Calorie Count Data

1. The table that could be populated from this source could be one that has net calorie counts for every date, along with total calories consumed, total calories burned, and metabolic rate (net calorie count = total calories consumed – (total calories burned + metabolic rate).
2. It would be interesting to add the days of the week for each date, along with the temperature for each date. This would give information on how the day of week and weather effect my routines.
3. Main Data Set:
   a. An instance would be 10/12/2021, and the universe would be dates.
   b. Total calories consumed is an attribute.
      i. This is discrete.
      ii. This is ordinal data.
   c. Net calories are an attribute.
      i. This is discrete.
      ii. This is ordinal data.
   d. . Total calories burned are an attribute
      i. This is discrete.
      ii. This is ordinal data.
   e. Metabolic rate is an attribute
      i. This is discrete.
      ii. This is ordinal data.
   f. The key would be specific dates.
   g. Total calories consumed would typically be a good indicator of net calories consumed, as it is the biggest input in figuring this out.
4. Weather Data Set:
   a. An instance would be 10/12/2021, and the universe would be dates.
   b. Temperature would be an attribute.
      i. This is discrete.
      ii. This is ordinal data.
   c. Whether it is raining would be an attribute.
      i. This is discrete.
      ii. This is nominal data.
   d. The key would be the specific dates
   e. Temperature would serve as a good indicator for whether it is raining or not. This is because it would be interesting to see the curve between when it is hot and unlikely to rain down to 32 degrees F, and there would likely be a curve between the data.
5. Days of week data set.
   a. An instance would be 10/12/2021, and the universe would be dates.
   b. Day of the week would be an attribute.
      i. This would be discrete.
      ii. This is nominal data.

     c. The date would be the key.

     d. Nothing specifically in this table would work since there is only one attribute but seeing the difference for weekdays versus weekends for something would be interesting.

6. Since the date is the key for each table, it would make the most sense to be the universal key.