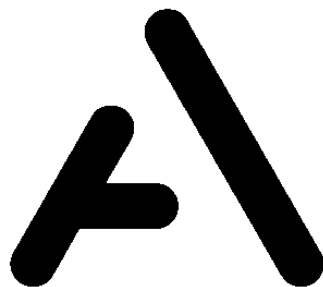


TEHNIČKA ŠKOLA DARUVAR

DIZAJN BAZE PODATAKA

Skladište: Analiza zahtijeva

Alexander Gustovarac, 3.RT, 3.11.2022



Entiteti: Polica, Roba, VrstaRobe, Zakupac

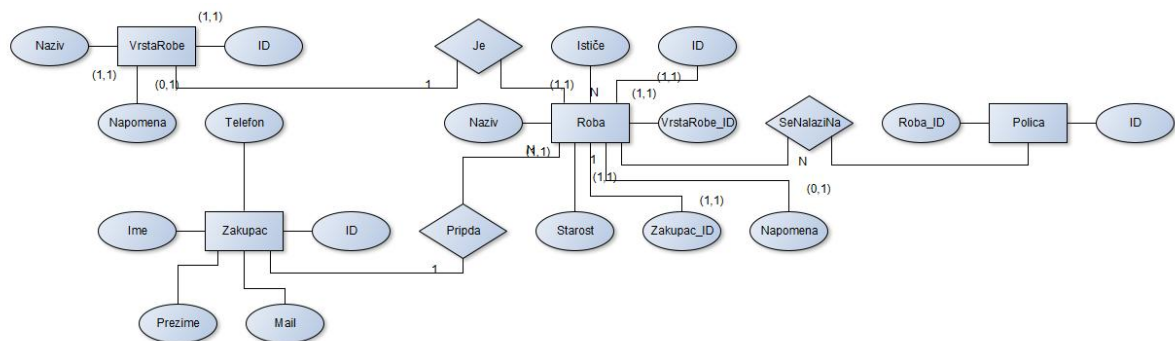
Atributi:

- Polica: (ID, Roba\_ID)
- Roba: (ID, Zakupac\_ID, VrstaRobe\_ID, Naziv, Starost, Ističe, Napomena)
- VrstaRode: (ID, Naziv, Napomena)
- Zakupac: (ID, Ime, Prezime, Telefon, Mail)

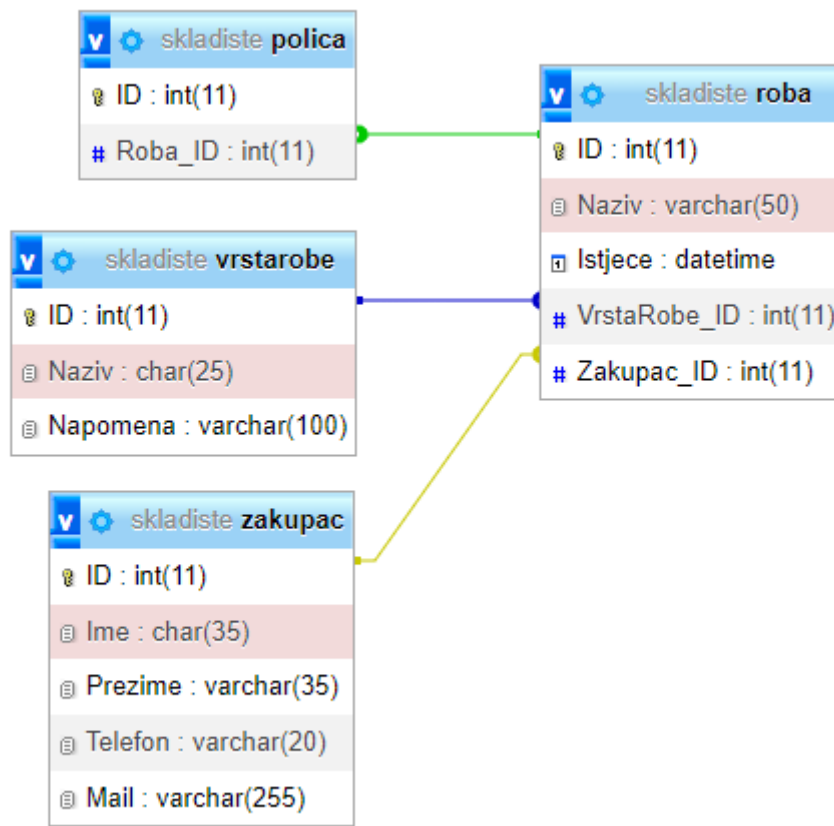
Veze:

- Roba **SeNalaziNa** Polici
- Rova **Je** VrstaRobe
- Roba **Pripada** Zakupcu

ER dijagram:



Relacijski model:



Baza podataka (SQL):

```
CREATE DATABASE `skladiste`;

USE `skladiste`;

CREATE TABLE `zakupac` (
  `ID` int(11) NOT NULL PRIMARY KEY AUTO_INCREMENT,
  `Ime` char(35) NOT NULL,
  `Prezime` varchar(35) NOT NULL,
  `Telefon` varchar(20) NOT NULL,
  `Mail` varchar(255) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;

INSERT INTO `zakupac` (`ID`, `Ime`, `Prezime`, `Telefon`, `Mail`) VALUES
(1, 'Pero', 'Perić', '+385991231234', 'pero.peric@gmail.com'),
(2, 'Ana', 'Perić', '+385991231234', 'ana.peric@gmail.com'),
(3, 'Tomislav', 'Tomić', '+123121231234', 'tomislav.tomic@gmail.com'),
(4, 'Test', 'User', '+123121231234', 'user1@gmail.com'),
(5, 'Test', 'User', '+123121231234', 'user1@gmail.com'),
(6, 'Test', 'User', '+123121231234', 'user1@gmail.com'),
(7, 'Test', 'User', '+123121231234', 'user1@gmail.com'),
(8, 'Test', 'User', '+123121231234', 'user1@gmail.com'),
(9, 'Test', 'User', '+123121231234', 'user1@gmail.com'),
```

```
(10, 'Test', 'User', '+123121231234', 'user1@gmail.com'),
(11, 'Test', 'User', '+123121231234', 'user1@gmail.com'),
(12, 'Test', 'User', '+123121231234', 'user1@gmail.com'),
(13, 'Test', 'User', '+123121231234', 'user1@gmail.com'),
(14, 'Test', 'User', '+123121231234', 'user1@gmail.com'),
(15, 'Test', 'User', '+123121231234', 'user1@gmail.com'),
(16, 'Test', 'User', '+123121231234', 'user1@gmail.com'),
(17, 'Test', 'User', '+123121231234', 'user1@gmail.com'),
(18, 'Test', 'User', '+123121231234', 'user1@gmail.com'),
(19, 'Test', 'User', '+123121231234', 'user1@gmail.com'),
(20, 'Test', 'User', '+123121231234', 'user1@gmail.com'),
(21, 'Test', 'User', '+123121231234', 'user1@gmail.com'),
(22, 'Test', 'User', '+123121231234', 'user1@gmail.com'),
(23, 'Test', 'User', '+123121231234', 'user1@gmail.com'),
(24, 'Test', 'User', '+123121231234', 'user1@gmail.com'),
(25, 'Test', 'User', '+123121231234', 'user1@gmail.com'),
(26, 'Test', 'User', '+123121231234', 'user1@gmail.com'),
(27, 'Test', 'User', '+123121231234', 'user1@gmail.com'),
(28, 'Test', 'User', '+123121231234', 'user1@gmail.com'),
(29, 'Test', 'User', '+123121231234', 'user1@gmail.com'),
(30, 'Test', 'User', '+123121231234', 'user1@gmail.com');
```

```
CREATE TABLE `vrstarobe` (
  `ID` int(11) NOT NULL PRIMARY KEY AUTO_INCREMENT,
  `Naziv` char(25) NOT NULL,
  `Napomena` varchar(100) DEFAULT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
INSERT INTO `vrstarobe` (`ID`, `Naziv`, `Napomena`) VALUES
(1, 'Vrsta1', '1'),
(2, 'Vrsta2', '2'),
(3, 'Vrsta3', '3'),
(4, 'Vrsta4', '4'),
(5, 'Vrsta5', '5'),
(6, 'Vrsta6', '6'),
(7, 'Vrsta7', '7'),
(8, 'Vrsta8', '8'),
(9, 'Vrsta9', '9'),
(10, 'Vrsta10', '10');
```

```
CREATE TABLE `roba` (
  `ID` int(11) NOT NULL PRIMARY KEY AUTO_INCREMENT,
  `Naziv` varchar(50) NOT NULL,
  `Istjece` datetime NOT NULL,
  `VrstaRobe_ID` int(11) NULL,
  `Zakupac_ID` int(11) NOT NULL,

  FOREIGN KEY (`VrstaRobe_ID`) REFERENCES `vrstarobe` (`ID`),
  FOREIGN KEY (`Zakupac_ID`) REFERENCES `zakupac` (`ID`)
```

```

) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
INSERT INTO `roba` (`ID`, `Naziv`, `Istjece`, `VrstaRobe_ID`, `Zakupac_ID`)
VALUES
(1, 'Roba1', '2022-01-01 00:00:00', 1, 1),
(2, 'Roba2', '2022-01-01 00:00:00', 2, 2),
(3, 'Roba3', '2022-01-01 00:00:00', NULL, 3),
(4, 'Roba4', '2022-01-01 00:00:00', NULL, 4),
(5, 'Roba5', '2022-01-01 00:00:00', NULL, 5),
(6, 'Roba6', '2022-01-01 00:00:00', NULL, 6),
(7, 'Roba7', '2022-01-01 00:00:00', 3, 7),
(8, 'Roba8', '2022-01-01 00:00:00', 3, 8),
(9, 'Roba9', '2022-01-01 00:00:00', 3, 9),
(10, 'Roba10', '2022-01-01 00:00:00', 1, 10),
(11, 'Roba11', '2022-01-01 00:00:00', NULL, 11),
(12, 'Roba12', '2022-01-01 00:00:00', 3, 12),
(13, 'Roba13', '2022-01-01 00:00:00', 1, 13),
(14, 'Roba14', '2022-01-01 00:00:00', NULL, 14),
(15, 'Roba15', '2022-01-01 00:00:00', 3, 15),
(16, 'Roba16', '2022-01-01 00:00:00', 1, 16),
(17, 'Roba17', '2022-01-01 00:00:00', 2, 17),
(18, 'Roba18', '2022-01-01 00:00:00', NULL, 18),
(19, 'Roba19', '2022-01-01 00:00:00', 1, 19),
(20, 'Roba20', '2022-01-01 00:00:00', 2, 20);

```

```

CREATE TABLE `polica` (
  `ID` int(11) NOT NULL PRIMARY KEY AUTO_INCREMENT,
  `Roba_ID` int(11) NULL,
  FOREIGN KEY (`Roba_ID`) REFERENCES `roba` (`ID`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
INSERT INTO `polica` (`ID`, `Roba_ID`) VALUES
(1, 1),
(2, 1),
(3, 2),
(4, 2),
(5, 3),
(6, 3),
(7, NULL),
(8, NULL),
(9, 5),
(10, 5),
(11, 6),
(12, NULL),
(13, 7),
(14, 7),
(15, 8),
(16, NULL),
(17, 9),
(18, 9),
(19, 10),

```

```
(20, 10),  
(21, 11),  
(22, 11),  
(23, 12),  
(24, 12),  
(25, 13),  
(26, 13),  
(27, 14),  
(28, 15),  
(29, 16),  
(30, 17),  
(31, 18),  
(32, 19),  
(33, 20);
```

#### Upiti:

1. Lista zakupaca (20 na stranici \$page): „SELECT \* FROM zakupac LIMIT 20 OFFSET <\$page-1\*20>“
2. Lista zakupaca (20 na stranici \$page i pretraženo \$q): „SELECT \* FROM zakupac WHERE ime LIKE '%<\$g>%' OR prezime LIKE '%<\$q>%' OR mail LIKE '%<\$q>%' OR telefon LIKE '%<\$q>%' LIMIT 20 OFFSET <\$page-1\*20>“
3. Umetanja kupca: „INSERT INTO `zakupac` (`Ime`, `Prezime`, `Telefon`, `Mail`) VALUES (NULL, '<ime>', '<prezime>', '<telefon>', '<email>')“
4. Uklanjanje robe: „UPDATE `polica` SET `Roba\_ID`=NULL WHERE `Roba\_ID`=<id>;DELETE FROM `roba` WHERE `ID`=<id>;“
5. Promjena podataka kupca: „UPDATE `zakupac` SET `Ime`='<ime>', `Prezime`='<prezime>', `Telefon`='<telefon>', `Mail`='<email>' WHERE `ID`=<di>“