

Figure 1: ER Diagram Representation

## 1 Discussion

Our ER diagram successfully represents the main entities and relationships. However, there are two key limitations:

Enforcing that ELO ratings remain above 1000 cannot be achieved within the ER model alone; database constraints are required.

The ER model does not explicitly represent the winner; instead, the winner must be determined through queries.

Despite these limitations, we successfully modeled match rankings on a scale

from 1 to 10 and applied ER modeling concepts, including participation constraints, key constraints, weak entities and relationships, and class hierarchies, where appropriate.