one term that is a member of an entity category and also includes one or more terms that match terms in the other identified queries. A query template is constructed that includes the matching terms and the entity category. A ranking of the query template may be determined and may be indicative of the likelihood that the query template is effective in determining query suggestions to provide to a user in response to future partial queries.

**[0005]** In some implementations, a computer implemented method is provided that includes the steps of: identifying an entity category, wherein the entity category is a grouping of entities that share one or more aspects in common; identifying entity aliases, each of the entity aliases associated with at least one of the entities in the entity category; identifying a query template, wherein the query template includes one or more template terms and an identifier of the entity category; determining a group of queries that conform to the query template, wherein each of the queries in the group of queries includes one of the identified entity aliases and one or more terms matching the template terms; and determining a ranking for the query template, wherein the ranking is based on ~~at least a count of occurrences of one or more of the entities of the entity category in the group of queries that conform to the query template~~ a number of conforming entity category members, wherein the conforming entity category members are the entities that are in the entity category and present in the group of queries that conform to the query template.

**[0006]** This method and other implementations of technology disclosed herein may each optionally include one or more of the following features.

**[0007]** The method may further include the step of determining if the query template is valid based on whether the ranking satisfies a threshold.

~~**[0008]** The count of occurrences of one or more of the entities of the entity category in the group of queries that conform to the query template may be based on a number of conforming entity category members, wherein the conforming entity category members are the entities that are in the entity category and present in the group of queries that conform to the query template. In some of those implementations, determining the ranking for the query template may include: comparing the number of conforming entity category members to a number of entity category members, wherein the number of entity category members is based on the number of the entities that are in the entity category.~~

**[0009]** Determining the ranking for the query template may include ~~The count of occurrences of one or more of the entities of the entity category in the group of queries that conform to the query template may be based on~~ determining a conforming frequency

of occurrence for multiple of the entities, wherein each conforming frequency of occurrence may be based on the frequency of occurrence of one of the entities in the group of queries that conform to the query template. In some of those implementations, determining the ranking for the query template may include: comparing the conforming frequency of occurrences to frequency of occurrences of the multiple entities of the entity category in an additional group of queries, wherein the additional group of queries includes queries that fail to conform to the query template.

**[0010]** ~~The count of occurrences may be based on the number of past queries that conform to the query template.~~ The ranking may be further determined based on similarity between members of the entities of the entity category. The identifier of the entity category ~~category term~~ may be a prefix of the query template. The one or more terms matching the template terms may include one or more terms that are not present in the query template.

**[0011]** In some implementations, a computer implemented method is provided that includes the steps of: identifying a partial query entered by a user; identifying a current location associated with the user that entered the partial query; identifying a query template based on the partial query, wherein the query template includes one or more template terms and an identifier of an entity category, and wherein the entity category is a grouping of entities that share one or more aspects in common; ~~and~~ formulating a query suggestion based on the query template, wherein formulating the query suggestion comprises: choosing an entity alias for an entity of the entities of the entity category based on the location of the user that entered the partial query, and formulating the query suggestion by inserting the entity alias into the query template; and providing ~~at least one query suggestion based on the query template, wherein the provided query suggestion includes the one or more template terms and an entity alias of one of the entities~~ the query suggestion for presentation to the user.

**[0012]** This method and other implementations of technology disclosed herein may each optionally include one or more of the following features.

**[0013]** Choosing ~~T~~the entity alias may further be ~~identified~~ based on one or more characters of the partial query. ~~The entity alias may be identified based on the location of the user.~~ Choosing the entity alias may further ~~The query suggestion may~~ be ~~identified~~ based on a popularity measure associated with the entity that is associated with the entity alias. Identifying the query template may further include determining whether one or more terms in the partial query match one or more of the template terms ~~in~~ of the query template. The query template may be identified based on a ranking of the query template.

**[0014]** Identifying the query template may further include the steps of: determining an entity category based on the partial query; and determining the query template based on the

determined entity category. In some of those implementations, determining the entity category based on the partial query may include: determining a partial query entity based on one or more partial query terms of the partial query; and determining the entity category based on the partial query entity. In some of those implementations, the method may further include the step of determining additional characters in the partial query that are in addition to the partial query terms utilized to determine the partial query entity, wherein determining the query template is further based on the additional characters.

**[0015]** The method may further include the step of determining a ranking of the query suggestion based on a popularity measure associated with the entity associated with the entity alias.

**[0016]** The method may further include the step of determining a ranking of the query suggestion based on a ranking associated with the ~~entity~~ query template.

**[0017]** Other implementations may include a non-transitory computer readable storage medium storing instructions executable by a processor to perform a method such as one or more of the methods described herein. Yet another implementation may include a system including memory and one or more processors operable to execute instructions, stored in the memory, to perform a method such as one or more of the methods described herein.

**[0018]** Particular implementations of the subject matter described herein determine a query template and/or ranking associated with the query template, based on identifying, from a group of queries, queries that have one or more matching terms and have one or more terms that are members of an entity category of terms. In some implementations, the ranking of the query template may be determined based on the number of previously entered queries in a set of queries that conform to the query template. In some implementations, the ranking of the query template may be determined based on the number of known entities from the entity category that are present in conforming queries. In some implementations, the ranking of the query template may be determined based on the distribution of members of the entity category in queries that conform to the query template and the distribution of members of the entity category in a group of queries that includes queries that do not conform to the query template. The query template and the ranking of the query template represent a new query

**Claims**

1. A method, comprising:

identifying an entity category, wherein the entity category is a grouping of entities that share one or more aspects in common;

identifying entity aliases, each of the entity aliases associated with at least one of the entities in the entity category;

identifying a query template, wherein the query template includes one or more template terms and an identifier of the entity category;

determining a group of queries that conform to the query template, wherein each of the queries in the group of queries includes one of the identified entity aliases and one or more terms matching the template terms; and

determining a ranking for the query template, wherein the ranking is based on ~~at least a count of occurrences of one or more of the entities of the entity category in the group of queries that conform to the query template.~~a number of conforming entity category members,

wherein the conforming entity category members are the entities that are in the entity category and present in the group of queries that conform to the query template.

2. The method of claim 1, further comprising determining if the query template is valid based on whether the ranking satisfies a threshold.

~~3. The method of claim 1, wherein the count of occurrences of one or more of the entities of the entity category in the group of queries that conform to the query template is based on a number of conforming entity category members, wherein the conforming entity category members are the entities that are in the entity category and present in the group of queries that conform to the query template.~~

34. The method of claim 1~~3~~, wherein the determining the ranking for the query template includes:

comparing the number of conforming entity category members to a number of entity category members, wherein the number of entity category members is based on the number of the entities that are in the entity category.

45. The method of claim 1, wherein determining the ranking for the query template includes:

determining ~~the count of occurrences of one or more of the entities of the entity category in the group of queries that conform to the query template is based on~~ a conforming frequency of occurrence for multiple of the entities, wherein each conforming

frequency of occurrence is based on the frequency of occurrence of one of the entities in the group of queries that conform to the query template.

56. The method of claim 45, wherein the determining the ranking for the query template includes:

comparing the conforming frequency of occurrences to frequency of occurrences of the multiple entities of the entity category in an additional group of queries, the additional group of queries including queries that fail to conform to the query template.

~~7. The method of claim 1, wherein the count of occurrences is based on the number of past queries that conform to the query template.~~

68. The method of claim 1, wherein the ranking is further determined based on similarity between members of the entities of the entity category.

79. The method of claim 1, wherein the ~~category term~~ identifier of the entity category is a prefix of the query template.

810. The method of claim 1, wherein the one or more terms matching the template terms includes one or more terms that are not present in the query template.

911. A method, comprising:

identifying a partial query entered by a user;

identifying a current location associated with the user that entered the partial query;

identifying a query template based on the partial query, wherein the query template includes one or more template terms and an identifier of an entity category, and wherein the entity category is a grouping of entities that share one or more aspects in common; ~~and~~

formulating a query suggestion based on the query template, wherein formulating the query suggestion comprises:

choosing an entity alias for an entity of the entities of the entity category based on the location of the user that entered the partial query, and

formulating the query suggestion by inserting the entity alias into the query template; and

providing the query suggestion for presentation to the user~~at least one query suggestion based on the query template, wherein the provided query suggestion includes the one or more template terms and an entity alias of one of the entities~~.

102. The method of claim 911, wherein choosing the entity alias is ~~identified~~ further based on one or more characters of the partial query.

~~13. The method of claim 11, wherein the entity alias is identified based on the location of the user.~~

114. The method of claim 911, ~~wherein the query suggestion is identified~~ wherein choosing the entity alias is further based on a popularity measure associated with the entity associated with the entity alias.

125. The method of claim 911, wherein identifying the query template includes determining whether one or more terms in the partial query match one or more of the template terms ~~in~~ of the query template.

136. The method of claim 911, wherein the query template is identified based on a ranking of the query template.

147. The method of claim 911, wherein identifying the query template includes:

determining an entity category based on the partial query; and

determining the query template based on the determined entity category.

158. The method of claim 147, wherein determining the entity category based on the partial query includes:

determining a partial query entity based on one or more partial query terms of the partial query; and

determining the entity category based on the partial query entity.

169. The method of claim 158, further comprising:

determining additional characters in the partial query that are in addition to the partial query terms utilized to determine the partial query entity, wherein determining the query template is further based on the additional characters.

1720. The method of claim 911, further comprising determining a ranking of the query suggestion based on a popularity measure associated with the entity associated with the entity alias.

1821. The method of claim 911, further comprising determining a ranking of the query suggestion based on a ranking associated with the ~~entity~~ query template.

1922. A system including memory and one or more processors operable to execute instructions stored in the memory, comprising instructions to:

identify an entity category, wherein the entity category is a grouping of entities that share one or more aspects in common;

identify entity aliases, each of the entity aliases associated with at least one of the entities in the entity category;

identify a query template, wherein the query template includes one or more template terms and an identifier of the entity category;

determine a group of queries that conform to the query template, wherein each of the queries in the group of queries includes one of the identified entity aliases and one or more terms matching the template terms; and

determine a ranking for the query template, wherein the ranking is based on ~~at least a count of occurrences of one or more of the entities of the entity category in the group of queries that conform to the query template.~~ a number of conforming entity category members,

wherein the conforming entity category members are the entities that are in the entity category and present in the group of queries that conform to the query template.