

Tugas 5 IF3038 Pemrograman Internet

Speek Messenger

Oleh:

Ananti Selaras Sunny (13507009)

Adityo Jiwandono (13507015)

Ginanjari Fahrul M (13507103)

Deskripsi Format Pesan

Deskripsi format pesan terdapat pada file protocol.h, pada file ini dibuatlah suatu aturan yang berisi format pesan yang diterima dan dikirim dari client dan server, serta sebaliknya.

Isi dari file tersebut:

```
#ifndef _SPEEK_PROTOCOL
#define _SPEEK_PROTOCOL

#define PROTOCOL_NAME "MSG"

#define PORT 7674

typedef struct {
    char name[4];
    int version;
    int pkt_len;
    int service;
    int status;
    char data[32768];
} protocol;

#define SPEEK_VERSION 1

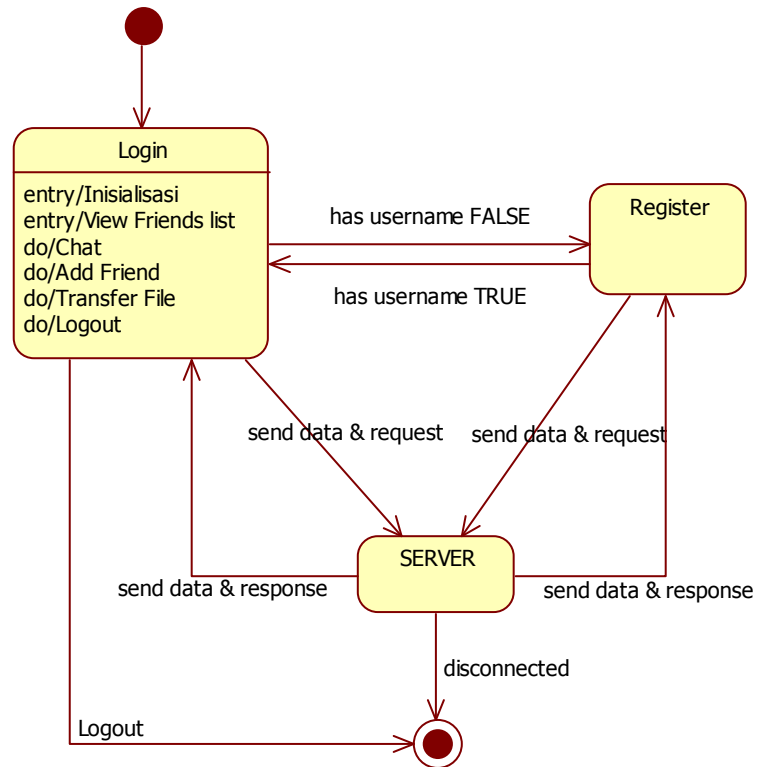
#define MSG_SERVICE_LOGON 1
#define MSG_SERVICE_LOGOFF 2
#define MSG_MESSAGE 3
#define MSG_FILETRANSFER 4
#define MSG_ADDFRIEND 5
#define MSG_REMFRIEND 6
#define MSG_RETFRIEND 7
#define MSG_STATUSUPDATE 8
#define MSG_REGISTER 9

#define MSG_STATUS_FAILED 0
#define MSG_STATUS_SUCCESS 1
#define MSG_STATUS_ONLINE 2
#define MSG_STATUS_OFFLINE 3

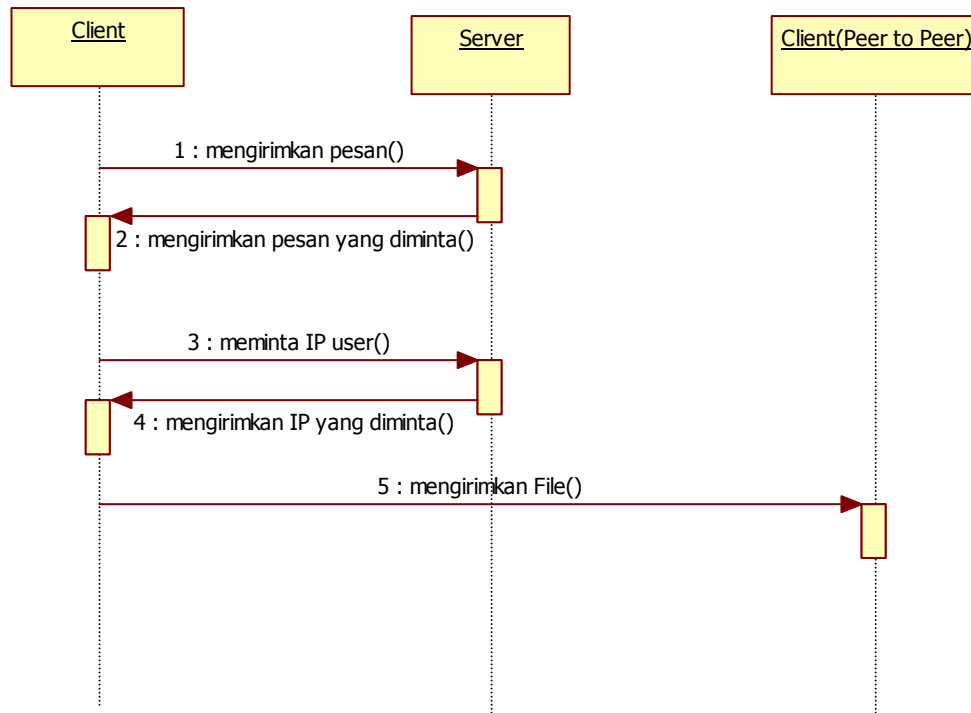
/*
 * MSG_SERVICE_LOGON
 * Client:
 * \30username\31password
 * Server:
 * Server akan mengembalikan status 1 kalau login sukses, 0 kalau gagal
 *
 * MSG_SERVICE_LOGOFF
 * Client:
 * \30username
 *
 * MSG_MESSAGE
 * Client:
 * \30sender\31receiver\31message
 * Server:
 * Teruskan ke client receiver
 *
 * MSG_RETFRIEND
 * Client:
 * \30username
 * Server:
```

```
* \30friendname1\31status1\30friendname\31status2
*
* MSG_ADDFRIEND
* Client:
* \30username\31friendname
* Server:
* Status 1 kalau berhasil, 0 kalau gagal
*
* MSG_REMFRIEND
* Client:
* \30username\31friendname
* Server:
* Status 1 kalau berhasil, 0 kalau gagal
*
* MSG_STATUS_UPDATE
* Server:
* \30username\31status
*
* MSG_REGISTER
* Client:
* \30username\31status
* Server:
* Status 1 kalau berhasil, 0 kalau gagal
*
* MSG_FILETRANSFER
* Client:
* \30targetusername
* Server
* Status: MSG_STATUS_SUCCESS atau MSG_STATUS_FAILED
* \30ipaddress
*
*/
#endif
```

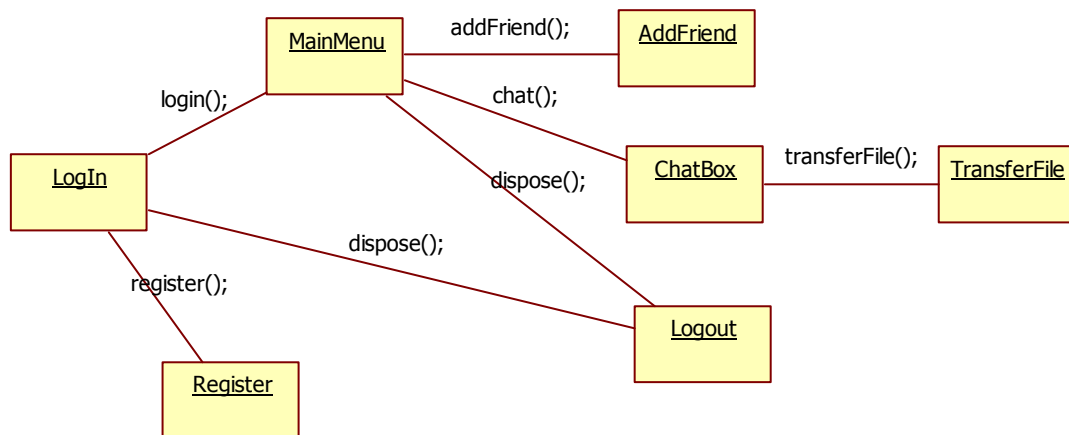
State Chart Diagram



Event Sequence



Collaboration Diagram



Error Control

1. Jika headernya bukan "SMSG" maka paket tidak diterima oleh server.
2. Jika nomor service tidak ada maka paket juga ditolak.