

Figure 1: ERD for Problem 4

Errors and resolution:

* Consistency rule(Redundant foreign keys)--Normally the problem can be resolved by removing the redundant foreign keys (Entity2.Attribute1-1,4-1). If the attribute does not represent a foreign key, it should be renamed instead of removed.
* Consistency Rule(Weak entity rule)- weak entity should be connected to atleast one identifying relationship. Not shown in entity 6. To resolve error either convert weak entity to strong entity or connect a identifying relationship with strong entity.
* Consistency Rule (Identifying relationship rule)-atleast one weak entity should be present when connected with an identifying relationship. (rel 1,2,3,4,6)To resolve error by adding one or more weak entities or making the relationship non-identifying