

OS Programming Project Report (Resource Monitor Using Python)

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Group – A6

Project overview:

- Our group used Python to create a dynamic resource monitor.
- Monitoring Disk, Network Usage, System Boot Time, and Top Processes are the project's main objectives.
- We also developed a simple front-end to display all this data on a single page, making it easier for users to get crucial statistics in a single, convenient spot.

How the group has managed to complete the project -

- Team members were assigned equal duties to guarantee the project's effective and successful completion.
- Throughout the process, the group held several talks to hone ideas.
- Every team member assumed responsibility for the individual tasks allocated to them.
- Ultimately, the culmination of everyone's efforts produced the finished product.
- The timely completion of this project was made possible by the team's diligent work and consistent communication.

Problems you faced –

- The psutil library, being new to me, required frequent reference to its documentation to grasp its functionalities.
- Complexity of the user interface

Places you found the solution -

- Front-End Development Resources: <https://frontendmasters.com/>
- <https://medium.com/analytics-vidhya/flask-development-part-3-file-structure-68e3bf2f6642>
- <https://realpython.com/flask-javascript-frontend-for-rest-api/>
- MDN Web Docs: <https://developer.mozilla.org/>

Group Members Contribution Towards the Project

- 1) Shreyas Shende:
Primarily focused on the Python part, utilizing the psutil package to gather necessary information for the project. Assisted in the integration of the frontend and backend using Flask.
- 2) Abhiraj Gupta:
Major contributor to the Flask integration and helped with JavaScript implementation.
- 3) **Ayush Dewan(me):**
I did the front-end development.
- 4) Gaurav:
Worked extensively on the front-end in collaboration with me.

Name of teammate who submitted the Project:

Shreyas Shende (ss4897)