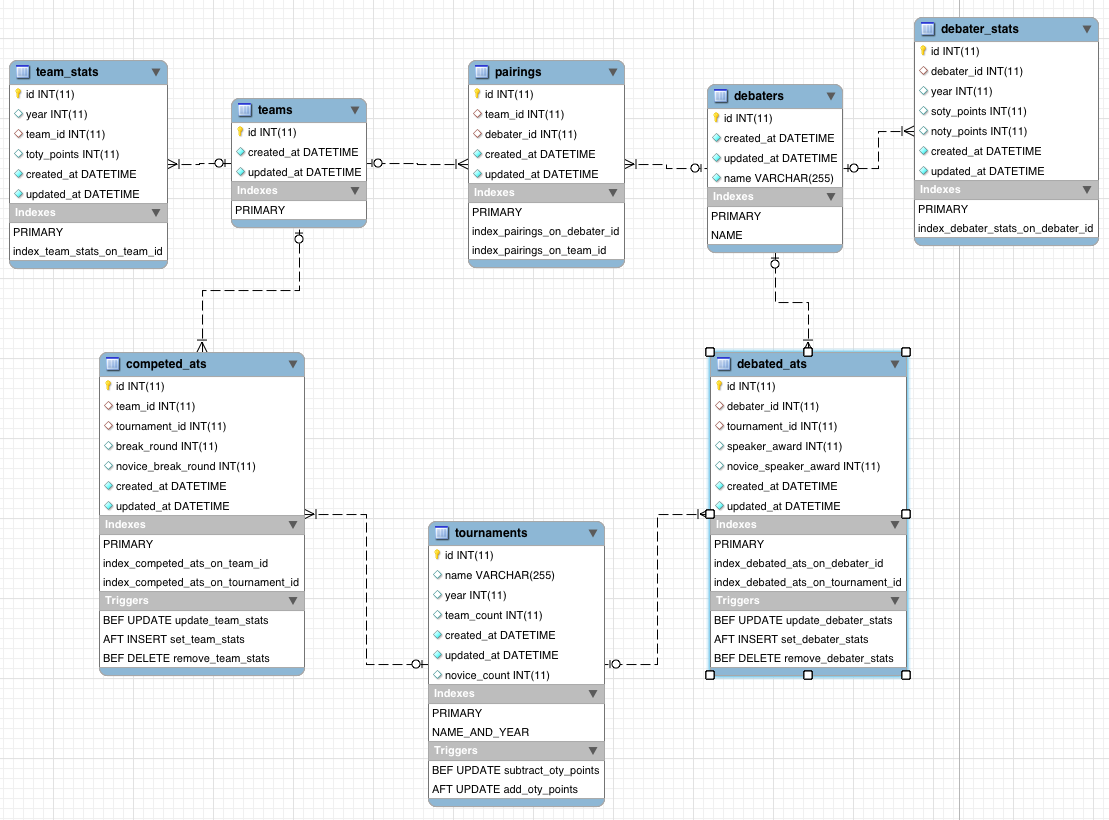
1.



(jargon note: TOTY, NOTY and SOTY stand for Team, Novice, and Speaker of the year)

2.

|  |  |  |
| --- | --- | --- |
| **Noun** | **Verb** | **Noun** |
| Debater | Has | Debater Stats |
| Debaters | Debate At | Tournaments |
| Debaters | Have Pairings | Teams |
| Teams | Compete At | Tournaments |
| Team | Has | Team Stats |

Debater, Team and Tournament are the primary entities. Multiple Debaters compose a Team, which is tracked in Pairings. Debaters can belong to multiple teams. Debaters and Team both have stats, which are tracked on a year-by-year basis in their respective stats entity. Teams can debate at multiple tournaments, which is tracked in the CompetedAts table, and debaters’ individual performance at Tournaments is tracked in the DebatedAts table.

Triggers are stored on the Tournaments, CompetedAts and DebatedAts in order to update the stats after information about the tournament changes, or information about the team/debater’s performance at the tournament changes.

The id, created\_at and updated\_at fields are all necessary when using Rails. Id must be used as the primary key for every entity because it is possible for the user to change the value of other fields.

Constrants not enforced by the database:

* Teams can only have two debaters, enforced by Rails validation
* Debaters/teams can only have one set of stats per year, enforced because the app doesn’t let users create stats directly, so the creation logic only allows this to be done once
* Debaters can’t be on the same team as themselves, enforced by rails validation
* Debaters can’t be on two teams that compete at the same tournament

We didn’t have to time to implement user-friendly error handling on the front end, so if any of these constraints fail, the data won’t be sent to the database, but there will not be any error message to let the user know. When database constraints fail, rails will redirect to the rails error message page.

3. The team\_stats and debater\_stats tables are composition, where a single aspect of info about the debaters and teams is composed of a separate entity