ER MODEL IN DBMS

ER Model of Instagram

Lets start with what is instagram?

Instagram is a social media platform that allows users to share photos and videos.

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Now what all things we can do on instagram?

- Create our profile
- Add profile picture and details
- Connect with friends
- Upload a post
- Like and comment on post
- Share stories
  and much more

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Lets start with all the steps needs to draw an ER diagram.

Step-1 : Recognize entities sets

Entities

- userLikes

- userProfile
- userFriends
- userPost
- userLogin

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Step–2 : Specify entity characteristics/attributes

Attributes

1. userProfile (user ID, username, email, profile pic)

    user ID– primary key
    userName– composite attribute
    email – single valued attribute
    profile pic – single valued attribute
    dob– stored attribute
    age– derived attribute

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Step-2 : Specify entity characteristics/attributes

Attributes

2. userFriends (followerID, followerName, userID)

    followerID- primary key
     followerName - single valued attribute
     userID - single valued attribute

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Step-2 : Specify entity characteristics/attributes

Attributes

3. userPost (post ID, caption, image, video, likesCount, timestamp)

   post ID- primary key
   caption – single valued attribute
    image – multi valued attribute
    video – multi valued attribute
    likesCount – single valued attribute
    timestamp – single valued attribute

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Step-2 : Specify entity characteristics/attributes

Attributes

4. userLogin (login ID,loginUserName,loginPassword)

   login ID- primary key
   loginUserName - single valued attribute
   loginPassword - multi valued attribute

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Step-2 : Specify entity characteristics/attributes

Attributes

4. userLikes (postID, userID)

    postID- primary key
    userID - single valued attribute

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Step-2 : Discover connections/relationships(also contraints like mapping/participation)

1.userProfile have userFriends (n:n)

2. userProfile have userPost (1:n) userPost will always be associated to a userProfile therefore total participation

3. userProfile has userLogin (1:1)

4. userProfile has userLikes (1:n) userLikes will always be associated to a userProfile therefore total participation

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Step-2 : Discover connections/relationships(also contraints like mapping/participation)

5. userFriends have userPost (1:n) userPost will always be associated to a userProfile therefore total participation

6. userFriends has userLogin (1:1)

7. userFriends has userLikes (1:n) userLikes will always be associated to a userProfile therefore total participation

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