Phase 2 Updated EER| CS 6400 -Spring 2021| Team 042 Phone Number Street Address (Has Restaurant <u>Limit</u> Store Number Has Snack Bar Ν Childcare Offers Store City Name Name Location <u>PID</u> Retail Price Is Located In City State Classification Product Population N Total Amount Sale Category Quantity Holiday Name Name Discount Description N Discount Price Advertising Campaign Date Occur

Date Number

## Changes

- We changed **Holiday** from a weak entity to a subclass of **Date**.
- We changed **Childcare** from a weak entity to a strong entity with **Limit** as primary key.
- We changed the relationship between **Childcare** and **Store** from 1:1 to 1:N.
- We removed the Provide relationship between Store and Product since all
  the products should be available on each store. So the relationship
  between Store and Product is supposed to be the cross product of them,
  which is unnecessary to be stored.
- We changed Discount, which was a weak entity, into a relationship between **Product** and **Date**.
- We changed the relationships between Sale, Product and Store into an M:N:L relationship.
- We modified the IFD diagram by modifying the one-way arrow between **Population** and **Task** as a two-way arrow and modifying the oneway arrow between **Population** and **Database** as a two-way arrow.
- We removed extra subtasks so that all the TDs are consistent with the IDF diagram.
- We included viewing the population of the City in the Maintain Population City task.