DESIGN CHOICES

# EER Diagram

* Entities: Profile, Post, Page, Message
* Specialization was used to define the subclasses for entities Page and Post
* The disjointness constraint was used between the subclasses and the entities considering that an instance of entity can only be one of its subclasses
* The total constraint was established considering that an instance of entity must be one of its subclasses

# Schema Diagram

* All the entities and relationships were mapped according to the steps explained in the textbook
* For mapping specialization, we preferred Option 8A (Multiple relations) as we assumed that would make our design simple and clear

ASSUMPTIONS

* A profile can be associated with only one email.
* A profile can only have one phone number.
* Username attribute in Profile entity is unique and a candidate key.
* Messages and comments can only be text-based.
* Reaction type attribute can have following values: Upvote, Downvote, and Favorite.
* A message can be only between two profiles.
* One profile can send and receive multiple messages.
* A page can have multiple profiles following it. And a profile can follow multiple pages.
* A page can only have one admin profile but a profile can be an admin of multiple pages.
* A page can have multiple posts but a post can only be associated with one page.
* The view attribute of Page entity is the count of page views and will be manually updated by the database admin.
* Profile can create a post on a page.
* A profile can create multiple posts but a post must be associated with only one profile ID and page ID.
* Only a profile can have a message. Pages cannot create a message.
* A profile can react to multiple posts and a post can have reactions from multiple profiles.
* A profile can comment on multiple posts and a post can have comment from multiple profiles.
* A profile can comment multiple times on a post but can have one type of react on the post.
* A page must be either entertainment or informative.
* A post must be one of these types: text, audio, video, or photo.
* An admin is allowed not to be among the followers of the page.