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The Graphic User Interface

of The AudioGraph Recorder

( PC version )

A thesis presented in partial fulfillment of the requirements
for the degree of

Master of Science in Computer Science at Massey University

Shao H. Nie

2001
Acknowledgements

I am indebted to Professor Chris Jesshope, my project supervisor, for his technical support throughout the project. Without the advice, comments and great patience from him, this thesis would not have been possible. I thank to him especially for his in depth analysis of some specific areas of the thesis, and for teaching me so much.

Honourable thanks to Mr. Chris Philips, for his advice on the history and design of GUI. And thanks go to the teachers, Mr. Nigel Perry, Mr. Paul Lyon, and Mr. Giovanni, for their opinions regarding programming languages. I would also like to thank Ms. Regina and Mr. Horia Slusanschi for providing some icon files for the project as well as advices on the Macintosh AudioGraph system.

I wish to also convey my gratitude to all the staff for lab computer support, and the secretaries of the computer science department for their help in time.

Finally, I thank my family for their support.
Abstract

With the popularity of the use of computers and the development of the Internet, many multimedia-authoring systems have been developed for computer-based teaching and learning. This is playing an increasingly important role in education. One authoring system is the *AudioGraph* project developed at Massey university of N.Z., which have been developed for recording audio-graphic presentation material for publication in an *html* reference environment, i.e. “on the web”.

One of the tools in the *AudioGraph* project is the *AudioGraph Recorder*, which is a Macintosh application for recording or authoring web-based multimedia presentations. Due to the success of the publication of the *AudioGraph* application and the need of PC users, an *AudioGraph Recorder* for the PCs is required. This project is about the porting of the *AudioGraph Recorder* from the Macintosh platform to the PC platform.

First this project report explains the functionality of the *AudioGraph Recorder* (the Macintosh version), especially how the end users interact with the interface of the *AudioGraph Recorder*, and the corresponding state changes of the controls in the interface.

Then the report compares the development tools used in both platforms. The Macintosh version of the *AudioGraph Recorder* has been developed with the *PowerPlant* framework in *CodeWarrior* environment, but the PC version uses MFC framework in *Visual C++ 6.0*.

This report also describes in detail how the interface of the *AudioGraph Recorder* application was constructed with the MFC, and implementation of some functionality of the application. At the same time some internals of the MFC framework are discussed.
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<th>Description</th>
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<tbody>
<tr>
<td>AWT</td>
<td>Abstract Windows Toolkit</td>
</tr>
<tr>
<td>API</td>
<td>Application Programming Interface</td>
</tr>
<tr>
<td>GUI</td>
<td>Graphics User Interface</td>
</tr>
<tr>
<td>JFC</td>
<td>Java foundation class</td>
</tr>
<tr>
<td>MDI</td>
<td>Multiple Document Interface</td>
</tr>
<tr>
<td>MFC</td>
<td>Microsoft foundation class</td>
</tr>
<tr>
<td>OO</td>
<td>Object-Oriented</td>
</tr>
<tr>
<td>OOUUI</td>
<td>Object-Oriented User Interface</td>
</tr>
<tr>
<td>OS</td>
<td>Operation System</td>
</tr>
<tr>
<td>RTCI</td>
<td>Run-Time Class Information</td>
</tr>
<tr>
<td>RTTI</td>
<td>Run-Time Type Information</td>
</tr>
<tr>
<td>SA/SD</td>
<td>structured analysis and structured design</td>
</tr>
<tr>
<td>SDI</td>
<td>Single Document Interface</td>
</tr>
<tr>
<td>SDK</td>
<td>Software development Kit</td>
</tr>
<tr>
<td>UML</td>
<td>Unified Modelling Language</td>
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