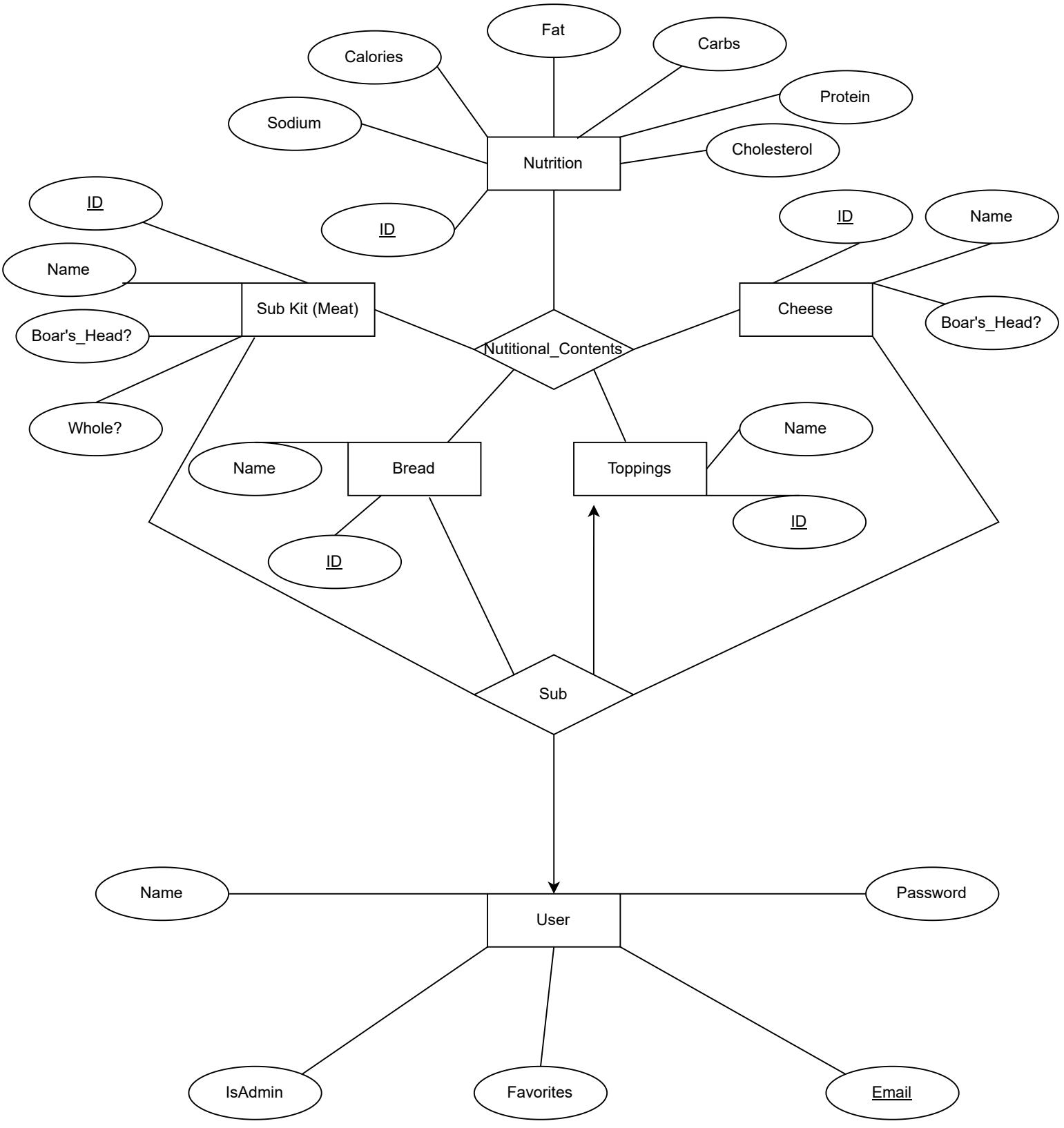
For my project this semester in COP4710, I will be creating a nutritional calculator for sandwiches made at the Publix Deli. As someone who is trying to lose weight and works at a Publix Deli, a fully fleshed out nutritional calculator will be incredibly useful for customers. The current way Publix displays nutritional information (which can be seen here) is not optimal for customers and does not contain an extensive list of the various options provided at the Deli. My goal is to emulate the Chipotle nutritional calculator (shown here) so users can clearly see the nutritional information of what they are ordering. Getting the data needed for this project will be easy as I can use the current nutritional information available to the public while also getting the information from my job as needed.

I will allow users to add sandwiches to a "favorites" list that allows them to save their favorite sandwich orders and allow them to review their nutritional content on the fly; users will be allowed to update these favorites as well. In addition, since Publix will occasionally add or remove sandwiches and items, I will give admin users the ability to add and remove items from the list. If the contents of an item changes, admin users will also be able to update the database to match the new nutritional contents. To keep the number of attributes per entity, I will use have a separate table that keeps track of the nutritional contents of each item, and then join items with their nutrition based on their ids – satisfying the need of a join query in the project – and I will use an aggregate query to sum up the nutrition in each sandwich. For my advanced functionality, I will guide users into making choices that best fit their nutritional wants and needs. For example, if a user chooses to go this route, and they enter a weight of 160, the application will guide them to make a sandwich with at least 48 grams of protein (assuming their goal is a gram of protein per pound of body weight and they eat three meals a day, 160*1/3=48g) while attempting to stay within their calorie goals. This feature is important to have because the protein

consumption is not only an important part of weight loss but muscle gain as well, and the demographic of people that are likely to use a nutritional calculator are more likely to care about at least one of the two. Because of this feature, I will need to have each part of the sub (bread, meat, etc.) be a separate entity.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