## ASHRAYA Project Terra Firma Computer Club 2018-19

We started the computer club program as a pilot in 2017-18 in three schools using our Project Coordinator, Mr. Ravi Shankar part-time as the computer teacher. The schools in which we piloted the program all had computers donated by other institutions such as Aziz Premji Foundation but the computers were not being used actively by the students. As we usually do with our programs, our goal to leverage the existing infrastructure and run activity based program to teach computer skills. We put together a detailed syllabus and curriculum material for all modules. Please see Appendix 1 for the detailed syllabus. The was built around the following modules: Parts of a Computer, MS Windows & File System, MS Word, MS Excel, MS PowerPoint, MS Paint, MS Outlook & Email, Internet Browsing & Search. We found very good success with the program and decided to expand the program to schools this year. We also hired a full-time computer teacher, Ms. Vishalakshi to run the program. Since one of the schools had only two computers (we needed at least four computers to run a program in a given school), we purchased two desktops to augment the computer resources at this school. Further, we realized that power availability was erratic in all these schools, which hindered program continuity. To avoid this, we purchased three laptops that our computer teacher carried with her everyday so that our programs could run even when there was no power. We also use a portable slide projector for the teacher to project the screen onto the wall so that all students can follow her tutorials. The following are the main characteristics of the computer program:

- 1. Run the Computer Club in <u>6 schools</u>
- 2. Select the top 20 students in each school based on their computer skills
- 3. <u>Conduct Computer Club sessions in each of 6 assigned schools at least once a week from June to March</u> <u>of each school year</u>; as per detailed program schedule assigned by the President
- Teach students experiments in the following modules: <u>Parts of a Computer, MS Windows & File System,</u> <u>MS Word, MS Excel, MS PowerPoint, MS Paint, MS Outlook & Email, Internet Browsing & Search,</u> and explain the scientific principles behind the experiments
- 5. Facilitate students to do school project work on the computer
- 6. Conduct <u>computer projects</u> with students in groups of 4 each group should conduct a minimum of 4 projects this year
- 7. <u>Conduct a minimum of 32 sessions per school during the school year</u>
- 8. Ensure that all students maintain a detailed Computer Club report that is updated every week
- 9. Conduct a <u>computer exam</u> for all 120 students (across all 6 schools) at the end of the year and provide a certificate to all students along with grades (A, B, C, D and E)
- 10. Conduct a computer project fair at the end of the year in which the top selected projects will be given awards

To date, we have completed the following modules this year: Parts of a Computer (1 class), MS Windows & File System (1 class), MS Paint (1 class), MS Word (5 classes), MS Excel (5 classes). We are currently teaching the MS Power Point module. At the end of the MS Word and MS Excel modules, we conducted practical exams in which all students had to follow instructions provided in real time on the computer (See Appendices 2 and 3). In the mid-year competitions that we conducted in Gundal Dam on Dec 4 2018, the top 12 students from the 6 schools participated in live competitions related to MS Word and MS Excel. Provided below are some photos from the program.















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## Appendix 1: Computer Program Syllabus

Module	Sub Module	Need to Know				
1. Introduction to Computer	1.1 What is a	1. Characteristics of Computers				
	Computer?	2. Basic Applications of Computer				
		1. Central Processing Unit (CPU)				
		2. Monitor, Keyboard and Mouse				
	1.2 Components of	3. Other Input / Output Devices				
	Computer system	4. Computer Memory				
		5. Concepts of Hardware and Software				
	2.1 What is an Operat	g System and Basics of Windows				
		1. Using Mouse and Moving Icons on the screen				
		2. My Computer Icon				
		3. The Recycle Bin				
	2.2 The User	4. Status Bar, Start & Menu Selection				
	Interface	5. Running an Application				
		6. Windows Explorer Viewing of File, Folders and Directories				
		7. Creating and Renaming of files and folders				
2. Introduction to		8. Opening and closing of different Windows and Directories				
Windows		1. Control Panels				
	2.2 Mindows Sotting	2. Wall Paper and Screen Savers				
	2.3 Windows Setting	3. Setting the Date and Sound				
		4. Using Help				
		1. Using Right Button of the Mouse				
		2. Creating Short Cuts				
	2.4 Advanced	3. Knowing All Main Applications under Start Menu				
	WINdows	4. Notepad				
		5. Window Accessories				
		1. An Introduction to MS Word				
	4.1 Word Processing	2. Opening MS Word				
		3. The Menu Bar				
	Dasic	4. Using Help				
		5. Using the Icons below Menu Bar				
4. Elements of Word Processing		1. Opening Documents				
word Processing	4.2 Opening	2. Save and Save AS				
	Documents and	3. Page Setup				
	Closing documents	4. Printing of Documents				
		5. Display/Hiding of Paragraph Marks and Inter Word Space				
		1. Enter a Title				

	4.3 Typing a Document	2. Type 3 Paragraphs of a Story				
		1. Scrolling the Document				
	4.4 Moving Around	2. Scrolling by Line/Paragraph				
	in a Document	3. Fast Scrolling and Moving Pages				
		1. Paragraph and Tab Setting				
		2. Text Selection				
	4.5 Text Creation	3. Cut, Copy and Paste				
	and Manipulation	4. Font and Size Selection				
		5. Bold ,Italic and Underline				
		6. Alignment of Text: Center, Left, Right and Justify				
		1. Changing Font, Size and Color				
		2. Paragraph Indenting				
	4.6 Formatting the	3. Bullets and Numbering				
	Text	4. Use of Tab and Tab Setting				
		5. Changing Case				
		1. Opening and Closing of Multiple Documents				
	4.7 Handling	2. Cut, Copy and Paste across Documents				
		3. Saving of Clipboards				
		1. Concept of Table: Rows, Columns and Cells				
		2. Draw Table				
		3. Changing Cell Width and Height				
	4.8 Table	4. Alignment of Text in Cell				
	Manipulation	5. Copy a Cell				
		6. Delete/Insert Rows and Columns				
		7. Borders for the Table				
		1. Printing a Document				
		2. Print Preview				
	4.9 Printing	3. Changing Margins				
		4. Print a Selected Page				
		1. Application/Usage of MS Excel				
	5.1 Elements of MS	2. Opening of Spreadsheet				
5. Spreadsheets		3. Understanding the Menu Bar				
	EXCE	4. Creation of Cells and Addressing of Cells				
		5. Cell Inputting				
		1. Enter Texts, Numbers and Dates into Cells				
	5.2 Manipulation of	2. Creation of Tables				
	Cells	3. Cell Height and Widths				
		4. Copying of Cells				
		1. Using Basic Functions				

		2. Sum Function				
	5.3 Providing	3. Average Function				
	Formulas	4. Percentage Function				
		5. Other Basic Functions				
		1. Maintaining Invoices by Date				
	5.4 Spreadsheets for	2. Totaling of Various Transactions				
	Small accountings	3. Creating Daily and Monthly Total Reports				
	6.1 Basic of	1. LAN				
	Computer networks	2. WAN				
6. Computer		1. Concept of Internet				
Communication	6.2 Internet	2. Application of Internet				
and Internet		1. WWW and Websites				
	6.3 Service on	2. Electronic Mails				
	Internet	3. Communication on Internet				
	7.1 Web Browsing	1. Internet Explorer				
	software	2. Google Chrome				
		1. Giving the URL Address				
		2. Search for Different Kinds of Information in Google				
7. WWW and Web		3. Moving Around in a Website				
Browsers	7.2 Surfing the	4. Saving Bookmarks of Important URLs				
	Internet	5. Buying Items from Amazon.Com				
		6. Printing or Saving Web Pages Offline				
		7. Downloading from the Internet				
		1. What is an Electronic Mail				
	8.1 Basic of	2. Email Addressing				
		3. Mailbox: Inbox and outbox				
		1. Viewing an Email				
	0.0 Million Freedla	2. Sending an Email				
8. Email	8.2 Using Emails	3. Saving Mails				
		4. Sending same EMail to various Users				
		1. Sending Soft Copy as Attachment				
	8.3 Document	2. Enclosures to Email				
	Handling	3. Sending a Portion of Document as Email				
		1. Difference between Presentation and Document				
		2. Using MS PowerPoint				
	9.1 Basics	3. Opening a Power Point Presentation				
9. Making Small		4. Using Wizard for creating a Presentation				
Presentations		1. Title				
	9.2 Creation of	2. Text Creation				
	Presentation	3. Fonts and Sizes				

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		4. Bullets and Indenting				
		5. Moving to Next Slide				
	9.3 Preparation of Slides	1. Selection of Type of Slides				
		2. Using Shapes and SmartArt				
		3. Importing Text from Word Documents				
		4. Importing Photos & Pictures				
		5. Creating a Chart with Data				
		6. Moving to Next Slide				
		7. Using the Slide Manager				
	9.4 Providing Aesthetics	1. Slide Designs				
		2. Background and Text colors				
		3. Making your Own Slide Format				
		4. Footnotes and Slide Numbering				
		5. Slide Transitions				
	9.5 Presentation of the Slides	1. Using the Slide Show				
		2. Printing the Slides and Handouts				
		3. Slide Sorter				
		4. Title Sorter				

## Appendix 2: MS Word Module Test

- 1. You should complete this exam in 45 minutes time
- 2. Create a new MS Word document titled "Arivina Aramane MS Word Test"
- 3. Write a title for the document "Students Exam Results"
- 4. Make the font of the title size 14 with Arial font type BOLD
- 5. Underline the title
- 6. Change color of the title to red
- 7. Leave a blank line under the title
- 8. Start the letter with the words "Dear Sir"
- 9. Make font of the above line size 12 with Times New Roman font type
- 10. Change color of above line to dark green
- 11. Leave a line under this line
- 12. Start a new paragraph and enter the following in the paragraph: "I would like to submit the results of the student exam conducted on Aug 2<sup>nd</sup> 2018. In total, 25 students participated in this exam. The exam had 10 questions and had a maximum score of 100. Given below are the key findings from the exam results."
- 13. Make sure that the paragraph is left indented.
- 14. Make font of the above paragraph size 11 with Book Antigua font type
- 15. Change color of above line to dark blue
- 16. Add the following bullet points under the paragraph (using numbers 1 to 5 for the bullets)
- 17. Let the first bullet point read "Maximum score was 85". Let the second bullet read "Minimum score was 25". Let the third bullet be "Average score was 45". Let the fourth bullet be "Out of 25 students, 12 were male and 13 female". Let the fifth bullet be "Out of the 15 students, 21 passed and 4 failed".
- 18. Indent the bullets by one tab
- 19. Change the font size of the bullets to 10 with Calibri font type
- 20. Change the bullet points to italics
- 21. Under the bullet points, leave a line
- 22. Insert a table with 4 columns and 26 rows
- 23. Let the first row of the table had the headers for each column. Let the header for column 1 be "Student Number". Let the header for the second student be "Name of Student". Let the header for the third column be "Gender". Let the header for the fourth column by "Student Score".
- 24. In the rows 2 to 26, enter some values under each header (you can decide what they should be). The values for the first column should go from 1 to 25. The values for the second column should be student names. The values for the third column should be either male or female. The values for the fourth column should be student scores with maximum of 85 and minimum of 25.
- 25. Let all table cells have borders
- 26. Color the first row (header row) grey
- 27. Bold the headers and make then font 10 with Calibri font type
- 28. Make the entire table font 10 with Calibri font type and color the text inside the table to red

- 29. Under the table, leave a blank line
- 30. Under the blank line, write the sentence "Please let me know if you have any questions about these scores". Use the same font for the sentence as you used for the first paragraph
- 31. Let this sentence be left indented
- 32. Under this sentence, leave another line
- 33. And then enter the words "Sincerely"
- 34. And then leave another line
- 35. And then write your name
- 36. Let your name be in BOLD and upper case with font 14 Arial font type
- 37. Add a border to the whole page
- 38. Change the margins of the page to 1.5,1.5,2.0 and 2.0
- 39. Add a footer to the page
- 40. Write the following in the footer: "School Exam Report Aug 2018"
- 41. Use font highlighter to highlight your name in yellow
- 42. Save the document and submit to the teacher

## Appendix 3: MS Excel Test

In this section, you have create a table as per the instructions and then do the calculations as per the instructions. Follow each step one by one.

You should create your table below the instructions in cells marked yellow.

You should have column headers for each column.

This is a ta	This is a table of of all purchases made by Ms. Madhumati in the vegetable and fruit market										
In the firs	In the first column, you should write the serial number for each item from 1 to 11										
In the sec	In the second column, you should list the items she purchased -										
Brinjals, P	Brinials, Potatoes, Onions, Beans, Carrots, Tomatoes, Apples, Bananas, Oranges, Grapes, Guavas										
In the thi	In the third column, you should state whether the item is a fruit or a vegetable										
In the fou	irth columr	n, you shou	ld enter th	e price pe	r Kg of eac	h item in R	upees: 30,	40, 80, 70, 100,	30, 200, 6	0, 80, 100, !	50
In the fift	h column,	you should	enter the	quantity i	n Kgs purch	nased of ea	ach item: 1,	, 4, 2, 1.5, 1, 2, 2	2, 3, 0.5, 2.5	5, 2	
In the sixt	In the sixth column, you should calculate the total amount equal to price x quantity										
At the bottom of the table, you should calculate the total amount in the sixth column; which is what she needs to pay the vendor											
Answer th	ne followir	g questior	is after you	are done	with the ta	able and ca	alculations	:			
	1) How m	uch did she	e pay in tot	al to the v	endor (in F	Rupees)?					
	2) Which i	tem was tl	ne most ex	pensive in	price?						
	3)Which i	tem did he	pay the m	ost for?							
4) How much amount did she pay for fruits and how much for vegetables?											
	5) Did she	pay more	for fruits o	r for veget	ables?						