**Objective:** The Director of Theater Operations (DTO) at Eisenhower Hall (Ike Hall) needs an information system to help manage theater operations and personnel. Classes Attributes Specified Relationships

**Situation:** Ike Hall hosts several performances every year (also known as a season). There are two types of performances: performances put on by professionals and performances put on by cadets. Performances should have an ID, name, date, synopsis, and long description. Performances are one-day only (there are no multi-day performances). A season begins in September and runs through the following August. Each season should have an ID, start year, and end year. A season can have many performances, but a specific performance can only be part of one season. A professional performance will have an act that performs. Each performance will have only one associated act, but an act can perform at Ike Hall multiple times. Each act will an ID, optionally have a name (if a group) or last name and first name if an individual. The act will also have a contact email and contact phone number. Cadet performances are put on by cadets. A performance can involve many cadets and a cadet can participate in multiple performances. The system should optionally store the details concerning the role a cadet was in for a performance which could be a directing role or an acting role. If it is a directing role the data stored is the type of director. If it is an acting role the data stored is the part played by the cadet. A cadet can direct and act in the same performance. Cadets can assist with both professional and cadet-led performances by working backstage. Each performance can have several cadets working backstage and a cadet can work in many performances. There is a lot of work to accomplish during the week to prepare for either type of performance. Cadets can have authorizations to work at Ike Hall during their normal drill time. There are two teams of seven cadets: one team is from First and Second Regiment and one team is from Third and Fourth Regiment. Each team will have a Cadet-in-Charge (CIC) and there is an overall CIC for Ike Hall. A cadet who works at Ike Hall during the week does not necessarily have to work backstage performances and vice versa. The overall CIC supervises the team CICs and team CICs supervise each of their team members. Data stored about each cadet is IkeHall ID, last name, first name, company, email address, phone number, supervisor ID (if any), and what team they work on (if any). There are also civilians who work at Ike Hall. At least one civilian will work backstage during any type of performance. Civilians will also work at Ike Hall during the week with the cadets. A civilian can supervise other civilians and the DTO will supervise the overall CIC. Data stored about each civilian is IkeHall ID, last name, first name, email address, phone number, duty title, and supervisor ID (if any). The DTO is responsible for adding seasons, acts, and performances (professional and cadet) to the database. Both the DTO and Director of Personnel (DP) can add civilians and cadets to the database, assign supervisors to both civilians and cadets, and delete civilians and cadets from the database. The CIC can add cadets to the database, assign supervisors to cadets, and delete cadets from the database. The DTO and DP can assign civilians and cadets to work backstage for both types of performances. The CIC can assign cadets to work backstage for both types of performances. The DTO and CIC can assign cadets to the teams that work at Ike Hall during the week. The DTO and CIC can assign cadets to specific roles for cadet performances. The DTO and DP can view a list of all civilians in the database. The DTO, DP, and CIC can view a list of all cadets in the database. The DTO, DP, and CIC can view a list of cadets by team. The DTO, DP, and CIC can view a list of personnel (both cadets and civilians) who are working backstage by performance. Any civilian or cadet with an account can view the list of performances that they are assigned to work. Anyone can view a list of all performances by season. Anyone can view a list of cadets and the role they filled in a specific cadet performance. Anyone can view the list of roles by cadet performances for a specific cadet.