

SYSTEMS ANALYSIS AND DATABASE DESIGN: MIT 263

Lab Exercise 2-4 Constructing the Entity-Relationship Diagram (ERD)

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SELECTED PROBLEM:

Manual Business Process in Payment of Grants of Social Pension's Beneficiaries

ERDISH STATEMENTS:

1. BENEFICIARY and PAYROLL
 - a. Each **BENEFICIARY** must contain in one and only one **PAYROLL**
 - b. Each **PAYROLL** may include one or more **BENEFICIARIES**
2. WORKER and BENEFICIARY
 - a. Each Field **WORKERS** may handle on one or more **BENEFICIARIES**
 - b. Each **BENEFICIARY** may be assigned to one and only one **WORKER**.
3. PAYROLL and FUND SOURCE
 - a. Each **PAYROLL** must have one and only one **FUND SOURCE**.
 - b. Each **FUND SOURCE** may be allotted to one or more **PAYROLL**
4. AREA OF ASSIGNMENT and WORKER
 - a. Each "**AREA OF ASSIGNMENT**" may be assigned to one or more field **WORKER**.
 - b. Each **WORKER** may be assigned with one or more **AREA OF ASSIGNMENT**.
2. BENEFICIARY and ADDRESS
 - a. Each beneficiary must be located in one and only one **ADDRESS**.
 - b. Each **BENEFICIARY ADDRESS** may be associated with one or more **BENEFICIARY**.
3. WORKER and PAYROLL
 - a. Each **WORKER** may prepare one or more **PAYROLL**.
 - b. Each payroll may be managed by one or more **WORKER**.
4. WORKER and DESIGNATION
 - a. Each **WORKER** may be assigned with one or more **DESIGNATION**
 - b. Each **POSITION** may be designated to one or more **WORKER**
5. WORKER and USER ACCOUNT
 - a. Each **WORKER** may be already have one and only one **USER ACCOUNT**
 - b. Each **USER ACCOUNT** must be issued to one and only one **WORKER**
6. USER ACCOUNT and ACCESS ROLE
 - a. Each **USER ACCOUNT** may be assigned with one or more **ACCESS ROLE**
 - b. Each **ACCESS ROLE** may be assigned to one or more **USER ACCOUNT**

BARKER NOTATION

