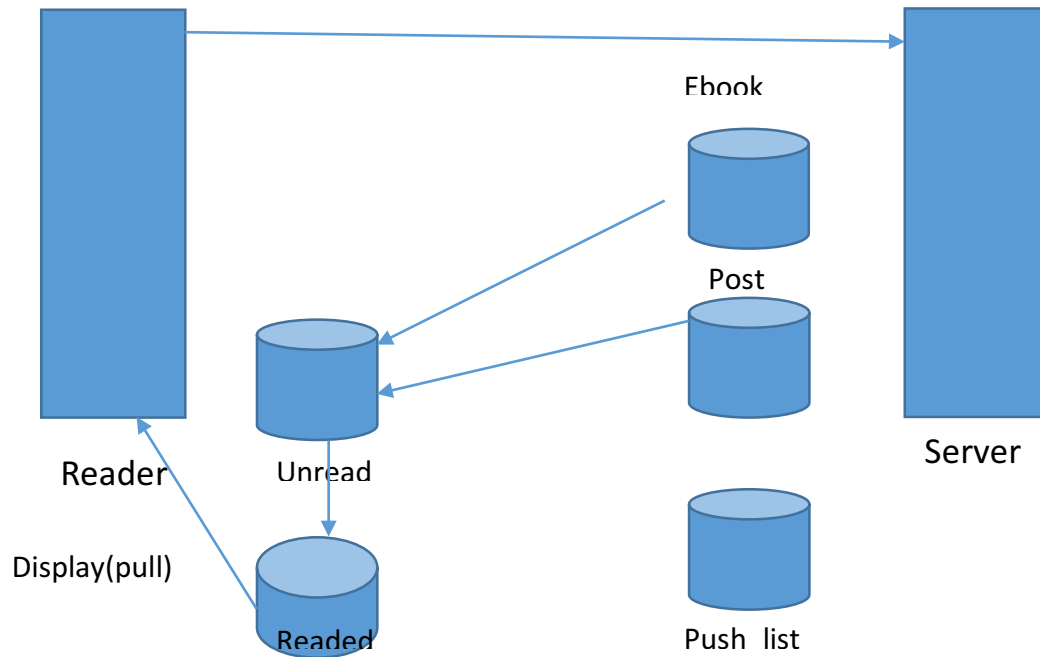


# COMP9331 Assignment Report

## Outline:

This assignment is mainly about how to use socket(TCP), how to design the message format, and importantly how to deal with logical relation.

## Logic design:



## Message format:

Post, unread, Readed: { exupery\_page1: [username > line > content > serial]}

Post\_record: username > line > content > serial

Push record: push ~ addr ~ port ~ unread(client) ~ readed(client)

Eg: push~localhost~49233~[]~[]

## Client:

The client side need to maintain two databases which are unread and readed and I just use dictionary to store the posts in the fixed format respectively.

unread format: { exupery\_page1: [username > line\_num > content > serial, ...], ...}

readed format: { exupery\_page1: [username > line\_num > content > serial, ...], ...}

**Pull:****display exupery 1:**

First send the request to server, the server will reply not only with content but also all the posts which specified by this page. And then check whether these posts are already in unread and readed, if not match add the posts in the unread. Then check whether the content can match with posts specified by this page, if match mark n. And then check in readed, if match mark m in same way.

**post\_to\_forum 1 hello:**

First send the request and the content in a fixed format to server, the server will stored it in the post\_dict

**read\_post 1:**

First find the specified posts in the unread, print out them in a fixed format. Meanwhile, the unread should reduce these records the readed should add these records.

**Push:** when use the push mode, the client should send select a idle port along with local database(unread, readed) to the server. And then start a new thread to listen this port to receive the new posts which server sent, Then check them with the unread and readed then add these posts in to unread. Meanwhile, if the posts can match with the current page which the client is reading, print 'There are new posts...'

**Server:**

The server need to main two databases which are push\_list and post\_dict and I just use dictionary post\_dict to store all the posts and use list push\_list to store all the push client

**Summary:**

I think this assignment emphasize more about how to deal with logic of operation, how to deal with local databases and how to design message format. It's very practical!