What is this book all about ?

This book teaches you how to develop multimedia applications using the **Java Media Framework (JMF).**

The book also introduces the new **Mobile Media API,** which can be used for developing multimedia **MIDlets** that run on **J2ME platforms.**

So what is JMF ?

JMF is an API. JMF is an optional package of Java 2 standard edition platform. JMF allows your applications to

- **(i) playback media,**
- **(ii) capture audio through microphone and video through Camera,**
- **(iii) do real-time streaming of media over the Internet**
- **(iv) process media (change media format, add special effects),**
- **(v) store media into a file.**

JMF supports popular media formats such as JPEG, MPEG-1, MPEG-2, QuickTime, AVI, WAV, MP3, GSM, G723, H263, MIDI, and Hotmedia.

JMF supports popular media access protocols such as file, HTTP, HTTPS, FTP, RTP, and RTSP.

Okay, why JMF?

Multimedia processing is compute-intensive. Hence existing desktop players rely upon native codes to improve performance. Hence they are platform dependent and unsuitable for deployment over Internet.

JMF provides a layer of abstraction. JMF API hides the implementation details and provides a cross platform solution. JMF delegates media processing tasks to native codes if they are available in client platforms. *Thus JMF does not lack performance.*

Who should read this book ?

This book is intended for

- **(i) Developers of web-based multimedia applications,**
- **(ii) Managers wanting to use multimedia in their products or projects for value addition,**
- **(iii) Students interested in learning multimedia through practice and to carry out projects.**

What benefits would you get by reading this book ?

You can enrich your Java applications, applets and Beans with multimedia contents such as audio, video, animation, MIDI sequences, etc.

You can develop Internet-based multimedia applications such as video telephony, video conferencing , media-on-demand, voice and video mailing system, Remote lecturing, live broadcast over internet, media rich e-commerce solutions etc.

What prerequisites do you need to read this book ?

You should be familiar with Java. Prior knowledge of multimedia is not needed. Multimedia formats, compression techniques, and standards are introduced. The book is self-contained. Further a case study on multimedia project implementation is presented in detail.

About the author:

Dr. T. G. Venkatesh has been involved in developing multimedia applications using JMF for the past 3 years. He is the main developer of the Cosmophone application.

He was a speaker in a BOF session entitled "Developing multimedia applications with the Java Media Framework APIs" in the JavaOne 2001 conference.

Venkatesh received his Ph.D from IISc, Bangalore. He has served as a faculty at IISc and IIT Delhi. Currently he is a faculty at IIT Madras.

The accompanying CDROM contains source code for all 85 programs discussed in the book, documentation and reference implementation of J2SE, J2ME, JMF, MMAPI and sample media files.

Get free video conferencing software !!! **CDROM includes the demo version of the *Cosmophone* application along with the installation and user's manual. The Cosmophone enables**

- **(i) video telephony over internet**
- **(ii) sending voice, video mail over Internet**
- **(iii) video conferencing in an Intranet.**

For more details of this book visit :
http://business.vsnl.com/cosmos_software

Read the foreword written by

Amith Yamasani , *Java Media Architect, Sun Microsystems, Inc. Santa Clara, USA.*