# Common thrift types

GFS uses several thrift datastructures which are common to multiple queries. They are listed below.

## EdgeType

`EdgeType` is a thrift enum which specifies which edge types to query for the graph.

```thrift

enum EdgeType {

FOLLOWING,

FOLLOWED\_BY,

FAVORITE,

FAVORITED\_BY,

RETWEET,

RETWEETED\_BY,

REPLY,

REPLYED\_BY,

MENTION,

MENTIONED\_BY,

MUTUAL\_FOLLOW,

SIMILAR\_TO, // more edge types (like block, report, etc.) can be supported later.

RESERVED\_12,

RESERVED\_13,

RESERVED\_14,

RESERVED\_15,

RESERVED\_16,

RESERVED\_17,

RESERVED\_18,

RESERVED\_19,

RESERVED\_20

}

```

For an example of how this is used, consider the `GetNeighbors` query. If we set the `edgeType` field

of the `GfsNeighborsRequest`, the response will contain all the users that the specified user follows.

If, on the other hand, we set `edgeType` to be `FollowedBy` it will return all the users who are

followed by the specified user.

## FeatureType

`FeatureType` is a thrift struct which is used in queries which require two edge types.

```thrift

struct FeatureType {

1: required EdgeType leftEdgeType // edge type from source user

2: required EdgeType rightEdgeType // edge type from candidate user

}(persisted="true")

```

## UserWithScore

The candidate generation queries return lists of candidates together with a computed score for the

relevant feature. `UserWithScore` is a thrift struct which bundles together a candidate's ID with

the score.

```thrift

struct UserWithScore {

1: required i64 userId

2: required double score

}

```