Title: **HR and Payroll Management**

Features:

1. Employee
2. Attendance
3. Leave
4. Requisition
5. NoticeBoard
6. Department
7. Access Control List

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| **Employee**  CardNo  Name  department  DateOfBirth  FatherName  MotherName  MaritalStatus  BloodGroup  NID  PresentAddress  PermanentAddress  Education  Contact  Email  Gender  Religion  Experience  Skill  employType  designation  signature  Image | **Attendance**  **Employee**  OfficeInTime  OfficeoutTime  lunchOutTime  lunchInTime  Present/Absent  offDayAttend  Total Attendance  **NoticeBoard**  deptType  noticeId  notice  **Depertment**  Deptname  DaptHead | **Leave**  **Employee**  leaveType  startDate  endDate  reasons  approvalLeave  status | **Requisition**  **Employee**  requisitionType  reason  approvalRequi  status |
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First Normal Form: (Define Primary key and foreign key)

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| --- | --- | --- | --- |
| **Employee**  **Id**  CardNo  Name  department  DateOfBirth  FatherName  MotherName  MaritalStatus  BloodGroup  NID  PresentAddress  PermanentAddress  Education  Contact  Email  Gender  Religion  Experience  Skill  employType  designation  signature  Image | **Attendance**  **Id**  EmployeeId  OfficeInTime  OfficeoutTime  lunchOutTime  lunchInTime  Present/Absent  offDayAttend  Total Attendance  **NoticeBoard**  **Id**  EmployeeId  DepartmentId  notice  **Depertment**  **Id**  Deptname  DeptHead | **Leave**  **Id**  EmployeeId  leaveType  startDate  endDate  reasons  approvalLeave  status  **DaptHead**  **Id**  EmployeeId  DepartmentId | **Requisition**  **Id**  EmployeeId  requisitionType  reason  approvalRequi  status |
|  |  |  |  |
|  |  |  |  |
|  |  |  | **AccessControlList**  EmployeeId  CardNo  Password  Type  LogHistory |

**Second Normal Form**: Make new table with common data field and define Primary key and foreign key

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| **Employee**  **Id**  CardNo  Name  DepertmentId  DateOfBirth  FatherName  MotherName  MaritalStatusId  BloodGroup  NID  PresentAddress  PermanentAddress  EducationId  Contact  Email  Gender  Religion  Experience  Skill  employTypeId  designationId  signature  Image | **Attendance**  **Id**  EmployeeId  OfficeInTime  OfficeoutTime  lunchOutTime  lunchInTime  Present/Absent  Total Attendance  **NoticeBoard**  **Id**  EmployeeId  DepartmentId  notice  **Depertment**  **Id**  Deptname  **MaritalStatus**  **Id**  name | **Leave**  **Id**  EmployeeId  leaveTypeId  startDate  endDate  reasons  approvalPersonId  status  **Education**  **Id**  Name | **Requisition**  **Id**  EmployeeId  requisitionTypeId  reason  approvalPersonId  status  **employType**  **id**  name  **designation**  **id**  name |
| **leaveType**  **Id**  name | **approvalPersonId**  **id**  employeeId | **requisitionType**  **Id**  name |  |
|  |  |  |  |
|  |  |  | **AccessControlList**  EmployeeId  CardNo  Password  Type  LogHistory |

Third Normal Form:remove and make new table with irregular and repeated data field and define pk and fk

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| **Employee**  **Id**  CardNo  Name  DepertmentId  DateOfBirth  FatherName  MotherName  MaritalStatusId  BloodGroup  NID  PresentAddress  PermanentAddress  EducationId  Email  Gender  Religion  employTypeId  designationId  signature  Image  **employeeEducation**  **employeeId**  **educationId**  Year | **Attendance**  **Id**  EmployeeId  OfficeInTime  OfficeoutTime  lunchOutTime  lunchInTime  Present/Absent  Total Attendance  **NoticeBoard**  **Id**  EmployeeId  DepartmentId  notice  **Depertment**  **Id**  Deptname  **MaritalStatus**  **Id**  name | **Leave**  **Id**  EmployeeId  leaveTypeId  startDate  endDate  reasons  approvalPersonId  status  **Education**  **Id**  Name  Description  **employeeContact**  **id**  employeeId  name  **employeeExperience**  **id**  employeeId  name | **Requisition**  **Id**  EmployeeId  requisitionTypeId  reason  approvalPersonId  status  **employType**  **id**  name  **designation**  **id**  name  **employeeSkill**  **id**  employeeId  name |
| **leaveType**  **Id**  name | **approvalPersonId**  **id**  employeeId | **requisitionType**  **Id**  name |  |
|  |  |  |  |
|  |  |  | **AccessControlList**  EmployeeId  CardNo  Password  Type  LogHistory |

Fourth Normal Form: remove redundant and dependant data field

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| **Employee**  **Id**  CardNo  Name  DepertmentId  DateOfBirth  FatherName  MotherName  MaritalStatus  BloodGroup  NID  PresentAddress  PermanentAddress  EducationId  Email  Gender  Religion  designationId  signature  Image  employTypeId  **employeeEducation**  **employeeId**  **educationId**  Year | **Attendance**  **Id**  EmployeeId  OfficeInTime  OfficeoutTime  lunchOutTime  lunchInTime  Present/Absent  **NoticeBoard**  **Id**  EmployeeId  DepartmentId  Title  notice  **Depertment**  **Id**  Deptname | **LeaveTable**  **Id**  EmployeeId  leaveTypeId  startDate  endDate  reasons  approvalPersonId  status  **Education**  **Id**  Name  Description  **employeeContact**  **id**  employeeId  name  **employeeExperience**  **id**  employeeId  name | **Requisition**  **Id**  EmployeeId  requisitionTypeId  reason  approvalPersonId  status  **employType**  **id**  name  **designation**  **id**  name  **employeeSkill**  **id**  employeeId  name |
| **leaveType**  **Id**  name |  | **requisitionType**  **Id**  name |  |
|  |  |  |  |
|  |  |  | **AccessControlList**  EmployeeId  CardNo  Password  Type  LogHistory |