

## CHAPTER IV

### ANALYSIS AND DESIGN

#### 4.1 ANALYSIS

##### 4.1.1 Use Case Diagram

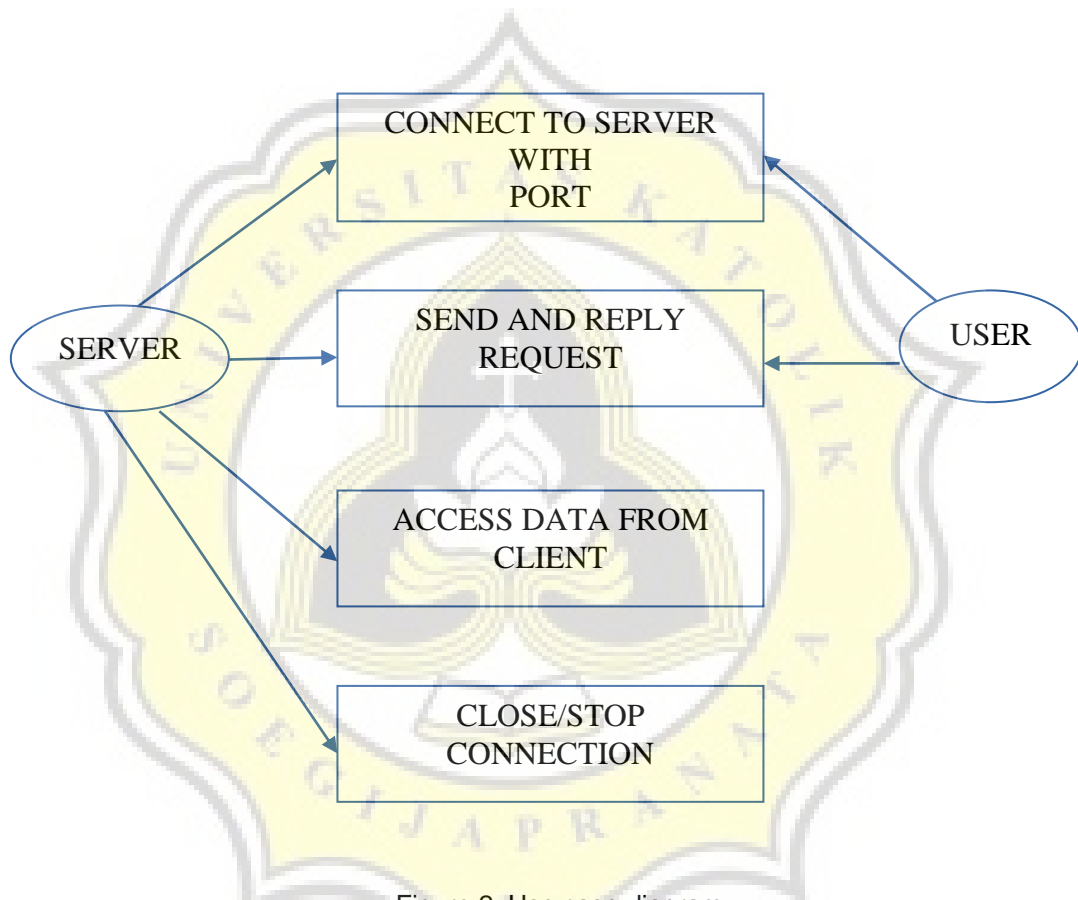


Figure 2. Use case diagram

1. First, Server will set the port and then client can do connection with server via server's IP Addresses and that port.
2. After user connect to server, then user can send request and server will reply the request.
3. Server will access data which given by user.
4. Server closes the connection.

### 4.1.2 FLOW CHART

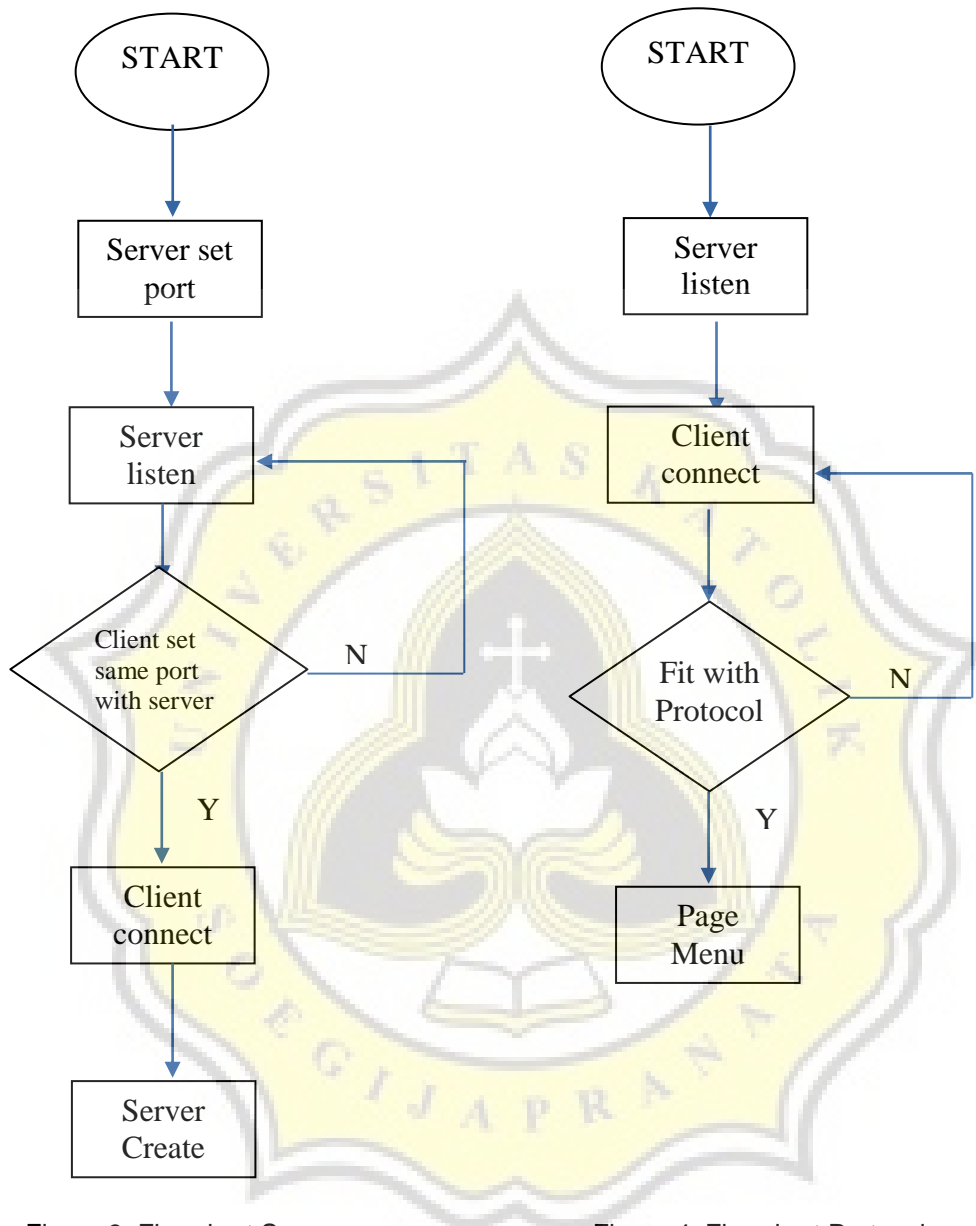


Figure 3. Flowchart Server

Figure 4. Flowchart Protocol

First, server will set port and then server listen to client ,if client set the same port which already set by server then client connect to server and server create thread. If user send request which fit with protocol then server will reply with menu page.

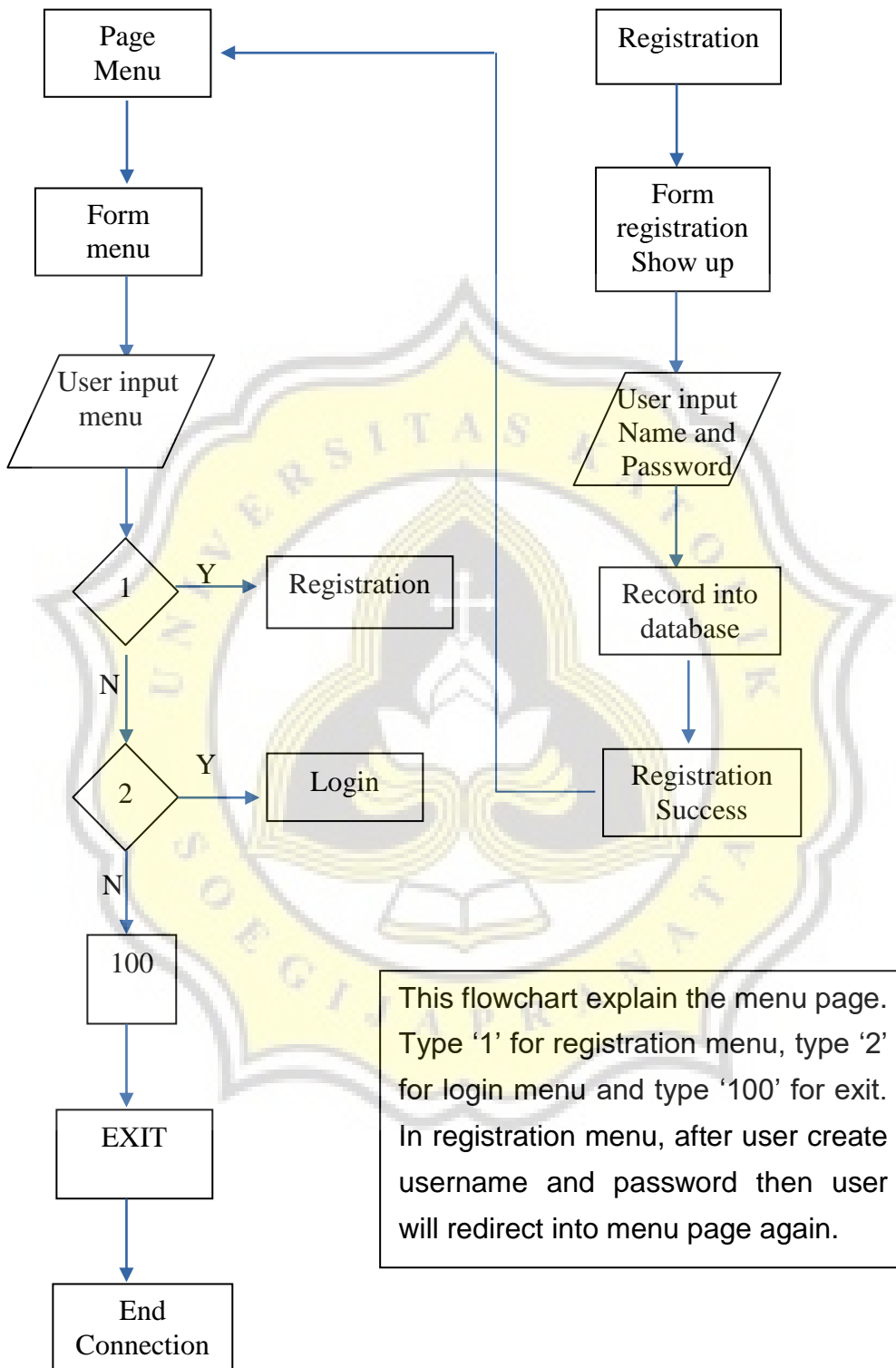


Figure 5. Flowchart Menu

Figure 6. Flowchart Registration

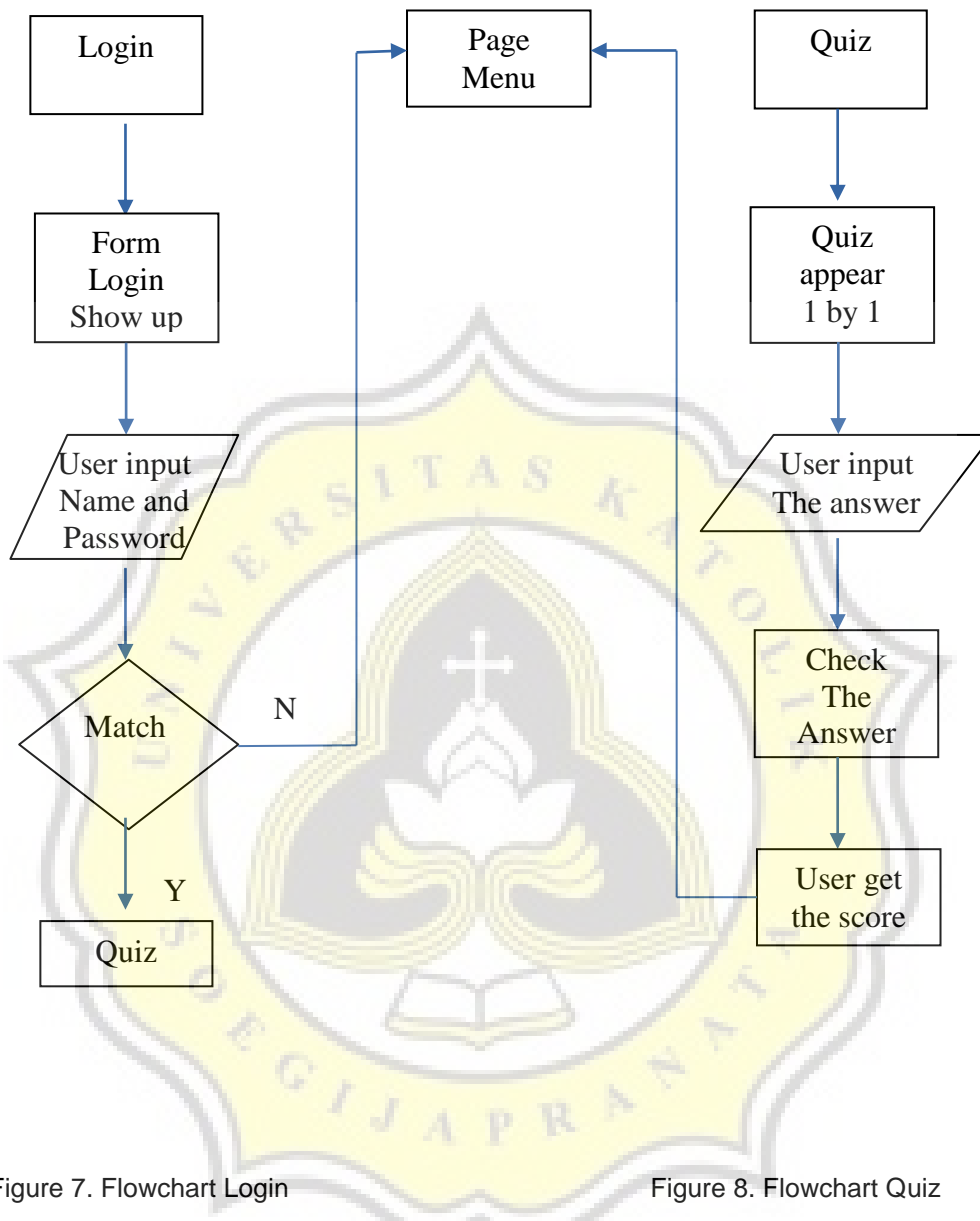


Figure 7. Flowchart Login

Figure 8. Flowchart Quiz

User type '2' for login, if username and password suitable with database then user will go to quiz page, but if not suitable then user will go to menu page again.

In quiz page user will get the quiz one by one and every user get different question, so user can more concentration while play the quiz. After all quiz get answered, user will get the score.

## 4.2 DESIGN

Server.java
<pre> - public void main  - class Clienthandler extends Thread   - void menu()   - void pilihmenu()   - void exit()   - void register()   - void login()   - void cetak2()   - void cetak3()   - void cetak4()   - void cetak5()   - void savejawab()   - void cocokjawaban()   - void log()   - voidhapus()   - void run() </pre>

Figure 9. Table Design

Explanation:

1. Public void main :

Place to create socket and some condition to accept the clients.

2. Void menu() :

Send page menu to client.

3. Void pilihmenu() :

Process user's input to choose the menu.

4. Void exit() :

Function when client input '100' in form menu and client get exit from this game.

5. Void register() :

Send form register to user and after client input username and password on form then server record it.

6. Void login() :

Form login show up and after client input username and password on form then server process it, match or not and if match then question one appear.

7 . Void cetak2() :

Send to client second question.

8 . Void cetak3() :

Send to client third question.

9 . Void cetak4() :

Send to client fourth question.

10 . void cetak5() :

Send to client fifth question.

11 . Void savejawab() :

Record client's answer into file text.

12 . Void cocokjawaban() :

Server matching the client's answer with the real answer and if match score + 20, and give client the final score.

13. Void log() :

To send the question,true answer and user's answer into page

14 . Void hapus() :

Erase all data in jawaban.txt after client get the final score.

15 . Void run() :

Process the line from client when connect to server via web and divide it one by one so server can read it correctly