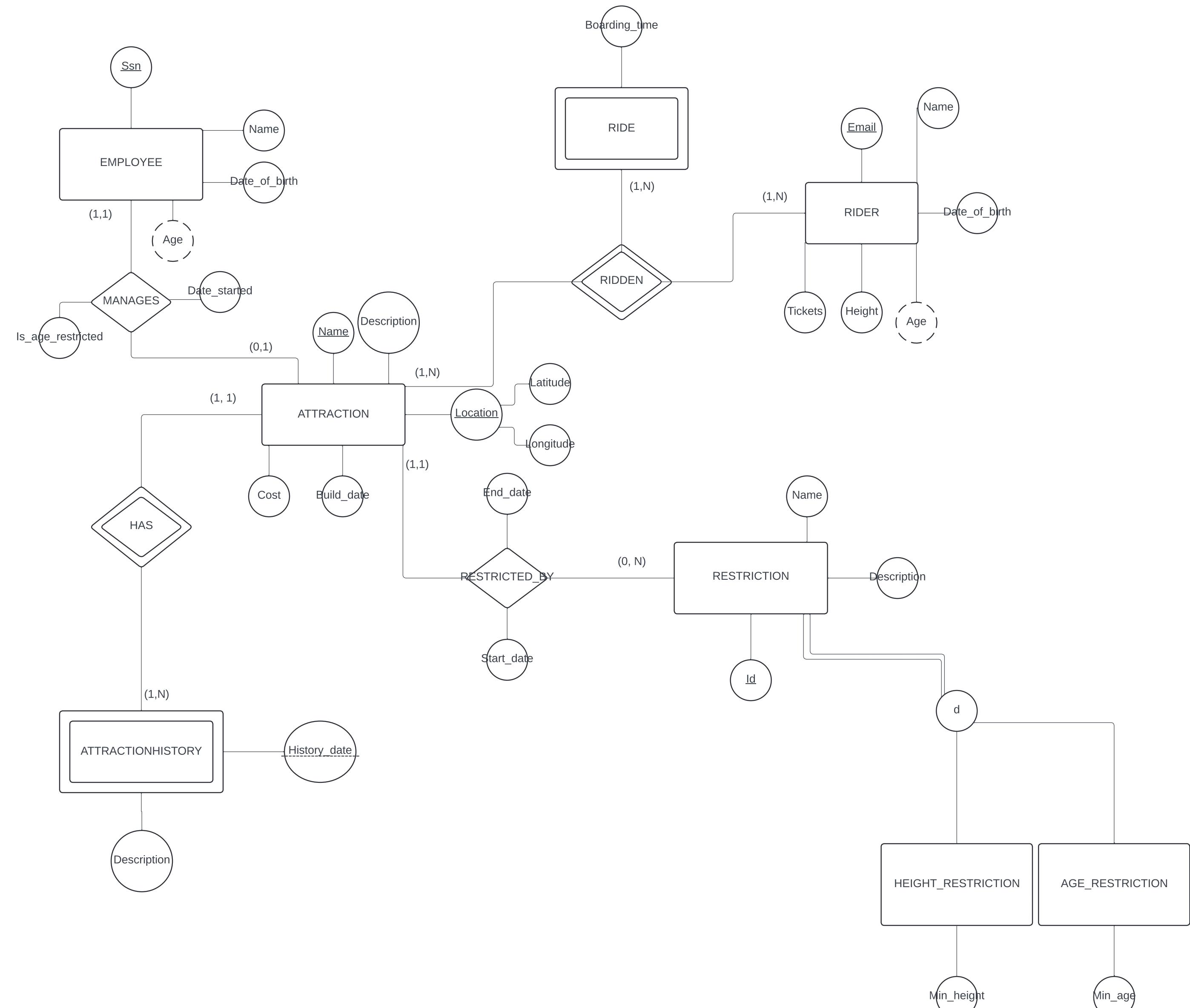


Data Requirements

- A theme park has attractions. Attractions have names that uniquely identify them. Attractions contain descriptions of what to expect on that attraction. The location of the attraction (latitude and longitude) and the date the attraction was built need to be recorded.
- An attraction may have one or many restrictions. These restrictions include minimum age and height requirements. A single restriction is unique to a given attraction. A restriction is only applicable in a certain date range i.e. there is a day the restriction starts being enforced and a day when the restriction stops being enforced. Restrictions are uniquely identified by an id. The name, and a short description of the restriction and it's intention is recorded to display to riders waiting in line for the attraction. Each attraction has a cost in tickets associated to it.
- Riders are the main customers of the theme park. The riders email is used to uniquely identify each rider. Their name, date of birth, height in inches, and current number of tickets must be recorded. New riders at the theme park receive 5 free tickets, and riders ride for free all day on their birthday.
- Riders ride many attractions throughout the day and an attraction will have many riders. When a rider attempts to ride an attraction they must meet the minimum height and age restrictions associated to that attraction. They must also have a sufficient number of tickets to ride the attraction, or it must be their birthday. The date and time the rider boards the attraction should be recorded for safety purposes.
- For each attraction, we keep track of the attraction history which will include the date in which the event(s) occurred, and a description of what happened on that day. The description should include all events happening on that day for a single attraction.

Conceptual Modeling

ER / E-ER Diagram



Logical Modeling

Relational Schema

