

MP2.2 Mark another group's project

We hand on the database distributed to us and tried to understand the structure of it and implied some queries on it. Here is the result on what we learnt from their database.

Queries:

```
select name from sqlite_master where type in ('table', 'view') and name NOT LIKE 'sqlite_%' ORDER BY 1;
```

- To list out the table name included in the database.

```
select * from Games G, Story S where G.name = S.sGName and S.type = 'OPEN WORLD' and S.length > 100;
```

- To list the open world game with length greater than 100 from the database.

FDs:

In Developer table, we find functional dependency on name=> address, owner and address=>owner, name

In Games table, we find functional dependency on name=>releaseDate, genre, developedBy

In later tables, there is no functional dependency found rather than key=> other attributes.

BCNF:

As there is no attribute can be separated in the database, the database is eligible to 1NF.

As there is no partial relationship between each attribute, the database is eligible to 2NF.

As there is no bad functional dependency among the attributes, the database is eligible to BCNF.

Understanding:

This database is designed for recording game information, including the genre of the game, developer of the game, also, some customer who has the game. The structure is well designed, but the implementation has some null in ServiceModel table. Also, there is a data in releaseDate attribute from Games table shows 2016-05-24, which indicates the database didn't set the value type rightly.