

Prevod ER šeme u relacionu šemu baze podataka

Baze podataka 2 (2022/2023)

OAS Primenjeno softversko inženjerstvo

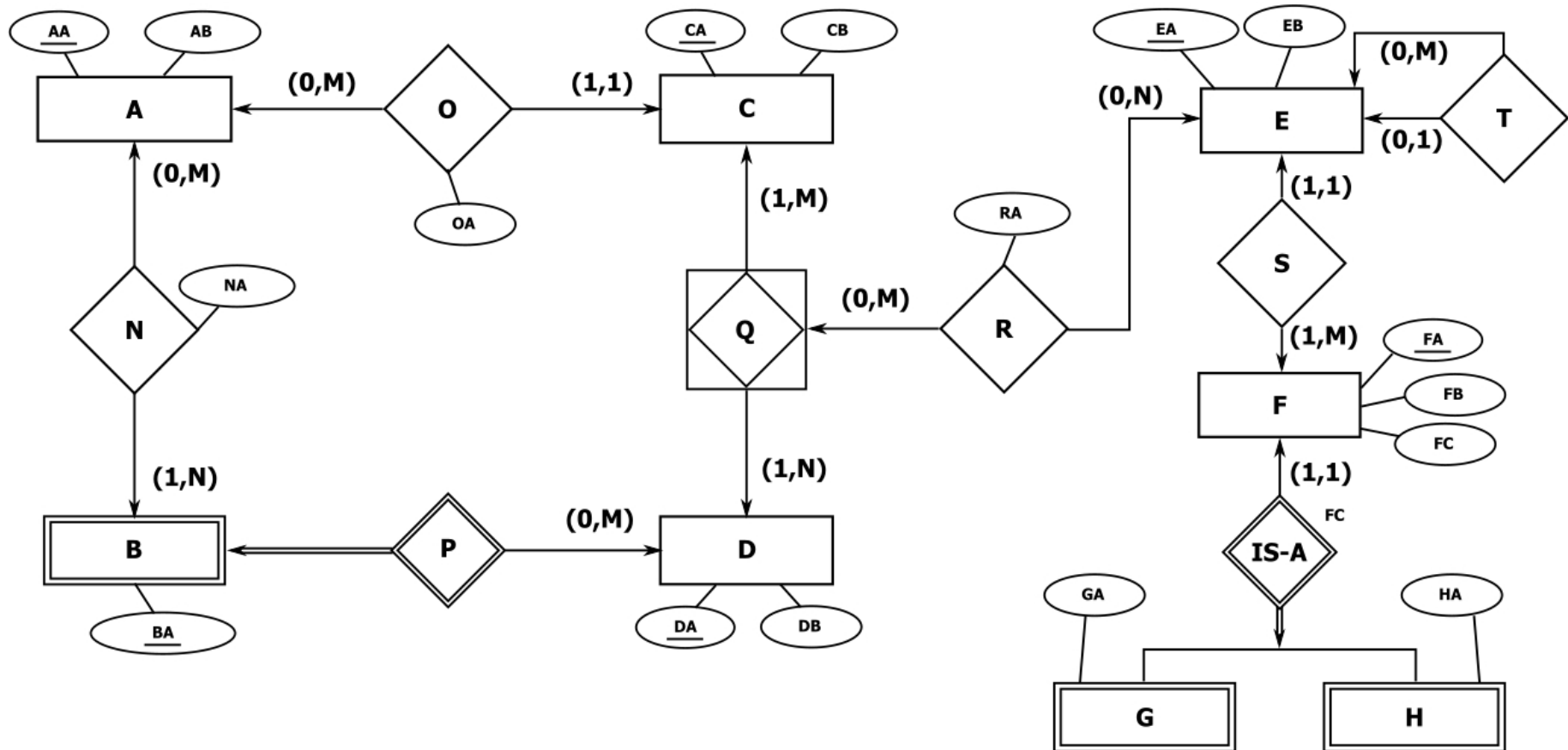
Fakultet tehničkih nauka

Univerzitet u Novom Sadu

Zadaci

- ZADATAK 1

Prevesti datu ER šemu u relacionu šemu baze podataka!



Zadaci

- ZADATAK 1

$A(\{AA, AB\}, \{AA\})$

$C(\{CA, CB, AA, OA\}, \{CA\})$

$C[AA] \subseteq A[AA]$

$\text{Null}(C, AA) = \perp$

$D(\{DA, DB\}, \{DA\})$

$B(\{DA, BA\}, \{DA+BA\})$

$B[DA] \subseteq D[DA]$

$N(\{AA, DA, BA, NA\}, \{AA+DA+BA\})$

$N[AA] \subseteq A[AA]$

$N[DA+BA] \subseteq B[DA+BA]$

$B[DA+BA] \subseteq N[DA+BA]$

Zadaci

- ZADATAK 1

$Q(\{CA, DA\}, \{CA+DA\})$

$Q[CA] \subseteq C[CA]$

$C[CA] \subseteq Q[CA]$

$Q[DA] \subseteq D[DA]$

$D[DA] \subseteq Q[DA]$

$F(\{FA, FB, FC\}, \{FA\})$

$G(\{FA, GA\}, \{FA\})$

$G[FA] \subseteq F[FA]$

$H(\{FA, HA\}, \{FA\})$

$H[FA] \subseteq F[FA]$

$F[FA] \subseteq G[FA] \cup H[FA]$

$G[FA] \cap H[FA] = \emptyset$

Zadaci

- ZADATAK 1

$$E(\{EA, EB, FA, EAX\}, \{EA\})$$

$$E[FA] \subseteq F[FA]$$

$$\text{Null}(E, FA) = \perp$$

$$F[FA] \subseteq E[FA]$$

$$\text{dom}(EAX) \subseteq \text{dom}(EA)$$

$$E[EAX] \subseteq E[EA]$$

$$\text{Null}(E, EAX) = \top$$

$$R(\{CA, DA, EA, RA\}, \{CA+DA+EA\})$$

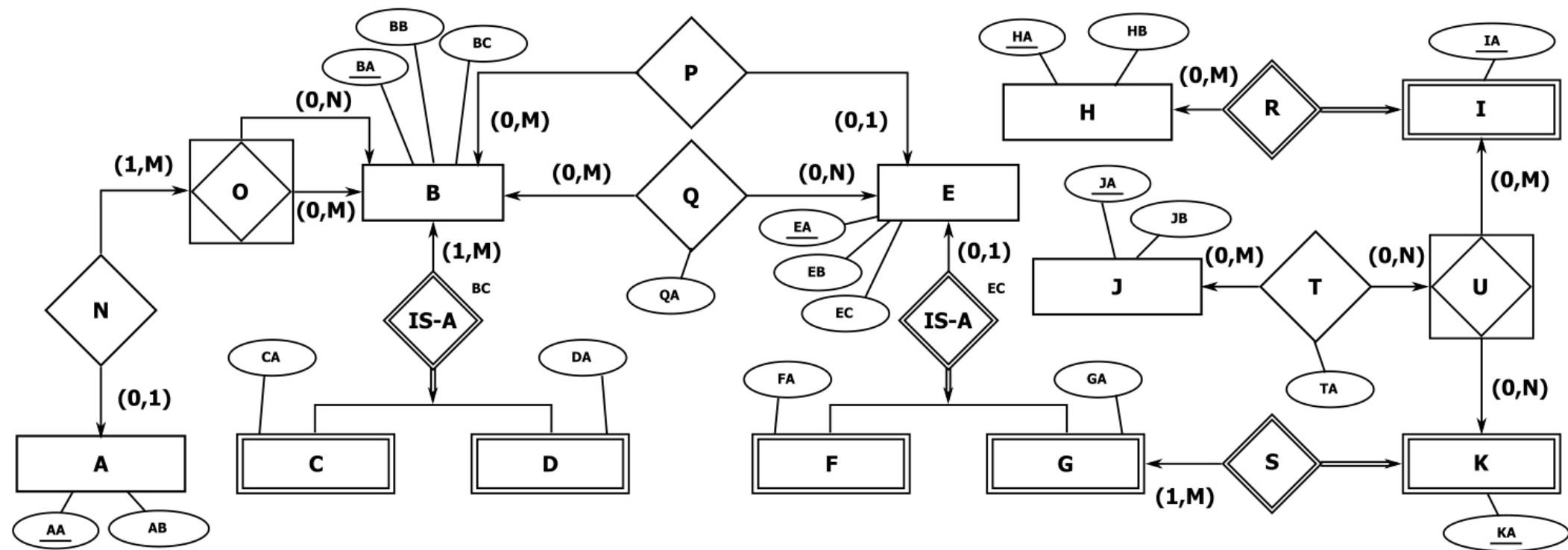
$$R[CA+DA] \subseteq Q[CA+DA]$$

$$R[EA] \subseteq E[EA]$$

Zadaci

- ZADATAK 2

Prevesti datu ER šemu u relacionu šemu baze podataka!



Zadaci

- ZADATAK 2

$B(\{BA, BB, BC\}, \{BA\})$

$C(\{BA, CA\}, \{BA\})$

$C[BA] \subseteq B[BA]$

$D(\{BA, DA\}, \{BA\})$

$D[BA] \subseteq B[BA]$

$B[BA] \subseteq C[BA] \cup D[BA]$

$O(\{BA, BAX\}, \{BA+BAX\})$

$O[BA] \subseteq B[BA]$

$\text{dom}(BAX) \subseteq \text{dom}(BA)$

$O[BAX] \subseteq B[BA]$

Zadaci

- ZADATAK 2

$A(\{AA, AB, BA, BAX\}, \{AA\})$

$A[BA+BAX] \subseteq O[BA+BAX]$

$\text{Null}(A, BA) = \top$

$\text{Null}(A, BAX) = \top$

$O[BA+BAX] \subseteq A[BA+BAX]$

$E(\{EA, EB, EC, BA\}, \{EA\})$

$F(\{EA, FA\}, \{EA\})$

$F[EA] \subseteq E[EA]$

$G(\{EA, GA\}, \{EA\})$

$G[EA] \subseteq E[EA]$

$F[EA] \cap G[EA] = \emptyset$

$E[BA] \subseteq B[BA]$

$\text{Null}(E, BA) = \top$

Zadaci

- ZADATAK 2

$Q(\{BA, EAX, QA\}, \{BA+EAX\})$

$Q[BA] \subseteq B[BA]$

$\text{dom}(EAX) \subseteq \text{dom}(EA)$

$Q[EAX] \subseteq E[EA]$

$H(\{HA, HB\}, \{HA\})$

$I(\{HA, IA\}, \{HA+IA\})$

$I[HA] \subseteq H[HA]$

$K(\{EA, KA\}, \{EA+KA\})$

$K[EA] \subseteq G[EA]$

$G[EA] \subseteq K[EA]$

Zadaci

- ZADATAK 2

$U(\{HA, IA, EA, KA\}, \{HA+IA+EA+KA\})$

$U[HA+IA] \subseteq I[HA+IA]$

$U[EA+KA] \subseteq K[EA+KA]$

$J(\{JA, JB\}, \{JA\})$

$T(\{JA, HA, IA, EA, KA, TA\}, \{JA+HA+IA+EA+KA\})$

$T[JA] \subseteq J[JA]$

$T[HA+IA+EA+KA] \subseteq U[HA+IA+EA+KA]$

Literatura

- Pavle Mogin, Ivan Luković, Miro Govedarica. Principi projektovanja baza podataka. 2. izdanje. Fakultet tehničkih nauka, Novi Sad. 2004.