

Web Development – E-R Model Exercise

Read the following scenario:

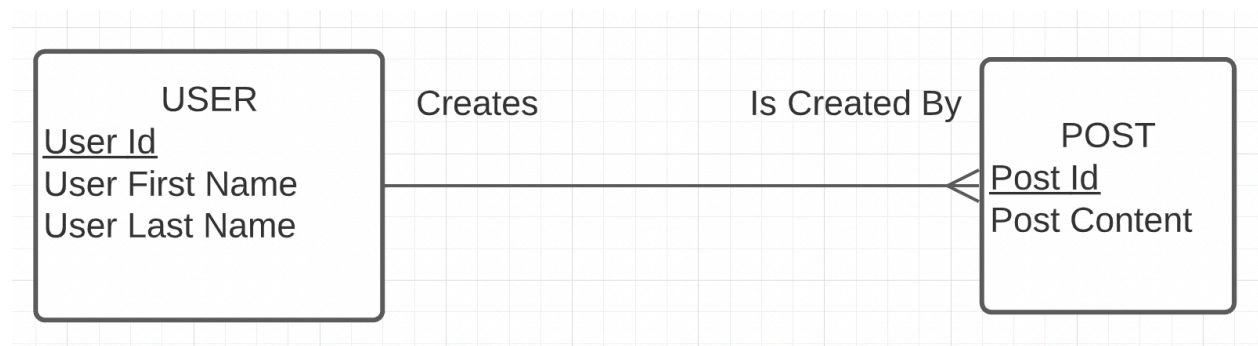
Bobby wants to create an app kind of like Twitter. Users should be able to create a text post and add it to their profile. Users are then able to edit and delete their posts.

1. Think about two possible entities. Create **two business rules** between two entities. We haven't talked about cardinalities much, so just jot down what you think could be an answer here for now. Use the following guideline if needed:

Rule 1: A User may create many Posts.

Rule 2: Each Post must be created by exactly one User.

2. Jot down a few possible attributes for each entity. Create an E-R Model for your two entities.
 - Be sure to underline the identifier (key) attribute in your E-R Model.
 - What is the relationship? **1:M**
 - What type are your entities? **Strong for both**
 - What is the relationship degree? **Binary**



3. What are the classifications for the attributes for the entity, PRODUCT? (required, optional, simple, composite, single-valued, multivalued, stored, derived, and/or identifier). Optional and required are subjective for some of the attributes...what do you think should be optional vs required?

Product Id: Required, simple, single-valued, stored, identifier

Product Name: Required, composite, single-valued, stored

Product Description: Required, simple, single-valued, stored

Product Tags: optional, simple, multivalued, stored

Weekly Sale Goal: optional, simple, single-valued, derived

PRODUCT
<u>Product Id</u>
Product Name (...)
Product Description
{Product Tags}
[Weekly Sale Goal]

See below for my thought process:

My thought process — I highly encourage you all to write out your ideas first as a way to brainstorm. I make up most of the exercises, and I always jot down what my plan/goal/ideas are first before even touching a computer. We all think differently, but I find it helps a lot (also makes any process a tad less overwhelming).

Twitter Like App

~ possible entities:

* USER, POST

Strong - each ^{will} have own unique id
entity

~ possible attributes

USER - User Id, User Name (First name, last name),
User Birthdate, User Email

Composite Attribute

POST - Post Id, Post Content

Relationship - created, Is Created By
Date Created - attribute

Business Rules

A USER may create many posts. Each post is created by exactly one user

