



**TINKERCODERS**  
BEYOND CODING

# APP DEVELOPMENT

## GRADE 6-8



### COURSE HIGHLIGHTS !

- **BUILD 10 REAL WORLD APPLICATION**
- 48 hours Live Session
- 48 hours Self Learning Session
- Fundamental of Block Based Programming
- Create Smart and Fun Games
- Create your Mobile Application
- Understand complex computer science concepts by intuitively applying them in games & mobile App
- Publishing App in App store / Play store
- Build real world application like Flashlight App, Money Management App, Math Calculator, Voice Translator, Ping-Pong Game & Tic-Tac-Toe
- Certificate of Completion
- LMS Access - Pre-recorded videos, Documents, Assignments, Codes



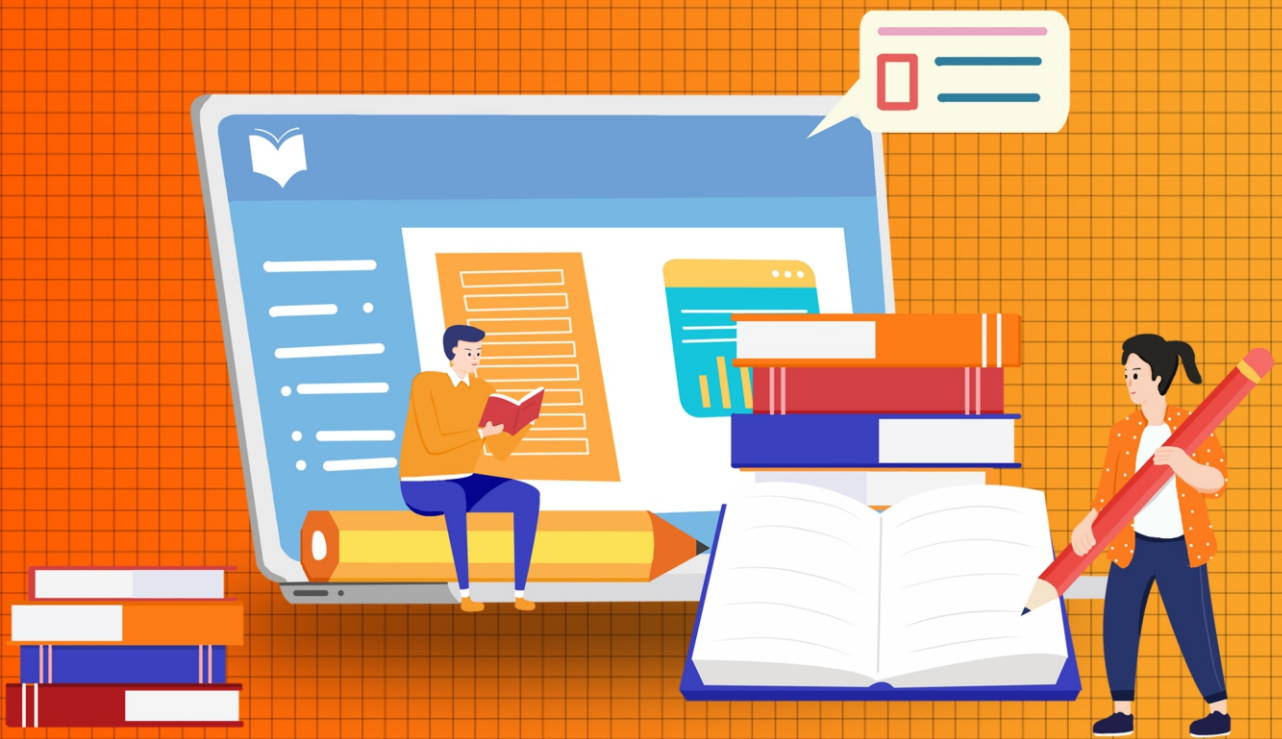
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**FREE Demo now!**

[www.tinkercoders.com](http://www.tinkercoders.com)

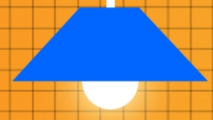




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## COURSE REQUIREMENTS



- No coding experience required
- Laptop, Computer or a tablet
- Access to the internet





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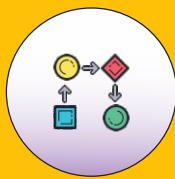
## WHAT YOU'LL LEARN IN THE COURSE



Designing and  
debugging the app



Managing images, sound, collisions,  
Image sprites, etc.



Insides of  
Procedures & Variables



Working with sensors like clock,  
accelerometer, location, light etc



Learn and control  
Real-time Database



Adding more features  
through Extensions



**Beginner**

**Grade 6-8**

**Introduction to  
Mobile Application**



**START**



### Getting Started with MIT App Inventor

- Sign up to MIT app inventor
- Installing MIT app companion

### Birthday card

- Use of button events
- Adding image in media section



### My Gallery

- Difference in scroll and normal arrangement.
- Adding multiple images

### BrainUp

- Adding multiple screen
- Use of variable



### LightsUp

- Controlling flash with buttons
- Use of timer

### Make Your own Browser

- Use of web viewer
- Concept of web address



### Attendance App

- Share information like date, time, location & image
- Use of Image component

### My Alarm Clock

- Designing responsive alarm screen
- Feature of setting multiple alarm



### MultiPurpose App

- Use of arrangements
- Creating a super app

### Math Calculator with Icon

- Use of arrangements
- Adding mathematical operations



### Need for Speed

- Use of canvas
- Adding motion in objects

### Women Security App

- Use of clock & location sensor
- Concept of coordinates



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### Animal Sound App

- Adding sound player
- Button events



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### Speaking Clock

- Adding text
- Use of text to speech

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## Intermediate

Grade 6-8

### BMI App

- Use of conditional statement
- Calculating the BMI



### My Tourist App Guide

- Use of spinner
- Check for selection



### Publishing the App + Creating Your own Icon

- Signup/login to Amazon Developer Console
- Publishing Free/Paid app



### Painting App

- Concept of dragging in canvas
- Creating list of colors



### Money Management App

- Importance of management in students life
- Notification and its working



### Secret message App

- Creating list & adding messages
- Encryption and decryption of message



### Ping Pong Game

- Use of checkbox
- Bouncing of ball



### Online notes App

- Storing the message
- Adding count







### Calling and texting App

- Selecting contact
- Call to any numbers



### Voice Translator

- Changing speech into text
- Yandex codes for different language



### Foodify

- Calculation of checked items
- Login to database



### AI based Animal detector App

- Add multiple labels
- Concept of model training



### Voice Based Calculator

- Checking for key words in a sentence
- Use of speech recognizer



### HangMan (Type of Guessing word Game)

- Getting random words
- Check for word in the list

### Tic Tac Toe

- Adding buttons
- Use of procedure



END





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## HOW THIS COURSE WILL HELP YOUR CHILD

### ● **CIC approach**

Consumer to innovator to the creator

This course aims to turn the student from a consumer of technology to the creator of technology.

### ● **Activity-Based learning**

Learn the required programming concepts by performing activities

### ● **Project - Based Learning**

Learn the required programming concepts by performing activities

Instead of a theoretical and traditional way of learning, students will build projects during the course.

### ● **Our PBL approach will help student in**

Allows students to acquire key knowledge & skills through the development of projects that respond to real-life problems

Develop critical thinking

Retain the concept

Integration of different concepts



# COURSE OUTLINE

## Beginner

Session Number	Activity name	Learning Outcome
	Introduction to Mobile Application	
	Getting Started with MIT App Inventor	Sigup to MIT App inventor Installing MIT app companion Introduction to Block based coding
1.	Birthday card	Use Of Button Events How to Change Background Use of Color & Layout
2.	MyGallery	Difference In Scroll and Normal Arrangement. Adding Multiple images Change Component Width and Height
3.	Animal Sound App	Adding sound player Button events
4.	BrainUp	Adding multiple screen Use of variable How to use label
5.	LightsUp	How to add extension Use of timer Use of conditional statement How to change button images
6.	Speaking Clock	Adding text Use of text to speech
7.	Make Your own Browser	Use of web viewer How URL Work How to get the link of different sites Adding query In search box
8.	Attendance App	Sharing text box information Use of Image component How to send message with Date/Time
9.	My Alarm Clock	Adding alarm extension Setting alarm with message
10.	MultiPurpose App	Use of arrangements Add multiple features in single app Use of multiple buttons
11-12	Math Calculator with Icon	Use of arrangements Adding multiple buttons Use of mathematical operation Input through textBox
13-14	Need for Speed	Use of Canvas Adding motion in objects Variable and its use Object touching
15-16	Women Security App	Use of Clock Concept of coordinates Use of Map How messaging works



COURSE **OUTLINE**  
Intermediate

Session Number	Activity name	Learning Outcome
1-2	BMI App	Calculating the BMI Use of conditional statement
3-4	My Tourist App Guide	Use of spinner Check for selection Displaying images and text
5-6	Publishing the App + Creating Your own Icon	Login to Amazon Developer Console Publishing Free/Paid app Creating design for app icon
7-8	Painting App	How dragging work in canvas Creating list and adding color Save and clear your painting Picking gallery images
9-10	Money Management App	Importance of management In students life Notification and its working Use of database How to update data
11-12	Secret message App	Creating list Encryption and decryption of message
13-14	Ping Pong Game	Use of checkbox Bouncing of ball Score increase for hitting paddle
15-16	Online notes App	Storing the message Adding count Option of deleting and inserting item in list



COURSE OUTLINE

Advance

Session Number	Activity name	Learning Outcome
1-2.	Calling and texting App	Selecting contact Calling for any numbers Texting and receiving message
3-4.	Voice Translator	Changing speech into text Yandex codes from language Convert text into speech
5-6.	Foodify	Calculation of checked items Login to database Sending and fletching of data
7-8.	AI based Animal detector App	Adding multiple labels Concept of model training How to capture image and start classification Use of toggle block
9-11.	Voice-Based Calculator	How to slice the words Use of speech recognizer Check for multiple keywords How to compare keyword with Pre-written keywords
12-14.	HangMan (Type of guessing word game)	Creating List Check for word in the list Changing images
15-16.	Tic Tac Toe	Adding buttons Use of procedure Adding of sign





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## OTHER COURSES



Game  
Development



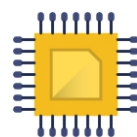
Artificial  
Intelligence &  
Machine learning



Web  
Development



Arduino  
Programming





Fun with  
electronics



## FOR MORE COURSES VISIT:

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