

LAPORAN TUGAS
SISTEM TERDISTRIBUSI



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BAB I

TUJUAN PRAKTIKUM

Running Locust:

```
locust -f .\fileTest.py
```



The screenshot shows a terminal window with the following content:

```

PS C:\Users\zayya\Downloads\SEMESTER V\SYSTEM TERDISTRIBUSI\myproject> locust -f .\fileTest.py
[2025-09-17 19:03:44,879] Zeryyern/INFO/locust.main: Starting Locust 2.40.4
[2025-09-17 19:03:44,880] Zeryyern/INFO/locust.main: Starting web interface at http://localhost:8089, press enter to open
your default browser.

```

RESULT AND ANALYSIS

The server performance was tested under different load sizes (1, 10, 100, 1000 users).

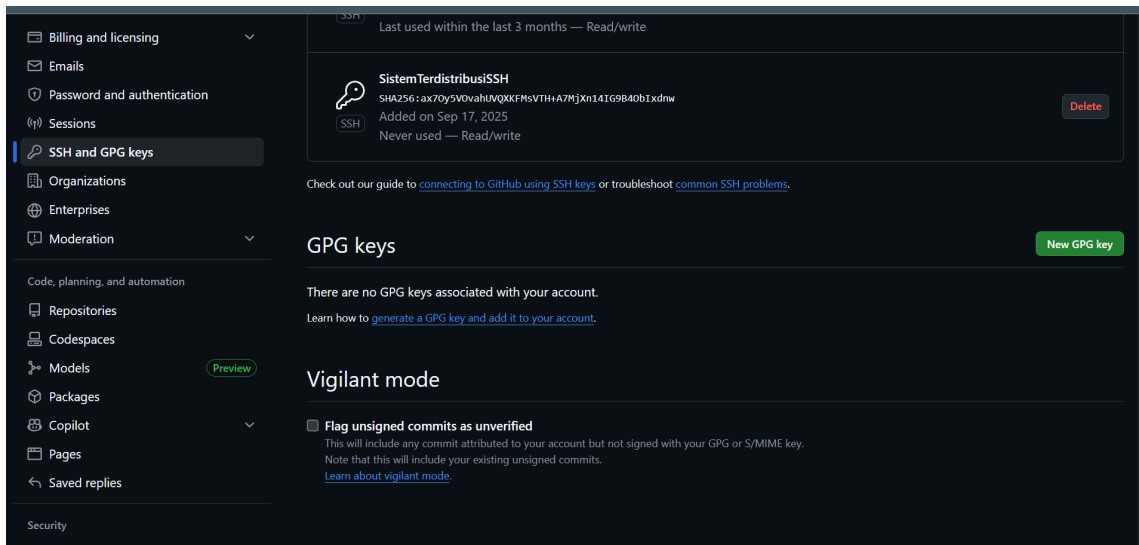
- **Metrics observed:**
 - **Response Time (Latency)** → Delay between request and response.
 - **Failure Rate** → Percentage of failed requests.
 - **Throughput** → Requests per second handled by the server.

The screenshot shows the Locust web interface in a browser. The top navigation bar includes tabs for 'STATISTICS', 'CHARTS', 'FAILURES', 'EXCEPTIONS', 'CURRENT RATIO', 'DOWNLOAD DATA', 'LOGS', and 'LOCUST CLOUD'. The 'STATISTICS' tab is active. Below the navigation bar, there's a header section with the Locust logo, host information ('http://127.0.0.1:5000/'), status ('RUNNING'), and summary statistics: Users (1000), RPS (40.8), and Failures (5%). There are also buttons for 'EDIT', 'STOP', and 'RESET'. The main content area displays a table of statistics for various HTTP requests. The table has columns for Type, Name, # Requests, # Fails, Median (ms), 95%ile (ms), 99%ile (ms), Average (ms), Min (ms), Max (ms), Average size (bytes), Current RPS, and Current Failures/s. The data shows that the 'Aggregated' row has the highest number of requests (49776) and failures (2507). The 'GET //files/100kb.txt' row has the highest average size (97155.42 bytes).

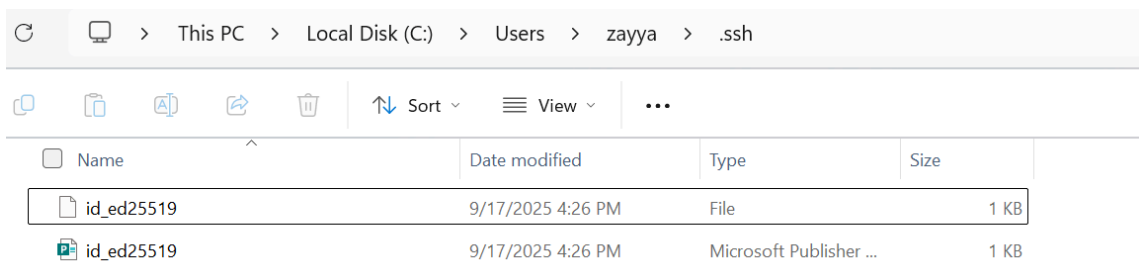
Type	Name	# Requests	# Fails	Median (ms)	95%ile (ms)	99%ile (ms)	Average (ms)	Min (ms)	Max (ms)	Average size (bytes)	Current RPS	Current Failures/s
GET	//	6187	289	7900	44000	137000	15236	5	235622	141.09	5.6	0.7
GET	//files/100kb.txt	12535	642	8100	45000	140000	15668.12	6	239100	97155.42	8.8	1.2
GET	//files/10kb.txt	12412	607	7900	46000	139000	15490.68	4	236172	9739.22	9.9	1.4
GET	//files/10mb.txt	6171	310	25000	83000	140000	30917.17	96	236321	9959008.16	5.1	0.8
GET	//files/1mb.txt	12471	659	9900	50000	140000	17501.53	14	236034	993166.52	11.4	2.3
	Aggregated	49776	2507	9800	55000	139000	17920.02	4	239100	1510415.03	40.8	6.4

GENERATING SSH KEY

`ssh-keygen -t ed25519 -C "zeryyernawwerl@student.un.ac.id"`

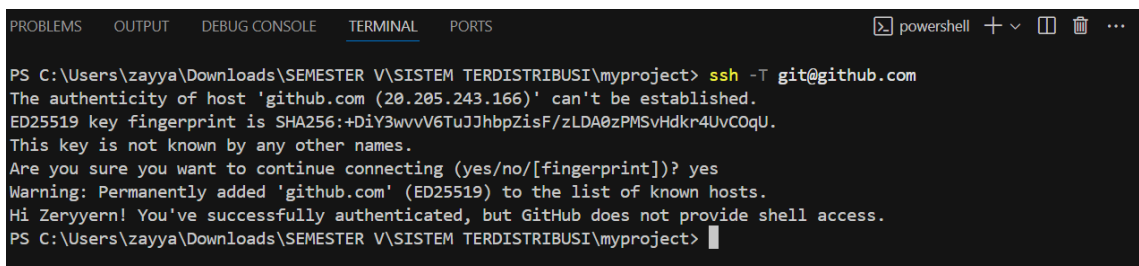


default save location `C:\Users\<username>\.ssh\id_ed25519`



Testing Connection

`ssh -T git@github.com`



CONCLUSION

1. SSH setup for GitHub was successfully completed. Secure communication is now enabled without requiring default username/password.
2. The Flask API was tested with Locust to simulate different user loads. The results (shown in graphs) demonstrate the server's performance, including response time and failure rates at increasing load levels. This process provides both **secure GitHub operations** and **measurable API performance evaluation**.