# 17th May | Sprint 2 Stress Testing

## Stress Testing for Adding Users into Chat

We use JMeter to simulate adding as many users into chat as we can, to see if our server can withstand this amount of load.

API to make request to: https://api.chatengine.io/chats/{{chat\_id}}/people/

HEADERS	VALUE
Project-ID	{{project_id}}
User-Name	{{user_name}}
User-Secret	{{user_secret}}

```
Body
{
    "username": "test_user_1"
}
```

### **JMeter Component Structure**

- Sprint 2 Test Plan
  - Members Threads { Number of Threads: 2000, Ramp-up period (seconds): 1, Loop Count: 1 }
    - CSV Data Set Config { Filename: member.csv, Variable Names: USERNAME}
    - Loop Controller
      - HTTP Add Member { Body Data: Specified in body, Method: POST }
        - HTTP Header Manager { Headers: Specified in HEADERS }
        - View Results Tree
        - Graph Results
        - Summary Report

#### Success Rate

```
# Stress Testing for add members in a chat
df_member = pd.read_csv("./Member/Member-Report.csv")
member_request_num = len(df_member)
print("Total number of request:", member_request_num)
member_code_list = df_member.responseCode.to_list()
valid_response = 0

for code in member_code_list:
    if code == '201':
        valid_response += 1

print("Number of successful request:", valid_response)
print("Success rate:", valid_response/member_request_num)
```

Total number of request: 2000

Number of successful request: 477

Success rate: 23.85%

### Sample User Report

TimeStamp	Elapsed	ResponseCode	ResponseMessage	ThreadName	Success	Bytes	SentBytes	GrpThreads	AllThreads	URL	Latency	IdleTime	Connect
1621232863944	11387	500	Internal Server Error	User Threads 1-68	FALSE	574	380	1914	1914	https://api.chatengine.io/chats/21968 /people/	11387	0	2
1621232864027	11304	500	Internal Server Error	User Threads 1-162	FALSE	574	381	1914	1914	https://api.chatengine.io/chats/21968 /people/	11304	0	1

1621232863954	11377	500	Internal Server Error	User Threads 1-77	FALSE	574	380	1914	1914	https://api.chatengine.io/chats/21968 /people/	11377	0	1
1621232864746	10610	201	Created	User Threads 1-781	TRUE	565	381	1911	1911	https://api.chatengine.io/chats/21968 /people/	10610	0	1
1621232865372	10165	201	Created	User Threads 1- 1296	TRUE	565	382	1910	1910	https://api.chatengine.io/chats/21968 /people/	10165	0	1