

面部心率檢測系統

Facial Heart Rate Detection System

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專題成員：雷美心

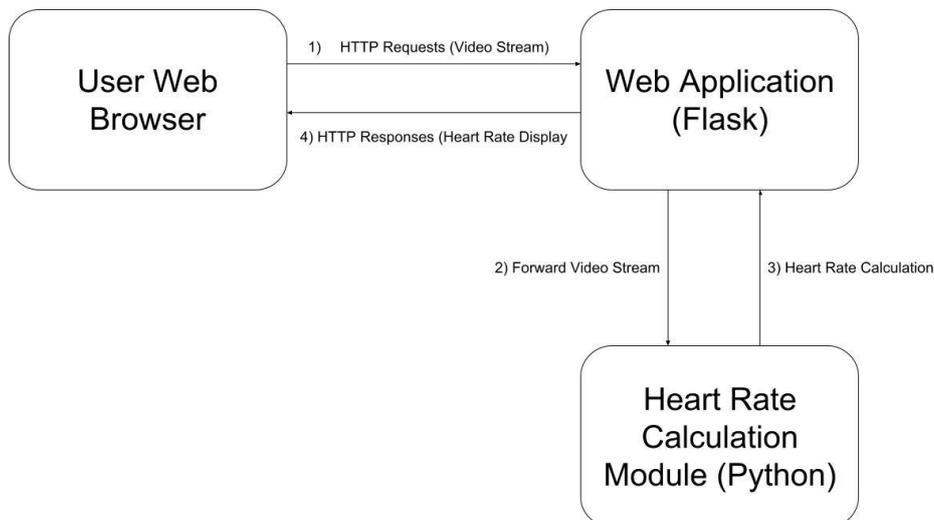
開發工具：Python

測試環境：Windows

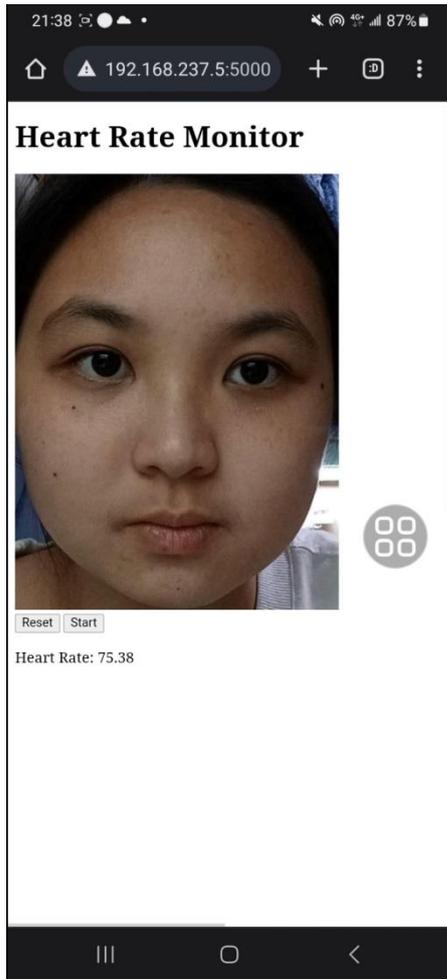
一、簡介：

This project focuses on developing a user-friendly web-based facial heart rate detection system using Python and Flask. The system utilizes computer vision algorithms to accurately estimate heart rate in real-time by analyzing changes in facial color. By eliminating the need for physical sensors or wearables, the system aims to enhance convenience and accessibility for users.

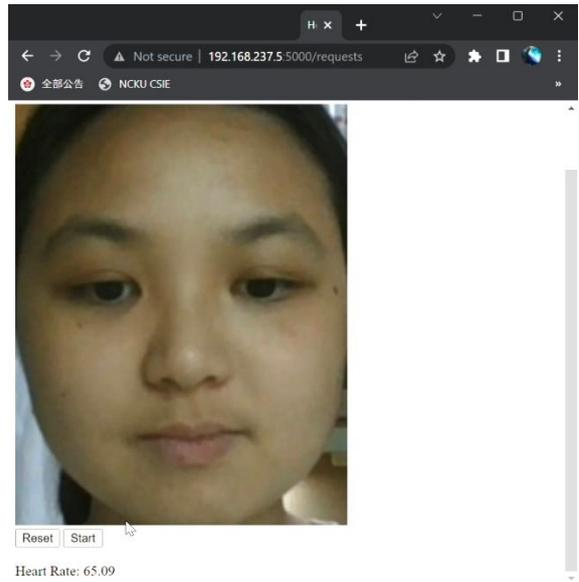
The architecture of the system comprises a web application interface developed with Flask and a heart rate calculation module implemented in Python. Users input their facial video stream through the web interface, which is then processed by the heart rate calculation module. The calculated heart rate is displayed back to the user via the web application. The project aims to provide an efficient and non-invasive solution for heart rate monitoring, with potential applications in personal health monitoring, stress detection, and early disease diagnosis.



二、測試結果：



圖一：Run on Android Browser



圖二：Run on Windows Browser