

# Creative { Coding }

## APP DEVELOPMENT

Ages 9-15 yrs



## Your learning path with NotchUp

## Level 1



GAME DEVELOPMENT

Ages 8-12 48 CLASSES



APP DEVELOPMENT

Ages 9-15
56 CLASSES

### Level 2



WEB
DEVELOPMENT

Ages 10+
48 + 16 CLASSES



**PYTHON** 

Ages 12+
48 CLASSES

#### Level 3



ADVANCED PYTHON WITH ARTIFICIAL INTELLIGENCE

Ages 12+
48 CLASSES



## Plan Details

BASIC	PRO	ADVANCED
₹4,400 15%Off ₹5,200	₹29,960 18%Off ₹36,400	₹46,800 31%Off ₹67,600
GET VOUCHER WORTH ₹ 500	GET VOUCHER WORTH ₹ 7,000	GET VOUCHER WORTH ₹ 14,000
EFFECTIVE PRICE ₹ 488/class	EFFECTIVE PRICE ₹ 410/class	EFFECTIVE PRICE ₹ 315/class
8 Classes	56 Classes	104 Classes
<ul> <li>✓ 1-on-1 Live Classes</li> <li>✓ Covers basics of App Dev (Module 1)</li> <li>✓ 1 detailed assessment report</li> <li>✓ Additional after class projects</li> </ul>	<ul> <li>✓ 1-on-1 Live Classes</li> <li>✓ Complete App Dev (Module 1 to 7)</li> <li>✓ 7 detailed assessment report</li> <li>✓ Additional after class projects</li> <li>✓ 1-year access* to webinars &amp; online forums</li> <li>✓ 3 Free Revision Sessions</li> <li>✓ Publish App on Play Store</li> <li>✓ App Developer Certification</li> </ul>	<ul> <li>✓ 1-on-1 Live Classes</li> <li>✓ Complete App &amp; Game Dev (Module 1 to 13)</li> <li>✓ 13 assessment reports</li> <li>✓ Additional after class projects</li> <li>✓ Unlimited access* to webinars &amp; online forums</li> <li>✓ 5 Free Revision Sessions</li> <li>✓ Publish App on Play Store</li> <li>✓ App &amp; Game Developer Certification</li> </ul>

Cancel Anytime. 100% Refund. No questions asked



## **Course Details**



## APP DEVELOPMENT

Students understand about user interface design and user experience along block coding concepts to create their own apps hosted on Google Play store.



#### **PLATFORM USED**

MIT App Inventor – A block-based programming tool developed to create Android apps



#### CURRICULUM - 56 sessions

- Application Coding –
   Method Call & Property
- Application Testing
- Working with Numbers
- Sound & Clock Components
- Web Viewer

- Text & Message Dialog
- Logical & Conditional Operations
- Audio & Video Components
- Location and Google Maps
- Spinner, Slider & Textbox



#### SKILLS DEVELOPED

- Pattern Recognition
- Visual Storytelling
- Logical Thinking
- Synchronization

- Abstraction
- Algorithm Design
- Decomposition
- Creative Thinking



#### **OUTPUT**

- Range Checker
- Maths Buddy Pro
- Grocery App
- Video App
- Photo App
- Spider Man Game

- Fleet Management App
- Quiz Game
- Image Recognizer App
- Buy Sell App
- Al Chat Bot
- Weather App



## **Course Details**



## **GAME DEVELOPMENT**

Students learn the concepts of block coding through creating their own games. These games will be published on the web.



#### **PLATFORM USED**

SCRATCH – A visual block-based programming tool developed by MIT, USA.



#### CURRICULUM - 48 sessions

- Introduction to Coding
- Block Sequencing
- Parallelism
- Layer Sequencing
- Conditionals
- User Interactivity

- Loops and Nested Loops
- Functions
- 2D Coordinates
- Variables
- Complex Motions
- Debugging



#### SKILLS DEVELOPED

- Pattern Recognition
- Visual Storytelling
- Logical Thinking
- Synchronization
- Abstraction
- Algorithm Design
- Decomposition
- Creative Thinking



#### **OUTPUT**

- Music Jam Project
- Jump Game
- Animated Stories
- Platformer Game
- Maze Game
- Quiz Game
- Ping Pong Game
- Voice Controlled Game



# Why NotchUp



Adaptive Curriculum

Every child is different, so is their learning path



in your preferred language



Flexible & Safe - Choose your preferred day/time, unlimited pauses



Gamified with rewards to keep children excited and engaged



Monthly detailed progress report to track your child's performance



Continuous **online support** for doubt resolution



**Certification** and courses designed by **IIT-D, IIM-A alumni** 



High Customer Satisfaction: 90% parents/ students give us 5 Star Rating



100% Money-back
Guarantee on all
online courses



# Why Coding is Important

#### CODING HELPS IN IMPROVING ACADEMIC PERFORMANCE



#### **MATHS SKILLS**

Coding helps apply math to the real world, making it more fun and improving math concepts





#### CONCENTRATION

Coding requires tracking of multiple things at the same time, automatically improving concentration levels



language, it strengthens both verbal and written skills

#### **CREATIVITY**

Coding helps to hone creative thinking skills of students as they brainstorm ideas to create meaningful projects

#### IT'S NEVER TOO EARLY TO START CODING



"We want every child in the world to be excited about the many possibilities coding can unlock for themselves, for their communities and for their societies"



"I taught myself how to program computers when I was a kid, bought my first computer when I was **10**, and sold my first commercial program when I was 12"



Sundar Pichai, CEO of Google and Alphabet





*Elon Musk, Founder* of Tesla and SpaceX



# Class Wise Topics (1/4)

Class #	Topic Covered	Class #	Topic Covered
МО	DULE 1 - INTRO TO APP DESIGN	МО	DULE 3 - MEDIA COMPONENTS
TRIAL	Translator App		
1	UI Components 1 + Quiz App	17	Revision of Concepts
2	UI Components 2	18	Camera + Video + Recorder
3	Math Blocks Part 1	19	Working with sounds
4	Grade App using Control-Logic	20	Extensions – Zip – Unzip App
5	Attendance Calculator App	21	Image Picker
6	Loop Blocks + Factorial App	22	Web Viewer App
7	Random Guess Game	23	Publish Your App
8	Fleet Management App	24	Guess the Movie Game
MC	DDULE 2 - USING MATHS IN APP	IV	IODULE 4 - TEXT AND SPEECH
9	Revision of concepts	25	Revision of Concepts
10	Barcode Scanner + Viewer	26	Text Blocks
11	Working with Lists	27	Text to Speech + Translator App
12	Procedures and Variables	28	Speech Recognizer
13	Notifications	29	Date and Time Picker
14	Social Buttons	30	Drawing and Animation
15	Pick your fav subject App	31	Ping Pong Game
16	Maths Buddy Pro	32	Make your own emoji



# Class Wise Topics (2/4)

Class #	<b>Topic Covered</b>	Class #	Topic Covered
N	MODULE 5 – USING SENSORS	MODU	JLE 7 - APP ADVANCED CONCEPTS
33	Revision of Concepts	49	Revision
34	Intro to Activity Starter	50	Dictionary Blocks
35	Sensors and Clocks	51	Cloud Database
36	Location sensors	52	Firebase Database
37	Accelerometer	53	Using Web API
38	Gyroscope	54	Weather Application
39	Orientation + Proximity Sensors	55	Design your own App
40	Spider Man Game	56	Build your own App
MODU	LE 6 – ADD APP FUNCTIONALITIES	МО	DULE 8 – BASICS OF GAME DEV
41	Revision of concepts	57	Introduction to Loops
42	Introduction to Maps	58	Nested Loops
43	Other Map Features	59	Music Jam Project
44	Bluetooth Server	60	Graphic Effects
45	Bluetooth Client	61	Create your own comic
46	Introduction to Storage + Files	62	Create your own stories
47	Intro to Databases	63	Text to Speech
48	Mini Golf Game	64	Race Chase Game



# Class Wise Topics (3/4)

Class #	Topic Covered	Class #	Topic Covered
МО	DULE 9 – ANIMATIONS + PEN	MOI	OULE 11 – CONDITIONAL LOOPS
65	Using the Pen	81	Concept Revision
66	More Pen Functions	82	Controls + Debugging
67	Pen Puzzles	83	Conditional Loops
68	2D Coordinates	84	Kaleidoscope Project
69	Application of Coordinates	85	Arithmetic Operators
70	Animation Basics	86	Random Operators
71	Debugging	87	Using Lists
72	The Jump Game	88	Voice Control Game – Egg Drop
MODUI	LE 10 VARIABLES + CONDITIONAL	M	DDULE 12 - USING FUNCTIONS
73	Start and Exit Game	89	Concept Revision
74	Variables	90	Ask and Wait Sensors
75	Variables 2	91	Number Guessing Game
76	Application of Variables	92	Quiz Game
77	Conditionals + Comparisons	93	Functions
78	Sensing	94	Applications of Functions
79	Logical Operators	95	Advanced Pen Blocks
80	Ping Pong Ball Game	96	Christmas Tree Project



## Class Wise Topics (4/4)

#### Class # Topic Covered

#### **MODULE 13 - ADVANCED CONCEPTS**

97 Make your own blocks

98 Cloning Effects Part 1

99 Cloning Effects Part 2

100 Platformer Game Part 1

101 Platformer Game Part 2

Design your own Game

103 Create your own Game

104 Add Game Extensions

