Report: Research and Selection of Windows Installer Tool for Movie Database Catalog App

1. Introduction

This report outlines the research conducted to identify suitable tools for creating a Windows installer for the Movie Database Catalog App, developed using Python. The tools considered are Inno Setup and PyInstaller. After thorough analysis, the most suitable tool has been selected based on specific criteria relevant to our project requirements.

2. Tools Researched

2.1 Inno Setup
- Description: Inno Setup is a free installer for Windows programs, offering a robust feature set and high stability.
- Features:
  - Supports all versions of Windows.
  - Customizable setup options.
  - Multilingual support.
  - Efficient and compact installers.
  - Integrated scripting engine for advanced customization.

2.2 PyInstaller
- Description: PyInstaller converts Python applications into stand-alone executables for Windows, macOS, and Linux.
- Features:
  - Cross-platform support.
  - Bundles all dependencies into a single executable.
  - No need for users to install Python or any dependencies.
  - Customizable build process.
  - Active community and comprehensive documentation.

3. Criteria for Selection

The following criteria were considered in selecting the most suitable tool:
- Ease of Use: The simplicity of setting up and using the tool.
- Features: The range of features and customization options available.
- Cross-Platform Consistency: Consistency with tools used by other development teams (e.g., Linux team).
- Support and Community: Availability of documentation and community support.
- Integration: How well the tool integrates with our existing development environment.

4. Analysis and Recommendation

Based on the criteria mentioned, PyInstaller was found to be the most suitable tool for the following reasons:
- Cross-Platform Consistency: The Linux development team is already using PyInstaller, ensuring consistency and streamlined processes across platforms.
- Ease of Use: PyInstaller is straightforward to set up and use, particularly for Python applications.
- Comprehensive Features: PyInstaller offers all necessary features to create a robust Windows installer, including bundling dependencies and customizing the build process.
- Strong Community Support: PyInstaller has an active community and extensive documentation, aiding in troubleshooting and future enhancements.

5. Conclusion

In conclusion, PyInstaller is recommended as the tool for creating the Windows installer for the Movie Database Catalog App. Its compatibility with our existing development processes, ease of use, and robust feature set make it the ideal choice.