Database Analysis Worksheet

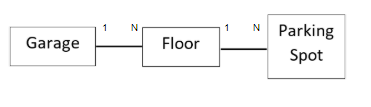
# Step 1: Identify Entities, Attributes, and Primary Keys

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Entity |  | Attributes |  | Primary Key |
| garages |  | name |  | id |
| floors |  | *garage\_id,* name, is\_\_commuter |  | id |
| spaces |  | *floor\_id,* is\_available, is\_handicap |  | id |

# Step 2: Define Relationships Between the Entities

|  |  |  |  |
| --- | --- | --- | --- |
| Entity 1 | Entity 2 | How Related?  (2 sentences) | Relationship Type (1:1, 1:N, M:N) |
| garages | floors | A garage can have many floors.  A floor belongs to a single garage. | 1:N |
| floors | spaces | A floor can have many parking spots.  A parking spot belongs to a single floor. | 1:N |
| garages | spaces | There will be no relationship | - |

# Step 3: Draw your Entity-Relationship Diagram (Hand-drawn is okay!!!)



# Step 4: Specify Tables, Fields, and Data Types

Fill out a chart for each table to be included in the database. YOU MAY NEED MORE TABLES THAN THERE ARE HERE. The ones here are just to get you started. Mark the primary key with a double asterisk (\*\*). Mark any foreign keys with the letters “fk” in parentheses, (fk).

Name of 1st Table: garages

|  |  |
| --- | --- |
| Field Name | Data Type |
| id\*\* | integer |
| name | string |
|  |  |
|  |  |
|  |  |

Name of 2nd Table: floors

|  |  |
| --- | --- |
| Field Name | Data Type |
| id\*\* | integer |
| name | string |
| is\_commuter | boolean |
| garage\_id(fk) | integer |
|  |  |

Name of 3rd Table: spaces

|  |  |
| --- | --- |
| Field Name | Data Type |
| id\*\* | integer |
| name | string |
| is\_handicap | boolean |
| floor\_id(fk) | integer |
|  |  |