### **BINV3STMENT ASSISTANT**

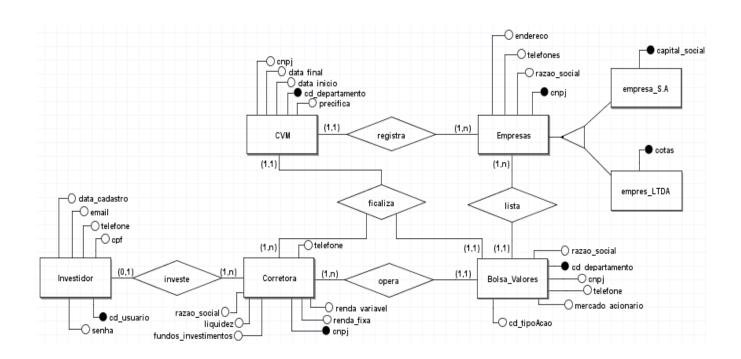
Leonardo Paganini – RM96562

Mariana Marques Sabio – RM96906

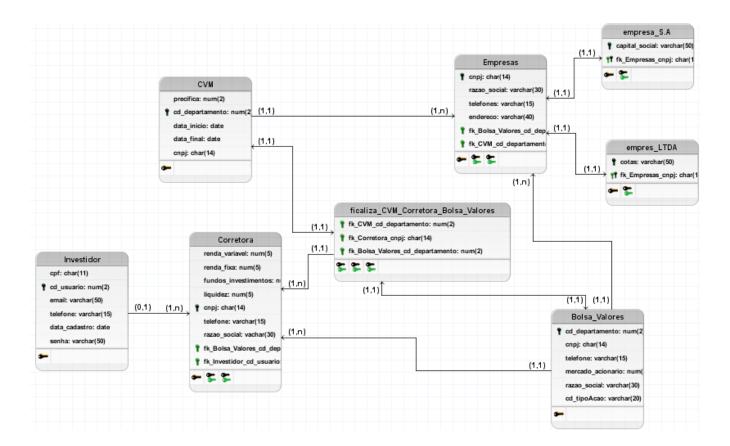
Matheus Leite Oliveira Scalfo – RM96893

Jhonn Brandon Cabrera Tacachiri – RM97305

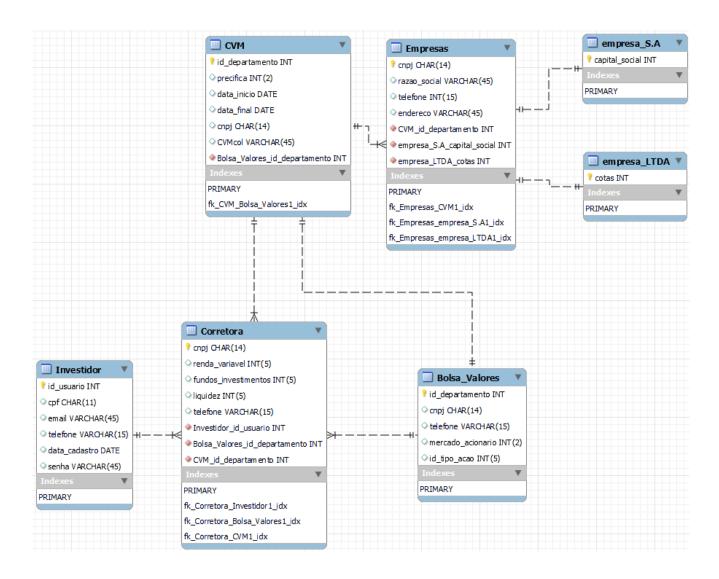
## Migração do modelo conceitual



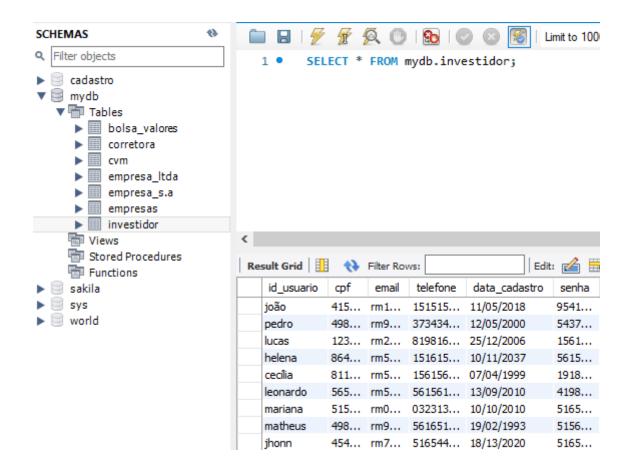
# modelo lógico relacional



# Criação do modelo físico, implementando os tipos de dados, tamanhos e suas regra



## Implementação do desenho do modelo físico



#### dicionário de dados

```
1
       -- MySQL Workbench Forward Engineering
3 •
       SET @OLD_UNIQUE_CHECKS=@@UNIQUE_CHECKS, UNIQUE_CHECKS=0;
 4 • SET @OLD_FOREIGN_KEY_CHECKS=@@FOREIGN_KEY_CHECKS, FOREIGN_KEY_CHECKS=0;
 5 • 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';
 8
       -- Schema mydb
10
11
12
       -- Schema mydb
13
14 • CREATE SCHEMA IF NOT EXISTS `mydb` DEFAULT CHARACTER SET utf8 ;
15 • USE `mydb` ;
17
18
     -- Table `mydb`.`Investidor`
19
20 • ⊝ CREATE TABLE IF NOT EXISTS `mydb`.`Investidor` (
        `id_usuario` INT NOT NULL,
         `cpf` CHAR(11) NULL,
22
        `email` VARCHAR(45) NULL,
23
        `telefone` VARCHAR(15) NULL,
     `data_cadastro` DATE NULL,
`senha` VARCHAR(45) NULL,
PRIMARY KEY (`id_usuario`))
25
27
28
     ENGINE = InnoDB;
       -- Table `mydb`.`Bolsa_Valores`
32
34 • ⊝ CREATE TABLE IF NOT EXISTS `mydb`.`Bolsa_Valores` (
        `id_departamento` INT NOT NULL,
`cnpj` CHAR(14) NULL,
35
        `telefone` VARCHAR(15) NULL,
37
      `mercado_acionario` INT(2) NULL,
`id_tipo_acao` INT(5) NULL,
PRIMARY KEY (`id_departamento`))
39
40
    ENGINE = InnoDB;
```

```
44
45
       -- Table `mydb`.`CVM`
       ______
47 • ⊖ CREATE TABLE IF NOT EXISTS `mydb`.`CVM` (
        'id_departamento' INT NOT NULL,
         `precifica` INT(2) NULL,
49
         `data_inicio` DATE NULL,
50
         'data final' DATE NULL,
51
         `cnpj` CHAR(14) NULL,
52
         `CVMcol` VARCHAR(45) NULL,
53
         `Bolsa_Valores_id_departamento` INT NOT NULL,
54
         PRIMARY KEY (`id_departamento`),
55
         INDEX `fk CVM Bolsa Valores1 idx` (`Bolsa Valores id departamento` ASC),
56
         CONSTRAINT `fk_CVM_Bolsa_Valores1`
57
           FOREIGN KEY (`Bolsa Valores id departamento`)
58
           REFERENCES `mydb`.`Bolsa_Valores` (`id_departamento`)
59
          ON DELETE NO ACTION
60
          ON UPDATE NO ACTION)
61
       ENGINE = InnoDB;
62
```

```
65
66
       -- Table `mydb`.`Corretora`
67
68 • ○ CREATE TABLE IF NOT EXISTS `mydb`.`Corretora` (
         `cnpj` CHAR(14) NOT NULL,
69
         `renda variavel` INT(5) NULL,
70
71
         `fundos_investimentos` INT(5) NULL,
         `liquidez` INT(5) NULL,
72
         `telefone` VARCHAR(15) NULL,
73
         `Investidor id usuario` INT NOT NULL,
74
         `Bolsa_Valores_id_departamento` INT NOT NULL,
75
         `CVM_id_departamento` INT NOT NULL,
76
77
         PRIMARY KEY ('cnpj'),
         INDEX `fk_Corretora_Investidor1_idx` (`Investidor_id_usuario` ASC) ,
78
         INDEX `fk_Corretora_Bolsa_Valores1_idx` (`Bolsa_Valores_id_departamento` ASC) ,
79
         INDEX `fk Corretora CVM1 idx` (`CVM id departamento` ASC),
80
81
         CONSTRAINT `fk_Corretora_Investidor1`
           FOREIGN KEY ('Investidor id usuario')
82
           REFERENCES `mydb`.`Investidor` (`id_usuario`)
           ON DELETE NO ACTION
84
           ON UPDATE NO ACTION,
85
         CONSTRAINT `fk Corretora Bolsa Valores1`
86
           FOREIGN KEY (`Bolsa_Valores_id_departamento`)
87
           REFERENCES `mydb`.`Bolsa_Valores` (`id_departamento`)
88
89
           ON DELETE NO ACTION
90
           ON UPDATE NO ACTION,
         CONSTRAINT `fk Corretora CVM1`
91
           FOREIGN KEY ('CVM id departamento')
92
           REFERENCES `mydb`.`CVM` (`id_departamento`)
93
           ON DELETE NO ACTION
94
           ON UPDATE NO ACTION)
95
       ENGINE = InnoDB;
96
```

```
99
100
       -- Table `mydb`.`empresa S.A`
101
102 • ○ CREATE TABLE IF NOT EXISTS `mydb`.`empresa_S.A` (
          `capital_social` INT NOT NULL,
103
       PRIMARY KEY (`capital_social`))
104
       ENGINE = InnoDB;
105
106
107
108
       -- Table `mydb`.`empresa_LTDA`
109
110
111 • 

CREATE TABLE IF NOT EXISTS `mydb`.`empresa_LTDA` (
         `cotas` INT NOT NULL,
112
       PRIMARY KEY (`cotas`))
113
114     ENGINE = InnoDB;
```

```
117
118
        -- Table `mydb`.`Empresas`
        ______
119
120 • ⊖ CREATE TABLE IF NOT EXISTS `mydb`.`Empresas` (
          `cnpj` CHAR(14) NOT NULL,
121
          `razao_social` VARCHAR(45) NULL,
122
         `telefone` INT(15) NULL,
123
124
          'endereco' VARCHAR(45) NULL,
          `CVM_id_departamento` INT NOT NULL,
125
          `empresa_S.A_capital_social` INT NOT NULL,
126
          'empresa LTDA cotas' INT NOT NULL,
127
          PRIMARY KEY ('cnpj'),
128
          INDEX `fk Empresas CVM1 idx` (`CVM id departamento` ASC) ,
129
          INDEX `fk_Empresas_empresa_S.A1_idx` (`empresa_S.A_capital_social` ASC) ,
130
131
          INDEX `fk_Empresas_empresa_LTDA1_idx` (`empresa_LTDA_cotas` ASC) ,
132
          CONSTRAINT `fk Empresas CVM1`
            FOREIGN KEY ('CVM_id_departamento')
133
            REFERENCES `mydb`.`CVM` (`id_departamento`)
134
135
            ON DELETE NO ACTION
            ON UPDATE NO ACTION,
136
137
          CONSTRAINT `fk Empresas empresa S.A1`
            FOREIGN KEY ('empresa_S.A_capital_social')
138
            REFERENCES `mydb`.`empresa_S.A` (`capital_social`)
139
            ON DELETE NO ACTION
140
            ON UPDATE NO ACTION,
141
          CONSTRAINT `fk_Empresas_empresa_LTDA1`
142
            FOREIGN KEY ('empresa_LTDA_cotas')
143
            REFERENCES `mydb`.`empresa LTDA` (`cotas`)
144
145
            ON DELETE NO ACTION
            ON UPDATE NO ACTION)
146
        ENGINE = InnoDB;
147
148
149
        SET SQL MODE=@OLD SQL MODE;
150 •
        SET FOREIGN_KEY_CHECKS=@OLD_FOREIGN_KEY_CHECKS;
151 •
        SET UNIQUE CHECKS=@OLD UNIQUE CHECKS;
152 •
153
```