Human Resource Management System

HRMS (Human Resource Management System) is an application software which is basically developed to maintain the Human Resource part of an organization. We can maintain all the records of the employees like we can Add new records, Delete existing records, Update existing records and View existing records.

Technical Specifications:

- **Platform:** This software is developed in Java. It is a GUI (Graphical User Interface) based software which we can run on any computer containing JRE (Java Runtime Environment).
- **Back-end:** Microsoft Access is used for the back-end database part of the software.
- **Security:** Authentication (Username & Password) is required to use this software.
- It contains following *tools*:
    - ❖ **Login Panel:** User has to provide a Username and Password in order to use the software. This is for the security of the software program from unauthenticated users.

    - ❖ **Employee Master:** Employee Master deals with all the operations related to the records of employees.
    All the attributes of the records are according to *AICTE pattern* as:
    Sr No, Faculty College ID, Left the Institute (Yes/No), Faculty Relieved Date, Full Name, Title, First Name, Middle Name, Last Name, Date of Birth, Date of Joining, Sex, Father's Name, Mother's Name, Address, City, State, Postal Code, Religion, Caste, Mobile, Email, PAN No, Aadhar Card No, Designation, Rank, Programme, Course, Appointment, Salary Mode, Doctorate (Yes/No), PG Degree, UG Degree, Other Qualification, Specialization, Teaching Exp, Research Exp, Pay Scale, Pay Scale Type, Basic Salary, Grade Pay/DP, DA, DA Rs, HRA, TA, Other Allowances, Gross Pay/Month, Bank Name, Bank Branch Name, IFSC Code, Bank A/C No, Appointment Type(Regulat/Approved), Approval Letter No, Physically Handicapped (Yes/No), Faculty on Leave (Yes/No), Type of Leave, On Leave From (Date), On Leave Up to (Date).
    We can perform following operations with the help of this tool:
    1. **Adding new record:** Add button will add the new records to the database.
    2. **Updating new record:** Edit button will edit the existing records to update the values in the database.

3. **Searching a record:** Search button will search the existing records from the database using search-keyword.
4. **Viewing a record:** View button will show the existing records from the database using corresponding ID.
5. **Deleting a record:** Delete button will delete the existing records from the database.

❖ **Department Master:** Department Master deals with Departments in the organization, which are to be added in the records of employees.
Operations: We can Add new Department, Edit existing Department, Delete existing Department, Search existing Department.

❖ **Reports:** We can generate reports of the employees' records as per the pattern of AICTE.

❖ **Backup:** This tool provides us facility to take the Backup of the records (database) which will be saved as a backup file in the disk and that can be used to restore the databases in the future in case of any technical disaster.

❖ **Restore:** This tool provides us facility to restore the Backup of the records (database) up to the date when last backup was taken in case of any technical disaster.

❖ **Change Password:** This tool is used to change the login password of the software program. If we want to change the password we will need existing password for authentication and new password that is to be set.

❖ **Logout:** If user wants to logout from the software program then Logout feature is provided there. Logout will redirect user to the login panel.

Future Extension:

This software can be extended in many aspects in the future. We can take it to the next levels to improve the features of this software program like:

• We can connect it to the local area network so that it can be used at many places on the same time which will reduce data redundancy and inconsistency.
• We can connect it to the internet for cloud storage of the databases, to increase its availability and to implement on many number of systems.

- We can associate Leave Master and Attendance Master with it, so that the Attendance system will also be maintained by this software.
- We can use Biometric Fingerprint Scanner/ Employees Smart ID Cards to make the system very easy, efficient, comfortable, reliable and modern.