Individual Project Report

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| Your Name: | Ng Ziming Vincent |
| Certificate: | Graduate Certificate in Intelligent Software Agents – IPA project |

# 1. Your personal contribution to the project.

# **Project lead and Sponsor** – I have essentially helped Republic Polytechnic identify areas where automation can be applied to improve work processes. As a key supporting member for the annual graduation ceremonies, I’m familiar with the manual processes currently in-place and I’m able to utilize the knowledge and insights I have gained through the ISA course. **Project requirements and solution design** – Understanding the post-processing (through interviews with stakeholders) that takes place after recording by the voice talent helped me to identify the technical requirements of the name recordings. The pipeline of activities can then be mapped to a multi-agent system that is intelligent enough to automate the repetitive tasks performed by the audio technician. **GUI and systems integration** – For ease of use by the end-user, a custom built GUI (through Python) with just the bare essentials ensures that the Name Recorder Automation agent is intuitive to learn and easy to use. I’m also in charge of integrating suitable digital signal processing libraries that will fulfill all the name recording requirements.

# 2. What you have learnt from the project. **Time and resource management** – Having to work on 2 concurrent practice module projects on top of the capstone project means it is crucial to manage my time effectively, and not spend too much time troubleshooting when things do not work as expected. I have learnt to focus on the key features and to leave ‘nice-to-have’ features as stretch goals to be done when I can afford the time. **Virtual environments** – Having to juggle multiple Python environments for the concurrent projects made it necessary to work with virtual environments to avoid library version conflicts. **Digital signal processing** – Working with audio post-processing made me more appreciative of the technicalities of editing audio waveforms without a GUI wave editor. Many technical jargon from the audio domain are clearer to me now after working with them in this project.

# 3. How you can apply this in future work-related projects. **Recognize opportunities for automation** - With the knowledge and skills gained in this project, I will be better equipped to recognize opportunities for process automation and propose automation projects that can improve workflows in all areas of work. **Communication with stakeholders** – Understanding the key pain points of stakeholders will help in pitching the project effectively to garner support and achieving maximum impact.