Supertype-Subtype Modeling Example Problems

Consider the following two separate ER models. Convert each model into an appropriate corresponding (partial) design/schema, using the conversion rules discussed in lecture. Your resulting database designs/schemas need to meet the following requirements:

* list your resulting tables in the form of SQL create table statements. (Since you are not provided with example data to help in determining appropriate types, any reasonable types that meet class style standards will be accepted.)

* make sure, for each table, that you include an explicit primary key clause, of course; and include foreign keys as the model dictates.

* do not make ANY inferences/assumptions NOT supported by the given models or stated along with them. (Assume that the models DO reflect the scenarios faithfully.)

In this case, example solutions for these are available on the course Moodle site, under "Selected Solutions". You are strongly advised to try to answer them yourself before consulting those example solutions.

Model #1

![ER Diagram]

- **Client**
  - CLI_NUM
  - Cli_phone
  - Cli_email
  - Cli_50ByUsername

- **Account**
  - ACCT_NUM
  - Acct_opening_date
  - Acct_curr_balance

- **Transaction**
  - TRANS_NUM
  - Trans_date
  - Trans_Amount

- **CLIENT**

- **ACCOUNT**

- **INDIVID**
  - Corp
  - Pac_Num
  - Corp_Name

- **CORP**
  - Individ
    - Individ_last_name
    - Individ_first_name
Model #2

Donation

Booster

Student

Parent

Alum

Friend

Donation Booster Student Parent Alum Friend
-------- ----------- ------- ------ ---- -----
DON_NUM BOOSTER_NUM STU_ID Vol_hrs Year_left Year_joined
Don_date Booster_lname Stu_lname Prefd_phone
Don_amount Booster_fname Stu_fname
Booster_email Stu_grade Stu_gpa