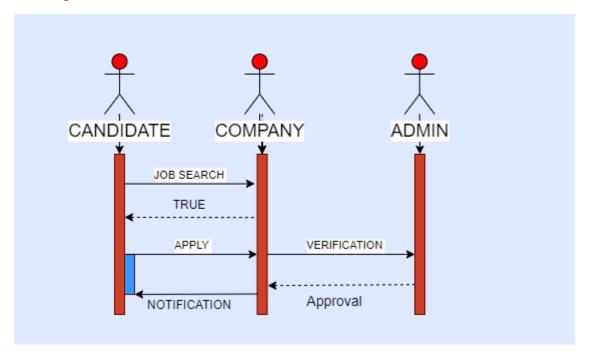


2:

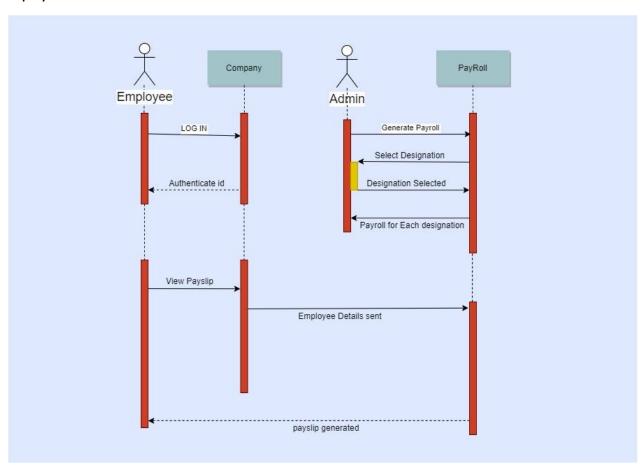


SEQUENCIAL DIAGRAMS

1:hiring module

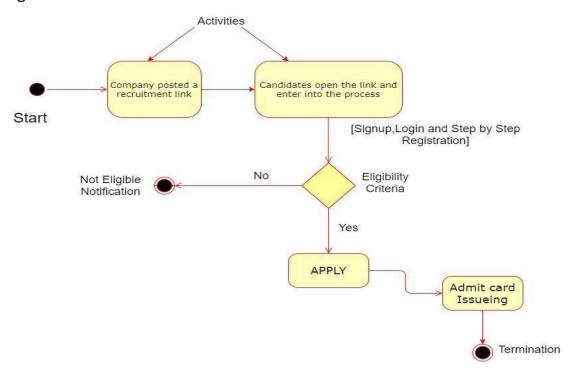


2:payroll Module

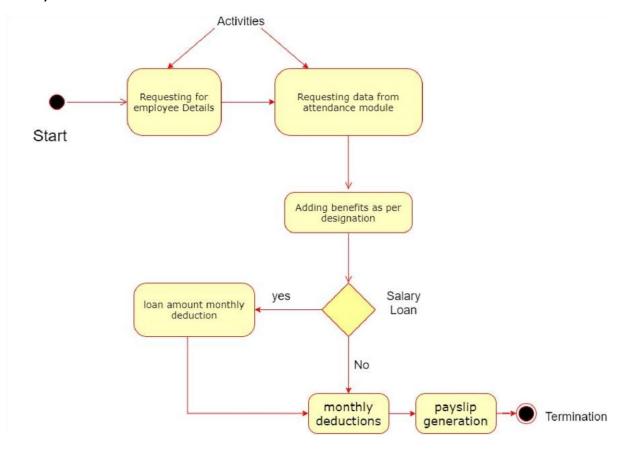


ACTIVITY DIAGRAMS

1.hiring module

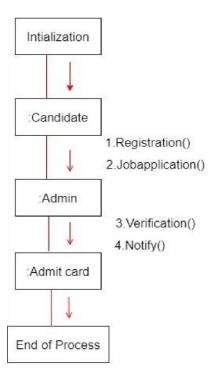


2. Payroll module

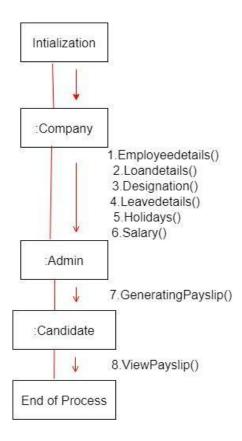


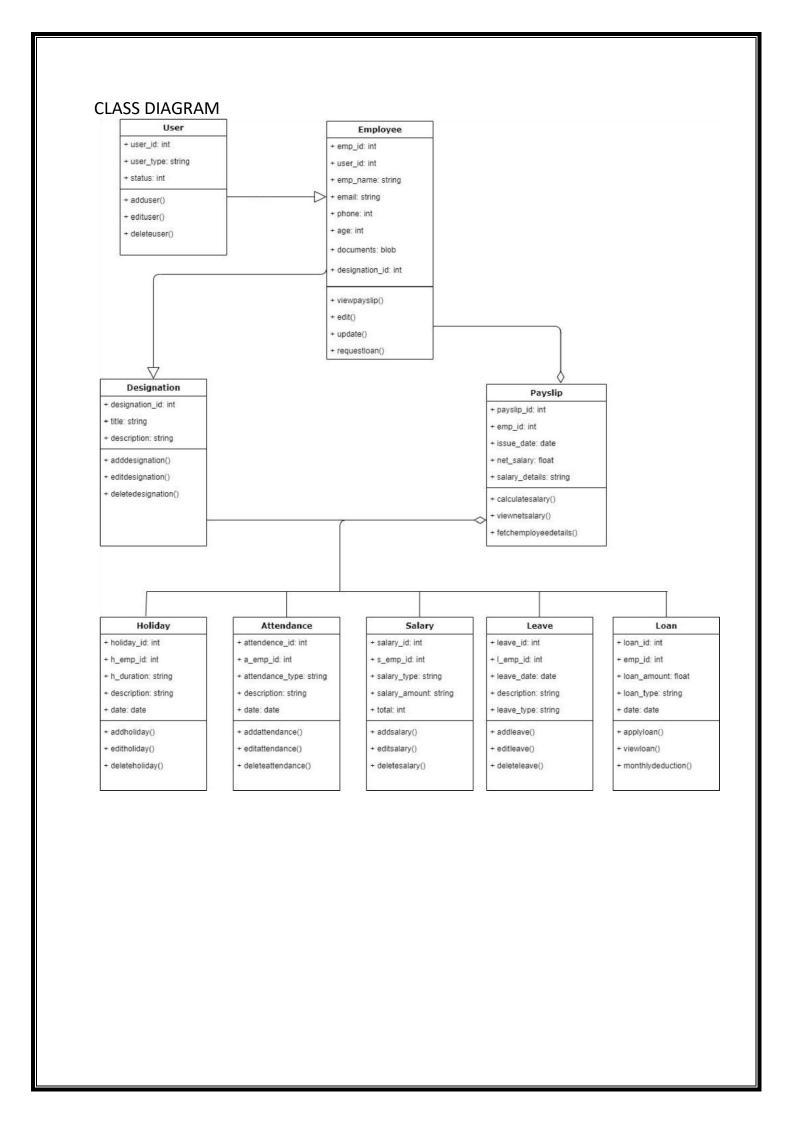
COLLABORATION DIAGRAM

1. Hiring Module



2. Payroll Module





OBJECT DIAGRAM Employee + emp_id: 1 + user_id: 1 + emp_name: Arjun + email: arjunm@gmail.com + phone: 8086229799 + age: 24 + documents: personal_doc.pdf + designation_id: 3 Payslip + payslip_id: 3 + emp_id: 1 + issue_date: 23/1/2020 + net_salary: 20000.00 Holiday Attendance Salary Leave Loan + salary_id: 1 + holiday_id: 1 + loan_id:1 + attendence_id: 2 + leave_id:1 + h_emp_id: 1 + a_emp_id: 1 + s_emp_id: 2 + h_duration: 2 days + attendance: daily + salary type:basic pay +leave_date:23/01/2020 + loan amount: 200000.00 + description: IN/OUT + salary amount:18000.00 + description: sick leave + description: pooja holidays +loan_type:salary loan + date: 20/08/2020 + date: 30/01/2020 + date: date + leave_type: medical

DEPLOYMENT DIAGRAM

