



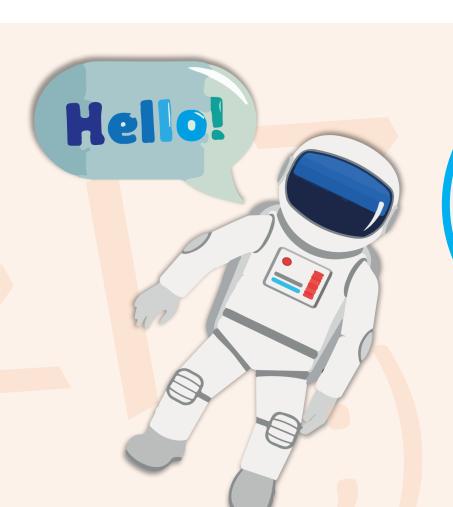


Class 1 to 20

Basic Web Development

In this term students will be introduced to the basic concepts of programming and coding. The course will take the students through a series of simple activities designed to channel the attention of students towards programming. This term takes the students though the basics of web development and internet. By the end of this term, students will learn the basics of web development and create their own webpages using simple drag and drop programming.

Module	Key Theme	Output
M1 (Classes 1 to 5)	Hello Internet!	Students will be taken into the world of internet and know about the basics of online world. They will learn about a block based web development platform. They will learn about basic the basic construct of a webpage. They will create their first 'Webpage'.
M2 (Classes 6 to 10)	Tags and text	Students will learn about basic HTML tags and syntax. They will learn about formatting the elements of a webpage. They will learn about text formatting and div/span elements on a webpage. They will create their own 'Profile Page'.
M3 (Classes 11 to 15)	Multimedia tags	Students will learn about different types of media and their formats. They will learn about the methods of adding media elements into webpages. They will style their previous project and also create their 'Complete Profile Page'.
M4 (Classes 15 to 20)	Form Handling	Students will learn about form fields and types of possible inputs to a webpage. They will learn about the process of handling data inside a webpage. They will create a 'Registration Form' webpage.





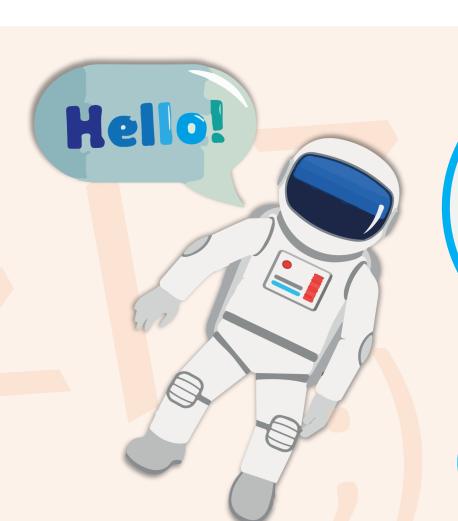


Class 21 to 40

## **App Development I**

This term will take students into the world of app development. They will create apps via coding on drag and drop platforms. Creating applications that can actually be materialized on a mobile device leads gives children a sense of achievement and this leads to increase in their interest of programming activities. Students will understand the steps involved in the development of applications viz. Design, Coding, Debugging, Testing and Publishing.

Module	Key Theme	Output
M1 (Classes 21 to 25)	Design Apps	Students will be introduced to app development and design process. They will learn concepts of UI development and about the interface of Thunkable. Basic programming concepts will be taught and students will create the first screen of the 'Calculator App'.
M2 (Classes 26 to 30)	App Activities	Students will create multiple application activities based on their prior learning and design new applications. They will learn about the interaction of various elements inside and app and create a 'Calculator app' and a 'Translator App'.
M3 (Classes 31 to 35)	Speech Recognizer	Students will integrate the previously learnt concepts into two new apps. They will revisit the concepts of ML and AI and create two new apps viz. 'Speech Recognizer' and 'Multiplication table app'.
M4 (Classes 36 to 40)	Text Recognizer	Students will learn about styling properties of elements. They will also learn about trained AI models that can be integrated with apps. Students will create an app viz. 'Text Recognizer app'.





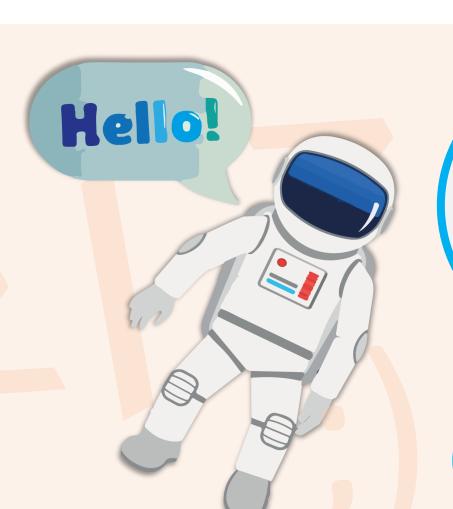


Class 41 to 60

Design a Website

In this term students will continue to dive into the world of web development. The term will take the students through drag and drop web development. Students will learn about Front End development by designing webpages and creating interactive interfaces. Students will learn about programming concepts while creating their own website. Students will also work on a group project which will encourage peer learning and increase their performance.

Module	Key Theme	Output
M1 (Classes 41 to 45)	Hello Styles!	Students will learn about styling elements on a webpage. They will go though the basics of CSS. Students will add style properties to their profile and create a 'Styled Profile Page'.
M2 (Classes 46 to 50)	Forms in Styles	Students will add style to form pages and revisit the concept of data handling in webpages. They will also learn about form field formats and styles. They will also start the process of creating a 'Survey Form' of their own.
M3 (Classes 51 to 55)	Forms Handling in Styles	Students will learn create a fully styled 'Survey Form'. This will take the students through all the previously learnt concepts of Front-End Development
M4 (Classes 56 to 60)	Website Group Project	Students will be divided into groups by the teacher and all the groups will be assigned the task of developing their own mini website. This will teach them the essence of team work and help them apply and revise the concepts learnt in the previous classes.







Class 61 to 80

## **App Development II**

In this term students will take an intermediate level of app development. The term will further elaborate on understanding the steps involved in the development of applications viz. Design, Coding, Debugging, Testing and Publishing. They will also elaborate on introductory concepts of Machine Learning and Artificial Intelligence. Students will also work on a group project which will encourage peer learning.

Module	Key Theme	Output
M1 (Classes 61 to 65)	Caller App	Students will revisit their knowledge of app development and start creating a new project 'Caller App'. They will learn about UI design and learn about basics of UX.
M2 (Classes 66 to 70)	lmage Recognizer App	Students will revisit the basics of Artificial Intelligence and trained Machine Learning models. They will learn about invisible components and will create an 'Image Recognizing application' and a 'Pdf Reader App'.
M3 (Classes 71 to 75)	Tic Tac Toe	Students will revisit the concepts of logic and structure in programming. They will design, code, debug and test a game simple app viz. 'Tic Tac Toe'.
M4 (Classes 76 to 80)	Application Group Project	Students will be divided into groups by the teacher and all the groups will be assigned the task of developing an application on their own. This will teach them the essence of team work and help them apply and revise the concepts learnt in the previous classes.