Computer Masti

First Edition 2009

BOOK-III

Sri Sri Ravishankar Vidya Mandir

The Art of Living

विद्या ददाति विनयम्

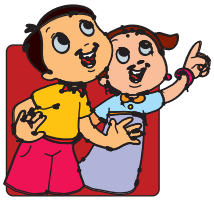
Publisher:
Sri Sri Ravishankar Vidya Mandir Trust
#1897/A, Gulora, Near Ragi Gudda Temple
26th Main, Southend 'C' Cross Road
9th Block, Jayanagar, Bangalore 560 069, India
http://www.ssrvm.org/

First Edition: 2009

The online version of this book is available freely for educational use, under the conditions described below (Copyright Statement). You may download the latest edition of this book from: http://www.cse.iitb.ac.in/~sri/ssrvm/

If you wish to publish an edition of this book or distribute it on a profit making basis, or use it for any commercial purpose, you MUST have prior approval from the editor:

Sridhar Iyer
Dept. of Computer Science and Engineering
Indian Institute of Technology Bombay
Powai, Mumbai – 400 076
INDIA
email: sri@iitb.ac.in



creative commons
SOME RIGHTS RESERVED

Copyright Statement

This book has been produced by the collaborative efforts of many authors. The distribution and usage of this book are as per the Creative Commons license – **Attribution - Non – Commercial - Share Alike**. See **http://creativecommons.org/licenses/byncsa/2.5/in/** for details. A brief excerpt from the license is given below.

You are free:
•**to Share** — to copy, distribute and transmit the work.
•**to Remix** — to adapt the work.

Under the following conditions:
•**Attribution**. You must attribute the work in the manner specified by the authors. For any reuse or distribution, you must make clear to others the license terms of this work.
•**Noncommercial**. You may not use this work for commercial purposes.
•**Share Alike**. If you alter, transform, or build upon this work, you may distribute the resulting work only under the same or similar license to this one.

Computer Masti

First Edition 2009

Book III

Created at:
Department of Computer Science & Engineering
Indian Institute of Technology Bombay
Mumbai, India.
www.cse.iitb.ac.in

Supported by:
Sri Sri Ravishankar Vidya Mandir Trust,
Bangalore, India.
www.ssrvm.org

Distributed under:
creative commons
SOME RIGHTS RESERVED

Editors
Sridhar Iyer
Malati Baru

Authors
Farida Umrani
Usha Viswanathan
Vijayalakshmi Chitta

Design
Sameer Sahasrabudhe
Swati Revandkar

Illustrations
Kaumudi Sahasrabudhe

Based on contributions from:
Aruna Adil, Aruna Prabhala,
Moushumi Pati, Neela Srinivasan,
Srinath Perur.

About This Book

This book has evolved out of contributions from many authors, bringing together a variety of creative ideas. All the authors have resolved that the royalty resulting from any commercial use of this book, would be donated to Sri Sri Ravishankar Vidya Mandir Trust (http://www.ssrvm.org/).

The salient features of this book are as follows:
• The online version of this book is available freely for educational use, under the conditions described earlier in the Copyright Statement.You may download the latest edition of this book from: http://www.cse.iitb.ac.in/~sri/ssrvm/
• The book is based on a highly detailed computer science syllabus that has been reviewed by many experts and is also available at the above Website.
• Each lesson focusses on specific concepts and the associated skills. These concepts are selected such that: (i) They lay a strong foundation for learning computer science, (ii) They contribute towards general intellectual development, and (iii) They are age appropriate.
• The Lessons, Worksheets and Activities in this book have been revised after a pilot study. Some of the authors used a preliminary version of this material for teaching at Sri Sri Ravishankar Vidya Mandir (SSRVM) Mulund, Mumbai. As a result of the insights gained, various sections in this book have been revised, to make them more appropriate.
• Each Lesson has a Teacher's Corner section, which gives a lesson plan, some dos and don'ts, and other tips, learnt from the above experience.
• The Worksheets and Activities are designed in such a way that they also supplement the topics being covered in other subjects, to the extent possible. Group activities are included in each lesson to encourage collaborative learning.
• The Lessons and Activities in this book are based on free and open source software. We are using a distribution of Linux called **Ubuntu**, which has a lot of free educational software and games. Schools do not need to purchase any software in order to implement this curriculum. Instructions (and videos) on how to download, install, and use the necessary software, are given at the above Website. Ubuntu can also be downloaded from www.ubuntu.com

You are welcome to participate in this effort and contribute to future editions. We encourage you to modify this book to suit your local school requirements, local languages and redistribute it to schools in your area! Comments on the book and suggestions for future editions, may be addressed to Sridhar Iyer (email: sri@iitb.ac.in).

Acknowledgements:
We are thankful to the authors of the initial open source content creation effort, from which this textbook has evolved. This initial version is also available at the above Website. The team comprising of Usha Viswanathan, Pravin Ingle, Vinod Bhalerao and SSRVM Mulund staff, implemented this curriculum our first version in the school and have provided valuable insides. We are also grateful to Prof. Vaijayanthi Sarma for her meticulous review.

edubuntu
creative commons
SOME RIGHTS RESERVED
SCRATCH

How To Use This Book

This book is meant to be used for teaching computers to children in the Second standard, in a way that is mostly fun (as indicated by the "Masti" in the title). It is designed so that it can be covered comfortably in one year, with one class (30 to 45 minutes) per week. A weekwise schedule of topics is given below.

Lesson No.	Topic Name	Concepts	Skills	Values reinforced	Weeks
1.	Revision	o	o	o	1st - 4th
2.	Stepwise thinking	o	o	o	5th - 7th
3.	Scratch 1	o		o	8th -10th
4.	Dos and Dont's: Asanas	o	o	o	11th -13th
		REVISION			
5.	Scratch 2	o	o		14th -16th
6.	Fun with text processing	o		o	17th -19th
7.	Project				20th -22nd

Interactivity is the key to success with these lessons. In the class, ask the students questions, and let many students answer each question. Ensure that the conceptual understanding is mastered before proceeding to the skills. In the computer lab, if they are doing activities in groups, ensure that they switch "drivers" frequently, so that each student gets to do a fair amount of the activities. Use the Group Activities and Projects suggested to stimulate creativity and encourage knowledge sharing.

ComputerMasti
First Edition 2009
Book III

Contents

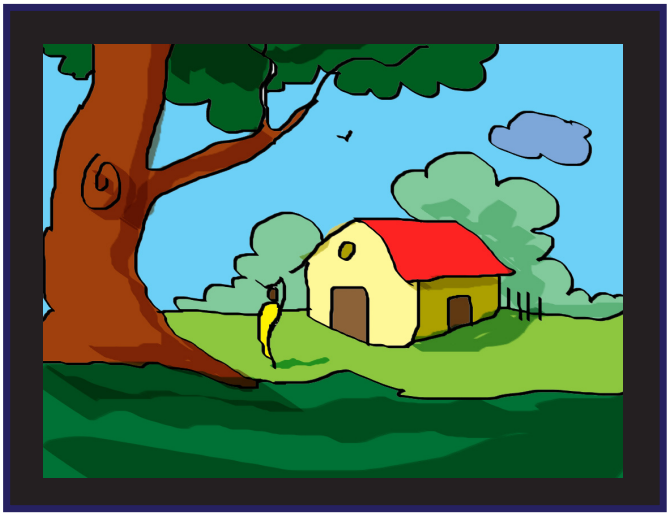
Sr. No	Name of the lesson	Page Number
0.	Last year	7
1.	Revision	8
2.	Stepwise thinking	22
3.	Scratch 1	36
4.	Dos and Dont's: Asanas	56
5.	Scratch 2	70
6.	Fun with text processing	84
7.	Project	98

Two years ago...

Jyoti and Tejas met Moz in the school computer lab. Since then they were having a lot of fun learning about computers and the activities in computers. They share quite a few stories and also learn from each other. Moz went for a vacation to Timbaktu and the children had been to their grandparents.

Jyoti: Moz, How was your trip to Timbaktu in Anantapur?
Moz: Oh! So you know where Timbaktu is. I enjoyed my trip. The children were interested in learning about computers. The children taught me how to make pottery items. So what did you do during the vacation?

Tejas: I taught my grandparents Tux paint, Text editor and other activities. They enjoyed playing Gcompris games. My grandmother liked the memory games and my grandfather was interested in Tux Paint. He drew this painting for me.



Jyoti: I was with my cousins during the vacation. They taught me some new games and yoga. We did some projects together. We wrote some stories on the computer.
Moz: That is good.
Tejas and Jyoti: We want to build our own game on the computer.
Moz: Sure you can. We will start tomorrow.