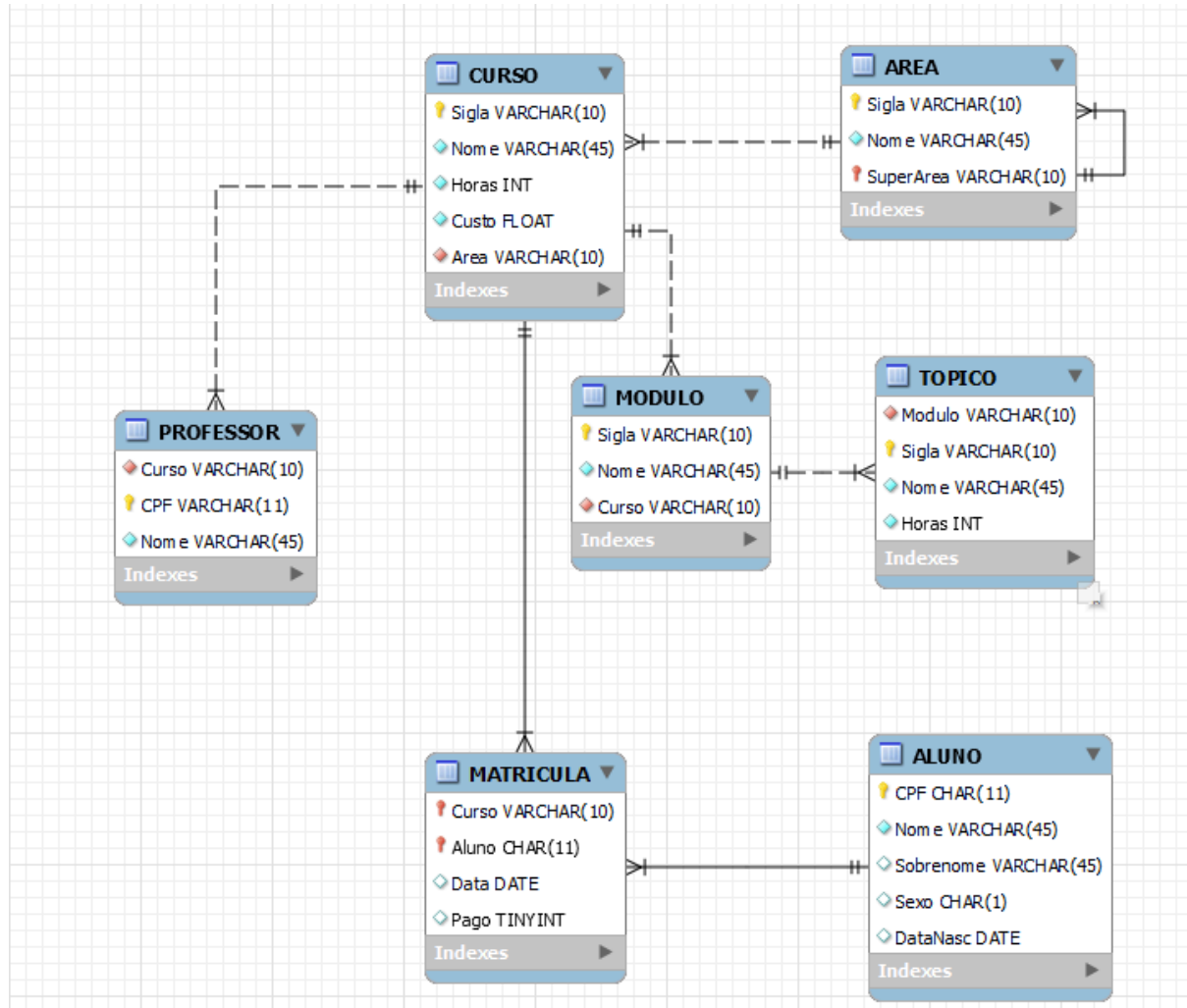


Hands on 6: SQL (DDL)

Aluno: João Madeira Carneiro Braga de Freitas

Matricula: 800854

1) Diagrama:



2) Consultas SQL:

```
-- MySQL Script generated by MySQL Workbench
-- Mon Mar 18 18:34:30 2024
-- 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='ONLY_FULL_GROUP_BY,STRICT_TRANS_TABLES,NO_ZERO_IN_DATE,NO_  
ZERO_DATE,ERROR_FOR_DIVISION_BY_ZERO,NO_ENGINE_SUBSTITUTION';
```

```
-- -----  
-- Schema mydb  
-- -----
```

```
CREATE SCHEMA IF NOT EXISTS `mydb`;  
USE `mydb`;
```

```
-- -----  
-- Table `ALUNO`  
-- -----
```

```
DROP TABLE IF EXISTS `ALUNO` ;
```

```
CREATE TABLE IF NOT EXISTS `ALUNO` (  
  `CPF` CHAR(11) NOT NULL,  
  `Nome` VARCHAR(45) NOT NULL,  
  `Sobrenome` VARCHAR(45) NULL,  
  `Sexo` CHAR(1) NULL,  
  `DataNasc` DATE NULL,  
  PRIMARY KEY (`CPF`))  
ENGINE = InnoDB;
```

```
-- -----  
-- Table `AREA`  
-- -----
```

```
DROP TABLE IF EXISTS `AREA` ;
```

```
CREATE TABLE IF NOT EXISTS `AREA` (  
  `Sigla` VARCHAR(10) NOT NULL,  
  `Nome` VARCHAR(45) NOT NULL,  
  `SuperArea` VARCHAR(10) NOT NULL,  
  PRIMARY KEY (`Sigla`, `SuperArea`),  
  CONSTRAINT `fk_AREA_AREA1`  
    FOREIGN KEY (`SuperArea`)  
    REFERENCES `AREA` (`Sigla`)  
    ON DELETE NO ACTION  
    ON UPDATE NO ACTION)  
ENGINE = InnoDB;
```

```
CREATE INDEX `fk_AREA_AREA1_idx` ON `AREA` (`SuperArea` ASC) VISIBLE;
```

```
-- -----  
-- Table `CURSO`  
-- -----
```

```
DROP TABLE IF EXISTS `CURSO` ;
```

```

CREATE TABLE IF NOT EXISTS `CURSO` (
  `Sigla` VARCHAR(10) NOT NULL,
  `Nome` VARCHAR(45) NOT NULL,
  `Horas` INT NOT NULL,
  `Custo` FLOAT NOT NULL,
  `Area` VARCHAR(10) NOT NULL,
  PRIMARY KEY (`Sigla`),
  CONSTRAINT `fk_CURSO_AREA`
    FOREIGN KEY (`Area`)
    REFERENCES `AREA` (`Sigla`)
    ON DELETE NO ACTION
    ON UPDATE NO ACTION)
ENGINE = InnoDB;

```

```

CREATE INDEX `fk_CURSO_AREA_idx` ON `CURSO` (`Area` ASC) VISIBLE;

```

```

-----
-- Table `MATRICULA`
-----

```

```

DROP TABLE IF EXISTS `MATRICULA` ;

```

```

CREATE TABLE IF NOT EXISTS `MATRICULA` (
  `Curso` VARCHAR(10) NOT NULL,
  `Aluno` CHAR(11) NOT NULL,
  `Data` DATE NULL,
  `Pago` TINYINT NULL,
  PRIMARY KEY (`Curso`, `Aluno`),
  CONSTRAINT `fk_CURSO_has_ALUNO_CURSO1`
    FOREIGN KEY (`Curso`)
    REFERENCES `CURSO` (`Sigla`)
    ON DELETE NO ACTION
    ON UPDATE NO ACTION,
  CONSTRAINT `fk_CURSO_has_ALUNO_ALUNO1`
    FOREIGN KEY (`Aluno`)
    REFERENCES `ALUNO` (`CPF`)
    ON DELETE NO ACTION
    ON UPDATE NO ACTION)
ENGINE = InnoDB;

```

```

CREATE INDEX `fk_CURSO_has_ALUNO_ALUNO1_idx` ON `MATRICULA` (`Aluno` ASC)
VISIBLE;

```

```

CREATE INDEX `fk_CURSO_has_ALUNO_CURSO1_idx` ON `MATRICULA` (`Curso` ASC)
VISIBLE;

```

-- Table `MODULO`

DROP TABLE IF EXISTS `MODULO` ;

CREATE TABLE IF NOT EXISTS `MODULO` (
 `Sigla` VARCHAR(10) NOT NULL,
 `Nome` VARCHAR(45) NOT NULL,
 `Curso` VARCHAR(10) NOT NULL,
 PRIMARY KEY (`Sigla`),
 CONSTRAINT `fk_MODULO_CURSO1`
 FOREIGN KEY (`Curso`)
 REFERENCES `CURSO` (`Sigla`)
 ON DELETE NO ACTION
 ON UPDATE NO ACTION)
ENGINE = InnoDB;

CREATE INDEX `fk_MODULO_CURSO1_idx` ON `MODULO` (`Curso` ASC) VISIBLE;

-- Table `PROFESSOR`

DROP TABLE IF EXISTS `PROFESSOR` ;

CREATE TABLE IF NOT EXISTS `PROFESSOR` (
 `Curso` VARCHAR(10) NOT NULL,
 `CPF` VARCHAR(11) NOT NULL,
 `Nome` VARCHAR(45) NOT NULL,
 PRIMARY KEY (`CPF`),
 CONSTRAINT `fk_PROFESSOR_CURSO1`
 FOREIGN KEY (`Curso`)
 REFERENCES `CURSO` (`Sigla`)
 ON DELETE NO ACTION
 ON UPDATE NO ACTION)
ENGINE = InnoDB;

CREATE INDEX `fk_PROFESSOR_CURSO1_idx` ON `PROFESSOR` (`Curso` ASC) VISIBLE;

-- Table `TOPICO`

DROP TABLE IF EXISTS `TOPICO` ;

CREATE TABLE IF NOT EXISTS `TOPICO` (
 `Modulo` VARCHAR(10) NOT NULL,
 `Sigla` VARCHAR(10) NOT NULL,

```
`Nome` VARCHAR(45) NOT NULL,  
`Horas` INT NOT NULL,  
PRIMARY KEY (`Sigla`),  
CONSTRAINT `fk_TOPICO_MODULO1`  
FOREIGN KEY (`Modulo`)  
REFERENCES `MODULO` (`Sigla`)  
ON DELETE NO ACTION  
ON UPDATE NO ACTION)  
ENGINE = InnoDB;
```

```
CREATE INDEX `fk_TOPICO_MODULO1_idx` ON `TOPICO` (`Modulo` ASC) VISIBLE;
```

```
SET SQL_MODE=@OLD_SQL_MODE;  
SET FOREIGN_KEY_CHECKS=@OLD_FOREIGN_KEY_CHECKS;  
SET UNIQUE_CHECKS=@OLD_UNIQUE_CHECKS;
```