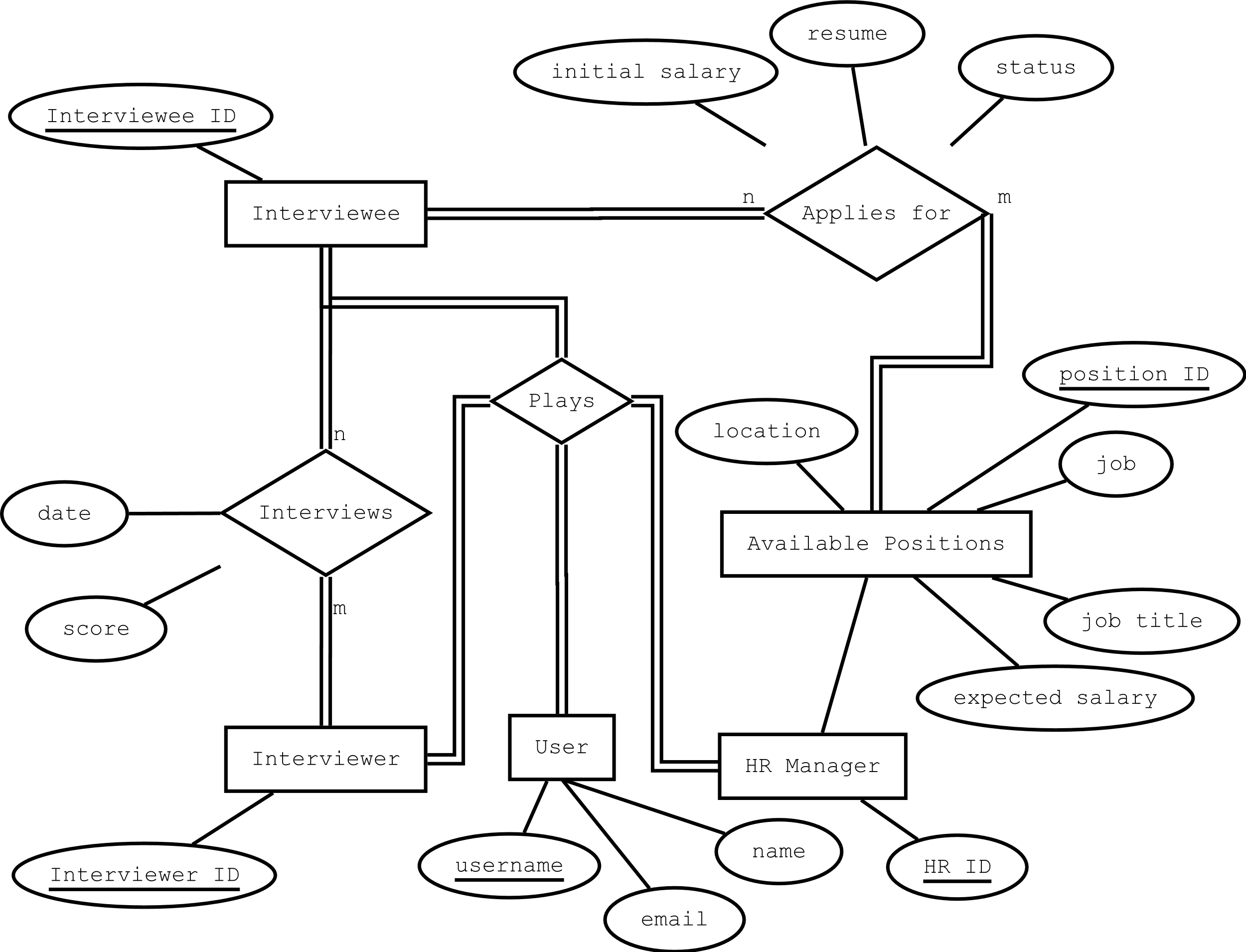
**Human Resources Migration Workflow System**

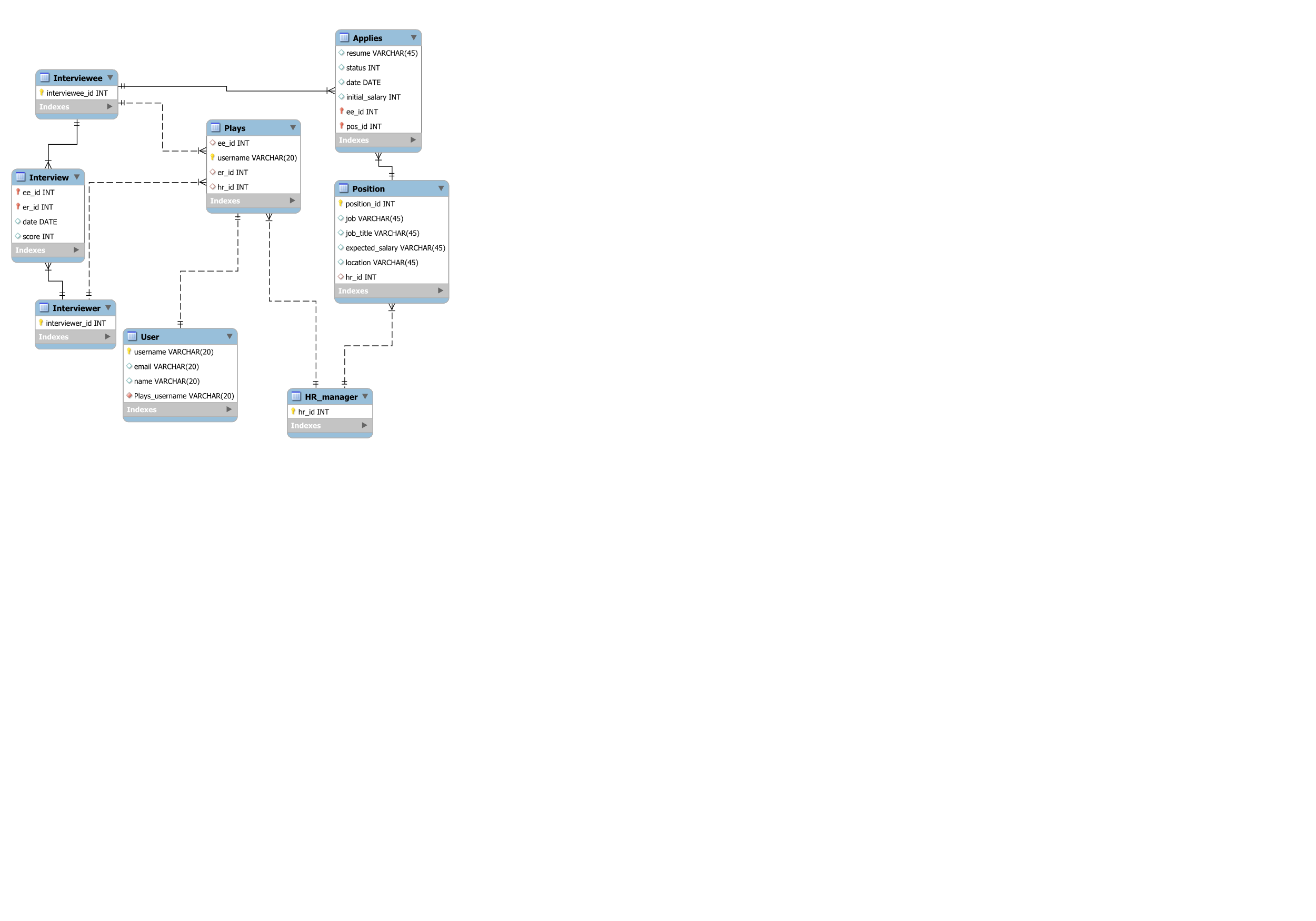
Human Resources Machine

**Section 4.** **Logical Database Design**

**Section 4.1 Entity Relationship Diagram (using Dia)**



**Section 4.2 Logical Database Design (using MySQL Workbench)**



**Section 4.3 Database Schema (A system generated list of tables with attributes and constraints)**

-- MySQL Script generated by MySQL Workbench

-- Sun May 13 11:29:26 2018

-- Model: New Model Version: 1.0

-- MySQL Workbench Forward Engineering

SET @OLD\_UNIQUE\_CHECKS=@@UNIQUE\_CHECKS, UNIQUE\_CHECKS=0;

SET @OLD\_FOREIGN\_KEY\_CHECKS=@@FOREIGN\_KEY\_CHECKS, FOREIGN\_KEY\_CHECKS=0;

SET @OLD\_SQL\_MODE=@@SQL\_MODE, SQL\_MODE='TRADITIONAL,ALLOW\_INVALID\_DATES';

-- -----------------------------------------------------

-- Schema HR\_Migration\_System

-- -----------------------------------------------------

-- -----------------------------------------------------

-- Schema HR\_Migration\_System

-- -----------------------------------------------------

CREATE SCHEMA IF NOT EXISTS `HR\_Migration\_System` DEFAULT CHARACTER SET utf8 ;

USE `HR\_Migration\_System` ;

-- -----------------------------------------------------

-- Table `HR\_Migration\_System`.`Interviewee`

-- -----------------------------------------------------

DROP TABLE IF EXISTS `HR\_Migration\_System`.`Interviewee` ;

CREATE TABLE IF NOT EXISTS `HR\_Migration\_System`.`Interviewee` (

`interviewee\_id` INT NOT NULL AUTO\_INCREMENT,

PRIMARY KEY (`interviewee\_id`),

UNIQUE INDEX `interviewee\_id\_UNIQUE` (`interviewee\_id` ASC))

ENGINE = InnoDB;

-- -----------------------------------------------------

-- Table `HR\_Migration\_System`.`Interviewer`

-- -----------------------------------------------------

DROP TABLE IF EXISTS `HR\_Migration\_System`.`Interviewer` ;

CREATE TABLE IF NOT EXISTS `HR\_Migration\_System`.`Interviewer` (

`interviewer\_id` INT NOT NULL AUTO\_INCREMENT,

PRIMARY KEY (`interviewer\_id`),

UNIQUE INDEX `interviewer\_id\_UNIQUE` (`interviewer\_id` ASC))

ENGINE = InnoDB;

-- -----------------------------------------------------

-- Table `HR\_Migration\_System`.`HR\_manager`

-- -----------------------------------------------------

DROP TABLE IF EXISTS `HR\_Migration\_System`.`HR\_manager` ;

CREATE TABLE IF NOT EXISTS `HR\_Migration\_System`.`HR\_manager` (

`hr\_id` INT NOT NULL AUTO\_INCREMENT,

PRIMARY KEY (`hr\_id`),

UNIQUE INDEX `hr\_id\_UNIQUE` (`hr\_id` ASC))

ENGINE = InnoDB;

-- -----------------------------------------------------

-- Table `HR\_Migration\_System`.`Position`

-- -----------------------------------------------------

DROP TABLE IF EXISTS `HR\_Migration\_System`.`Position` ;

CREATE TABLE IF NOT EXISTS `HR\_Migration\_System`.`Position` (

`position\_id` INT NOT NULL,

`job` VARCHAR(45) NULL,

`job\_title` VARCHAR(45) NULL,

`expected\_salary` VARCHAR(45) NULL,

`location` VARCHAR(45) NULL,

`hr\_id` INT NULL,

PRIMARY KEY (`position\_id`),

UNIQUE INDEX `position\_id\_UNIQUE` (`position\_id` ASC),

INDEX `hr\_id\_idx` (`hr\_id` ASC),

CONSTRAINT `hr\_id`

FOREIGN KEY (`hr\_id`)

REFERENCES `HR\_Migration\_System`.`HR\_manager` (`hr\_id`)

ON DELETE NO ACTION

ON UPDATE NO ACTION)

ENGINE = InnoDB;

-- -----------------------------------------------------

-- Table `HR\_Migration\_System`.`Plays`

-- -----------------------------------------------------

DROP TABLE IF EXISTS `HR\_Migration\_System`.`Plays` ;

CREATE TABLE IF NOT EXISTS `HR\_Migration\_System`.`Plays` (

`ee\_id` INT NULL,

`username` VARCHAR(20) NOT NULL,

`er\_id` INT NULL,

`hr\_id` INT NULL,

PRIMARY KEY (`username`),

UNIQUE INDEX `username\_UNIQUE` (`username` ASC),

INDEX `ee\_id\_idx` (`ee\_id` ASC),

INDEX `er\_id\_idx` (`er\_id` ASC),

INDEX `hr\_id\_idx` (`hr\_id` ASC),

CONSTRAINT `ee\_id`

FOREIGN KEY (`ee\_id`)

REFERENCES `HR\_Migration\_System`.`Interviewee` (`interviewee\_id`)

ON DELETE NO ACTION

ON UPDATE NO ACTION,

CONSTRAINT `er\_id`

FOREIGN KEY (`er\_id`)

REFERENCES `HR\_Migration\_System`.`Interviewer` (`interviewer\_id`)

ON DELETE NO ACTION

ON UPDATE NO ACTION,

CONSTRAINT `hr\_id`

FOREIGN KEY (`hr\_id`)

REFERENCES `HR\_Migration\_System`.`HR\_manager` (`hr\_id`)

ON DELETE NO ACTION

ON UPDATE NO ACTION)

ENGINE = InnoDB;

-- -----------------------------------------------------

-- Table `HR\_Migration\_System`.`User`

-- -----------------------------------------------------

DROP TABLE IF EXISTS `HR\_Migration\_System`.`User` ;

CREATE TABLE IF NOT EXISTS `HR\_Migration\_System`.`User` (

`username` VARCHAR(20) NOT NULL,

`email` VARCHAR(20) NULL,

`name` VARCHAR(20) NULL,

`Plays\_username` VARCHAR(20) NOT NULL,

PRIMARY KEY (`username`),

UNIQUE INDEX `username\_UNIQUE` (`username` ASC),

INDEX `fk\_User\_Plays\_idx` (`Plays\_username` ASC),

CONSTRAINT `fk\_User\_Plays`

FOREIGN KEY (`Plays\_username`)

REFERENCES `HR\_Migration\_System`.`Plays` (`username`)

ON DELETE NO ACTION

ON UPDATE NO ACTION)

ENGINE = InnoDB;

-- -----------------------------------------------------

-- Table `HR\_Migration\_System`.`Applies`

-- -----------------------------------------------------

DROP TABLE IF EXISTS `HR\_Migration\_System`.`Applies` ;

CREATE TABLE IF NOT EXISTS `HR\_Migration\_System`.`Applies` (

`resume` VARCHAR(45) NULL,

`status` INT NULL,

`date` DATE NULL,

`initial\_salary` INT NULL,

`ee\_id` INT NOT NULL,

`pos\_id` INT NOT NULL,

PRIMARY KEY (`ee\_id`, `pos\_id`),

INDEX `pos\_id\_idx` (`pos\_id` ASC),

CONSTRAINT `ee\_id`

FOREIGN KEY (`ee\_id`)

REFERENCES `HR\_Migration\_System`.`Interviewee` (`interviewee\_id`)

ON DELETE NO ACTION

ON UPDATE NO ACTION,

CONSTRAINT `pos\_id`

FOREIGN KEY (`pos\_id`)

REFERENCES `HR\_Migration\_System`.`Position` (`position\_id`)

ON DELETE NO ACTION

ON UPDATE NO ACTION)

ENGINE = InnoDB;

-- -----------------------------------------------------

-- Table `HR\_Migration\_System`.`Interview`

-- -----------------------------------------------------

DROP TABLE IF EXISTS `HR\_Migration\_System`.`Interview` ;

CREATE TABLE IF NOT EXISTS `HR\_Migration\_System`.`Interview` (

`ee\_id` INT NOT NULL,

`er\_id` INT NOT NULL,

`date` DATE NULL,

`score` INT NULL,

PRIMARY KEY (`ee\_id`, `er\_id`),

INDEX `er\_id\_idx` (`er\_id` ASC),

CONSTRAINT `ee\_id`

FOREIGN KEY (`ee\_id`)

REFERENCES `HR\_Migration\_System`.`Interviewee` (`interviewee\_id`)

ON DELETE NO ACTION

ON UPDATE NO ACTION,

CONSTRAINT `er\_id`

FOREIGN KEY (`er\_id`)

REFERENCES `HR\_Migration\_System`.`Interviewer` (`interviewer\_id`)

ON DELETE NO ACTION

ON UPDATE NO ACTION)

ENGINE = InnoDB;

SET SQL\_MODE=@OLD\_SQL\_MODE;

SET FOREIGN\_KEY\_CHECKS=@OLD\_FOREIGN\_KEY\_CHECKS;

SET UNIQUE\_CHECKS=@OLD\_UNIQUE\_CHECKS;

**Section 4.4 Your Meeting Log**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***No*** | ***Date and time*** | ***Duration*** | ***Location*** | ***Discussion topic*** | ***Attenders*** |
| 1 | 3/17/2018:3:00pm | 2.5 hrs | 709 Gewu | Project selection | Ning Zhang  Yingkai Sun  Yue Han  Yukun Ma |
| 2 | 3/23/2018:3:00pm | 2 hrs | 709 Gewu | Requirements | Ning Zhang  Yingkai Sun  Yue Han  Yukun Ma |
| 3 | 3/25/2018:8:00pm | 2 hrs | 709 Gewu | Requirements | Ning Zhang  Yingkai Sun  Yue Han  Yukun Ma |
| 4 | 4/1/2018:4:00pm | 2 hrs | 709 Gewu | Requirements | Ning Zhang  Yingkai Sun  Yue Han  Yukun Ma |
| 5 | 4/8/2018:19:00pm | 2 hrs | 709 Gewu | Use Case Diagram | Ning Zhang  Yingkai Sun  Yue Han  Yukun Ma |
| 6 | 4/14/2018:21:00pm | 1 hr | 709 Gewu | Use Case Diagram | Ning Zhang  Yingkai Sun  Yue Han  Yukun Ma |
| 7 | 4/22/2018:16:00pm | 3 hrs | 709 Gewu | Application Design | Ning Zhang  Yingkai Sun  Yue Han  Yukun Ma |
| 8 | 4/29/2018:20:00pm | 3 hrs | 709 Gewu | User Interface Design | Ning Zhang  Yingkai Sun  Yue Han  Yukun Ma |
| 9 | 5/13/2018:20:00pm | 3 hrs | 709 Gewu | Logical Database Design | Ning Zhang  Yingkai Sun  Yue Han  Yukun Ma |