CASE STUDY

Optimizing The Visa Application Filling Process

OVERVIEW

❝ Neutrino helped a Singapore based AI, Biometrics, Robotics & Verification Intelligence Technology Enterprise to optimize, streamline and automate its entire processes. ❞

CHALLENGES

The automated process for filling visa applications was experiencing significant time inefficiencies, with each user form taking approximately 8 minutes to complete. This prolonged duration posed challenges such as delays in processing and potential backlog accumulation, hindering operational efficiency. To address these issues, there was a critical need to optimize the process to reduce the time taken for each application.

OBJECTIVES

- ⊘ To reduce the time required to fill in the form from 8 minutes to a significantly shorter duration.

- ⊘ To implement optimization strategies we proposed lite application such as NodeJS in addition to leveraging Selenium and Playwright libraries through Python and incorporating multiprocessing and threading techniques to enhance the performance.

- ⊘ To streamline the application filling process, ensuring swift and efficient completion of applications while maintaining accuracy and reliability.

Success Criteria

- Achieve a reduction in processing time to **108 seconds** per user for Selenium and **87 seconds** per user for Playwright.

- Achieve a processing time of **128 seconds** for four users using Selenium and **120 seconds** using Playwright, with multiprocessing and threading.

Cost Effective   **Time Savior**

Improve Accuracy and reliability of the platform

Technical Requirements

SOULTIONS

- The proposed solution involves using NodeJS or Selenium and Playwrite with Python to automate the visa application form filling process.

- By implementing multiprocessing and threading. We aim to distribute tasks effectively, reducing the time required for each user's interaction with the application.

Conclusion:

" By leveraging Selenium and Playwright with Python and implementing multiprocessing and threading, we have successfully reduced the time required to fill visa applications. This POC has validated the effectiveness of the proposed solution, paving the way for broader implementation to streamline the visa application process. "

NEUTRINO
Delivering Excellence

🌐 **www.neutrinotechsystems.com**   ✉ **info@neutrinotechsystems.com**