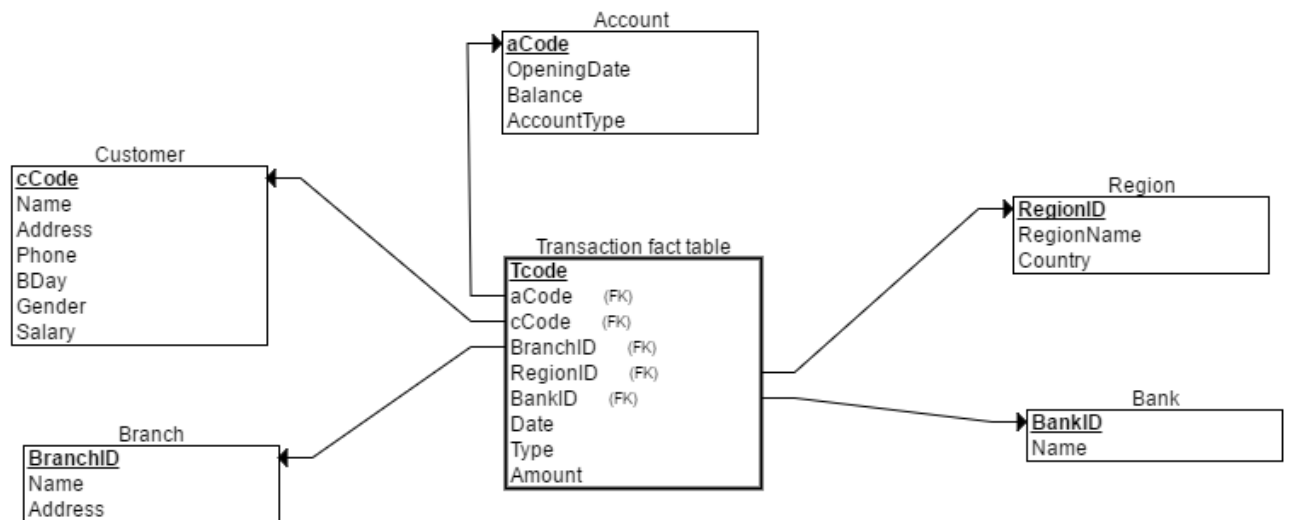


Exercise 1

1. I chose the Transaction table as FACT table because it is a level of measurement. It's also the table that's the most important and connects the others together. I chose the other tables as dimensions because not all rely on other tables e.g. Bank doesn't rely on other tables at all yet the Transactions table needs it.

There are also different types of transactions and different types of customers that would be involved in this process hence it was better to make the Transactions table a FACT table and other as DIMENSIONS.

Through the Transaction table can the other DIMENSIONS be tracked.



2. `SELECT SUM(Tcode) FROM Transaction WHERE Date<="31-12-2009 23:59" AND >= "01-01-2009 00:00" AND BankID;`

Exercise 2

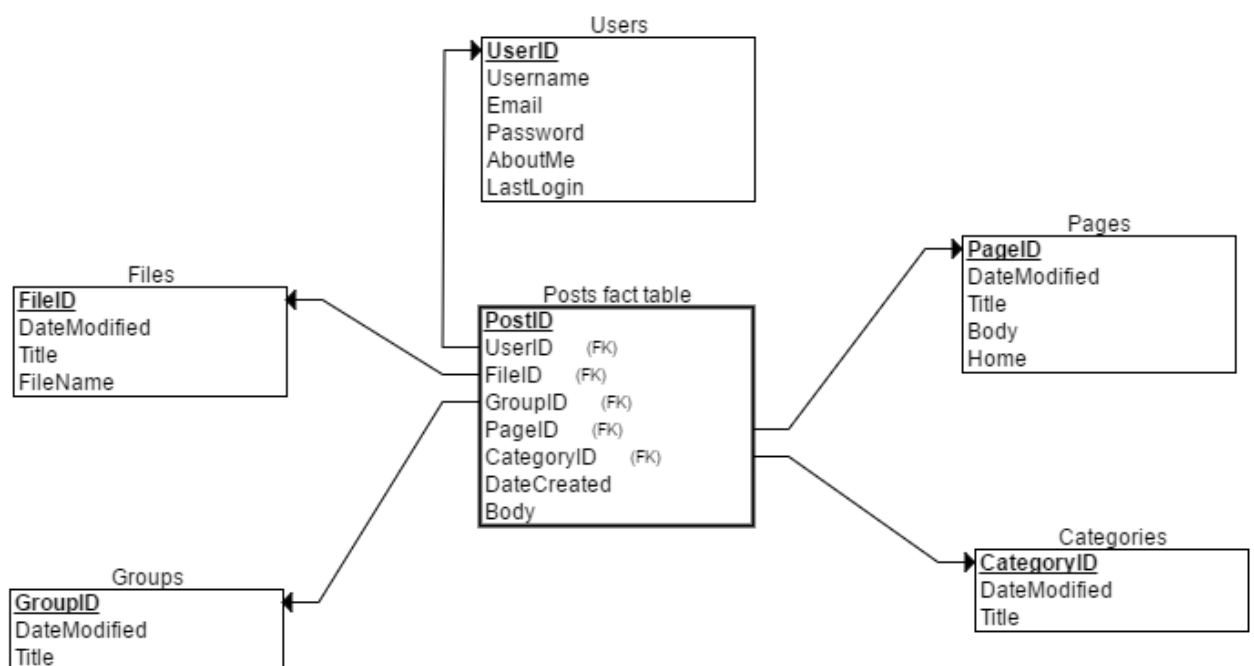
Boards.ie is a forum site whereby people create topics and interact via posts. Users can create groups or posts and other users can respond to it. Files can also be attached to posts. The posts can also be categorised.

The business model I'm aiming for lets the individual know the total amount of posts that exist on the site. It also lets users know the last time a User logged in and gives the total posts that exist in groups as well. It also tells us the categories the posts exist under. You can also see the files that are attached to certain posts. There is a way of also knowing how many pages exist on the site.

Questions

- How many posts exist in total on the site?
- How many posts were made under a certain category?
- How many posts exist in a group?
- What posts carry a file(s)?
- How many pages exist?

The diagram shows that a User can create Files and Groups and they can be handled under Categories. The more Posts created, the more Pages are generated. Many more Users can create and add to Posts. Multiple files can also be attached to Posts.



- `SELECT SUM(PostID) FROM Posts; /* Show the number of posts on the site */`
- `SELECT SUM(GroupID) FROM Posts WHERE PageID > 20; /* Displays the groups that have more than 20 pages of posts */`