## **HRMS Data Model and ETL Process**



Fact Table	Data WareHouse		Dimension Table	Relational	l
punch	identity	constraints	gender	identity	constraints
punch_id	primary_key	INT NOT NULL auto_increment	gender_id	primary_key	INT NOT NULL auto_increment
employee_id	foreign_key from employee table	INT NOT NULL	gender_name	self	VARCHAR(45) NOT NULL
att_date	self	DATE NOT NULL			
punch_in	self	DATETIME NOT NULL	Dimension Table	Relational	
punch_out	self	DATETIME NOT NULL	designation	identity	constraints
			designation_id	primary_key	INT NOT NULL auto_increment
			designation_name	self	VARCHAR(45) NOT NULL
Dimension Table	Relational				

			uesignation_name	SCII	VANCITAN(43) NOT NOLL
Dimension Table	Relational			•	
employee	identity	constraints			
employee_id	primary_key	INT NOT NULL	Dimension Table	Relational	
employee_name	self	VARCHAR(45) NOT NULL	department	identity	constraints
dob	self	DATE NOT NULL	department_id	primary_key	INT NOT NULL auto_increment
gender_id	foreign_key from gender table	INT NOT NULL	department_name	self	VARCHAR(45) NOT NULL
salary	self	INT NOT NULL			
reimbursement	self	INT NOT NULL	Dimension Table	Relational	
doj	self	DATE NOT NULL	bank	identity	constraints
designation_id	foreign_key from designation table	INT NOT NULL	bank_id	primary_key	INT NOT NULL auto_increment
manager_id	foreign_key from employee table (self)	INT NOT NULL	bank_name	self	VARCHAR(45) NOT NULL
department_id	foreign_key from department table	INT NOT NULL			
phone	self	INT NOT NULL	Dimension Table	Relational	
emergency_phone	self	INT NOT NULL	ifsc	identity	constraints
official_email_id	self	VARCHAR(45) NOT NULL	ifsc_id	primary_key	INT NOT NULL auto_increment
personal_email_id	self	VARCHAR(45) NOT NULL	ifsc_name	self	VARCHAR(45) NOT NULL
current_address	self	VARCHAR(45) NOT NULL	bank_id	foreigh_key from bank table	INT NOT NULL
permanent_address	self	VARCHAR(45) NOT NULL			_
education	self	VARCHAR(45) NOT NULL	Dimension Table	Relational	
mother's_name	self	VARCHAR(45) NOT NULL	shift	identity	constraints
father's_name	self	VARCHAR(45) NOT NULL	shift_id	primary_key	INT NOT NULL auto_increment
aadhar_number	self	INT NOT NULL	shift_name	self	VARCHAR(45) NOT NULL
pan_number	self	VARCHAR(45) NOT NULL	shift_login_time	self	DATETIME
bank_id	foreign_key from bank table	INT NOT NULL	shift_logout_time	self	DATETIME
ifsc_id	foreign_key from ifsc table	INT NOT NULL			
name_per_aadhar	self	VARCHAR(45) NOT NULL	Dimension Table	Relational	
shift id	foreign key from shift table	INT NOT NULL	attendence	identity	constraints





Triggers Everyday at 6:00 AM IST		
NoSQL Daily Data Mart 1 condition current year		
daily_agg	identity	
d_attendence_id	primary_key	
employee_id	foreign_key from employees table	
att_date	as it is from punch table	
total_hours	calculation of punch_out - punch_in in hours	
attendence_id	decision of total_hours, foreign_key from attendence table	

Triggers Last Day of the Month at 6:00 AM IST		
NoSQL	Monthly Data Mart 1 condition current year mtd	
monthly_agg	identity	
m_attendence_id	primary_key	
employee_id	foreign_key from employees table	
Month	get month from att_date from daily_agg on last day of month	
Year	get year from att_date from daily_agg on last day of month	
Average_loggedin_hi	calculation of mean of total_hours from daily_agg	
Leave balance	calculation of available monthly balance based on attendence id in daily age	

Dashboarding admin panel				
Designation wise attendence				
Designation wise leave balar	nce Daily, Monthly, Yearly			
Department wise attendence	e Daily, Monthly, Yearly			
Department wise leave balar	nce Daily, Monthly, Yearly			
Shift wise attendence	Daily, Monthly, Yearly			
Shift wise leave balance	Daily, Monthly, Yearly			
Gender wise attendence	Daily, Monthly, Yearly			
Gender wise leave balance	Daily, Monthly, Yearly			
Top 5 attendence	Daily, Monthly, Yearly			
Top 5 leave balance	Daily, Monthly, Yearly			
Bottom 5 attendence	Daily, Monthly, Yearly			
Bottom 5 leave balance	Daily, Monthly, Yearly			
Top 5 late comings of the	Daily, Monthly, Yearly			
Top 5 early leavings	Daily, Monthly, Yearly			