{coda}kid™ Coding & AI for Kids & Teens

AI & Coding Course Catalog

Private Online Tutoring



Why Choose Us?

- Real coding and AI with pro languages & Tools
- Over 100,000 Students Taught
- STEM.org Accredited Program
- 4.9★ Google-rated by families

Coding Road Map (All Pathwys)

Coding Basics

Scratch 1 → Scratch 2 → Scratch 3

Scratch 2 → Python Basics

Scratch 3 → Python Basics

Core Pathways

Software Engineer

- Modern Python 1
- Modern Python 2
- Modern Python 3

Modern Web Developer

- Web Dev 1
- Web Dev 2
- Web Dev 3

AI Engineer

- AI 1
- AI 2
- AI 3

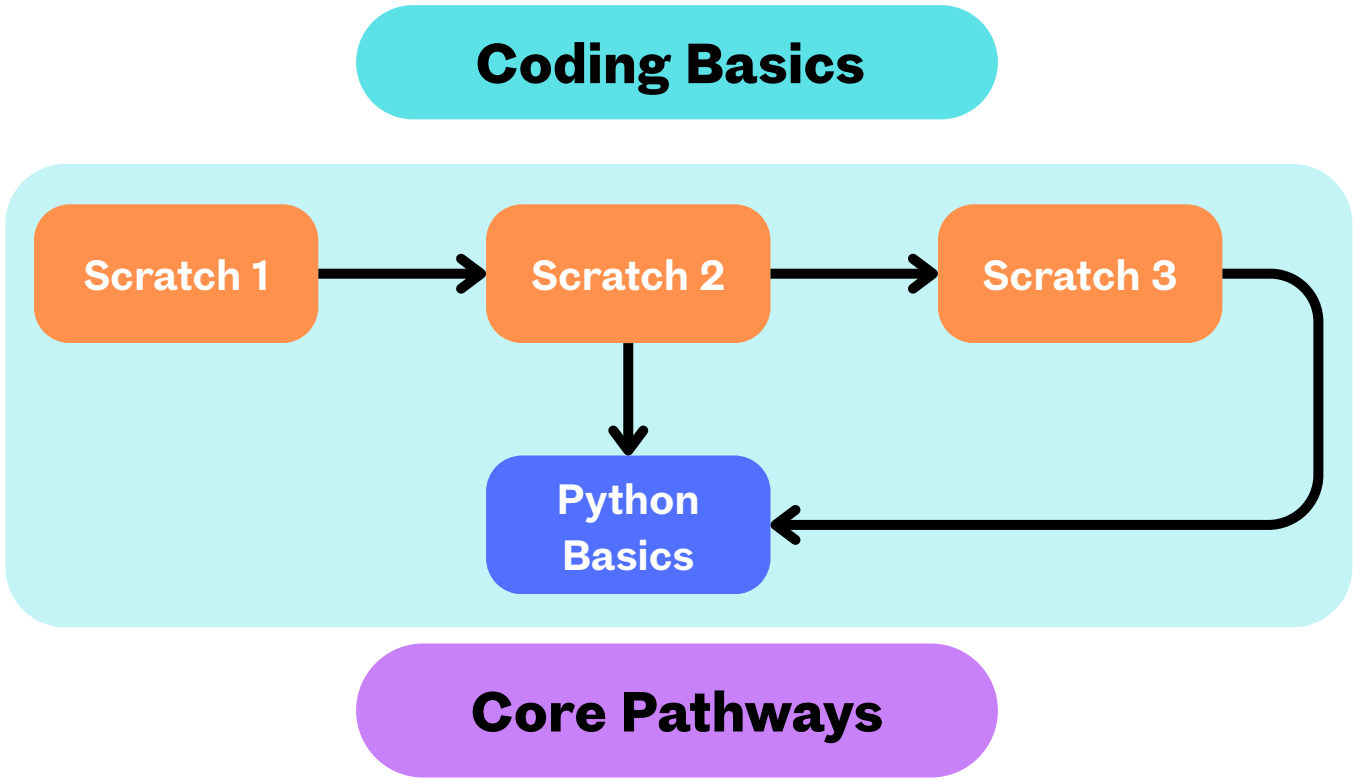
Game Developer (Enhanced With AI)

- Roblox 1
- Roblox 2
- Roblox 3

- Python Game Dev 1
- Python Game Dev 2
- Python Game Dev 3

- Minecraft Modding (MCreator)
- Minecraft Modding (Java)

Elementary pathway



Elementary Electives

JS Game Dev

Requirements
9+
Any core

Machine Learning

Requirements
10+
Modern Python 1

3D Game Development With Unreal and Unity

Requirements
10+
Roblox 2 or Python Game Dev 2

UEFN

Requirements
10+
Roblox 1 or Python Game Dev 2

Middle School Pathway

Coding Basics

"Accelerated Scratch" → Python Basics

Core Pathways

Software Engineer

- Modern Python 1
- Modern Python 2
- Modern Python 3

Modern Web Developer

- Web Dev 1
- Web Dev 2
- Web Dev 3

AI Engineer

- AI 1
- AI 2
- AI 3

Game Developer (Enhanced With AI)

- Roblox 1
- Roblox 2
- Roblox 3
- Python Game Dev 1
- Python Game Dev 2
- Python Game Dev 3
- Minecraft Modding (MCreator)
- Minecraft Modding (Java)

Middle School Electives

3D Game Development With Unreal & Unity

Requirements
10+
Roblox 2 or Python Game Dev 2

UEFN

Requirements
10+
Roblox 1 or Python Game Dev 2

Machine Learning

Requirements
10+
Modern Python 1

Web Dev With React

Requirements
13+
Web Dev Level 3

Advanced AI

Requirements
13+
AI Level 3

Roblox AI Development

Requirements
10+
Roblox Level 3

Entrepreneurship

Requirements
13+
Web Dev 2 + AI 1 + Modern Python 1

JS Game Dev

Requirements
9+
Any core

Portfolio Creation

Requirements
13+
1 Core + 1 Elective + Entrepreneurship

Ship AI Product

Launch Tech Startup

Launch Tech-Enabled 501c3

Launch Website

High School Pathway

Coding Basics

Python Basics

Core Pathways

Software Engineer

- Modern Python 1
- Modern Python 2
- Modern Python 3

Modern Web Developer

- Web Dev 1
- Web Dev 2
- Web Dev 3

AI Engineer

- AI 1
- AI 2
- AI 3

Game Developer (Enhanced With AI)

- Roblox 1
- Roblox 2
- Roblox 3
- Python Game Dev 1
- Python Game Dev 2
- Python Game Dev 3
- Minecraft Modding (MCreator)
- Minecraft Modding (Java)

High School Electives

3D Game Development With Unreal & Unity

Requirements
10+
Roblox 2 or Python Game Dev 2

UEFN

Requirements
10+
Roblox 1 or Python Game Dev 2

Machine Learning

Requirements
10+
Modern Python 1

Web Dev With React

Requirements
13+
Web Dev Level 3

Advanced AI

Requirements
13+
AI Level 3

Roblox AI Development

Requirements
10+
Roblox Level 3

Entrepreneurship

Requirements
13+
Web Dev 2 + AI 1 + Modern Python 1

JS Game Dev

Requirements
9+
Any core

Portfolio Creation

Requirements
13+
1 Core + 1 Elective + Entrepreneurship

Ship AI Product

Launch Tech Startup

Launch Tech-Enabled 501c3

Launch Website

Scratch

Scratch Level 1



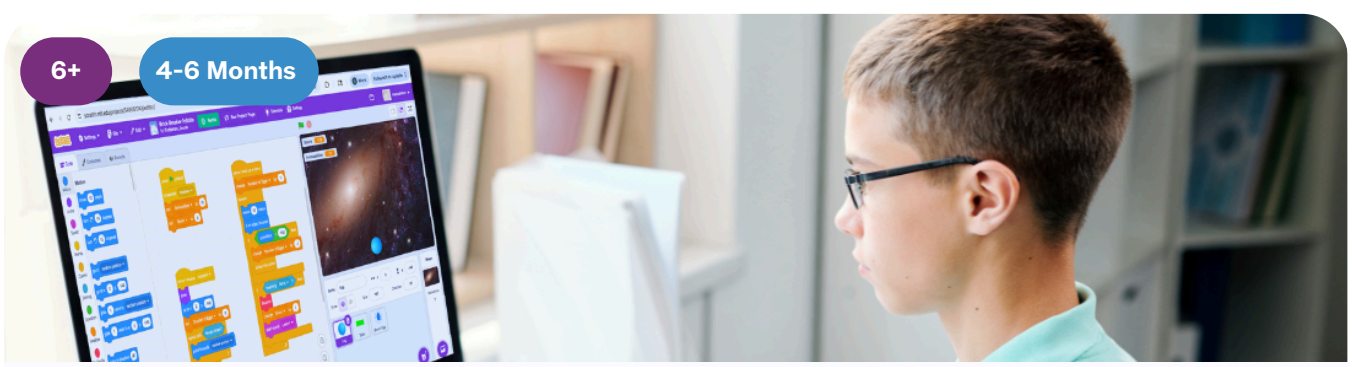
Introduce your child to Scratch Level 1! Kids will explore the basics of coding with fun, visual blocks while learning logic, flow control, and directions. They'll design and animate custom sprites, add sounds, and create movement through events, loops, and simple collisions. Along the way, they'll plan, build, test, and polish their own projects—gaining real coding and creative problem-solving skills they can proudly share.

Scratch Level 2



Take coding to the next level with Scratch Level 2! Kids will dive into intermediate logic with variables, conditionals, and randomness to make their games more dynamic. They'll explore movement and behaviors like gravity jumps, tracking, and collision patterns while building game systems with scoring, lives, timers, and level progression. To finish, they'll polish their projects with animations, sound, and custom menus—making their games feel like real playable experiences.

Scratch Level 3



Master coding with Scratch Level 3! Kids will unlock advanced architecture using custom blocks and state machines to organize their projects. They'll work with data and systems through lists, timers, and resource tracking while building multi-level games. Physics-style motion like velocity, acceleration, and collision responses will make their creations more realistic. Finally, they'll add procedural and AI-inspired patterns —bringing their games to life with depth and challenge.

Scratch Sample Projects

Level 1

CATS EVERYWHERE

Create an engaging game that challenges players to estimate the random number of cats displayed on the screen!



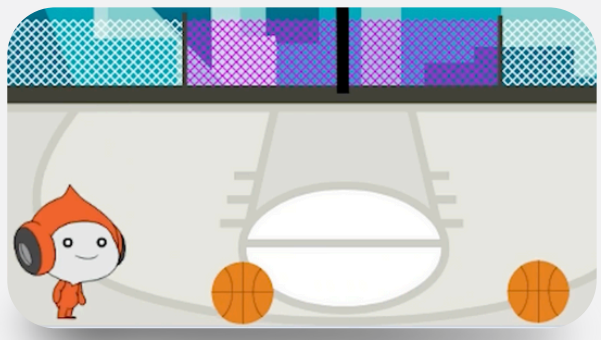
SCRATCH CHASE

Design a fun mini-game in Scratch where players collect strawberries while dodging a bear.



INFINITE JUMPER

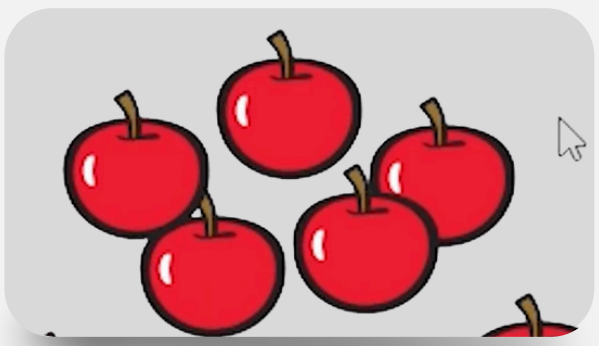
Design a game where players jump over basketballs in an endless jumping experience.



Level 2

FRUIT SLASH

Design a game inspired by Fruit Ninja, where players slice through fruits while dodging non-fruit items.



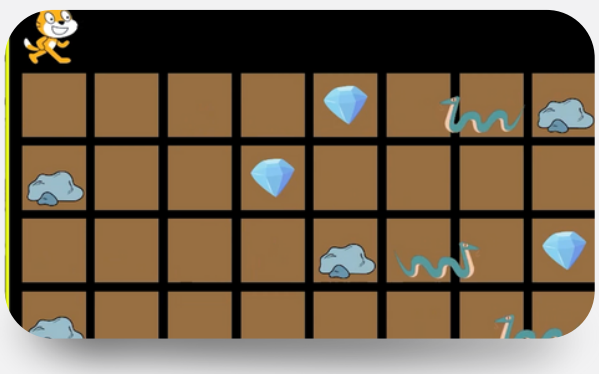
HOCKEY

Design an Air Hockey Game



DIGGING

Create an arcade-style game where players can dig endlessly for diamonds.



Level 3

SLINGSHOT SLAM

Create a multi-level slingshot game inspired by Angry Birds, where players can break bricks by hitting them.



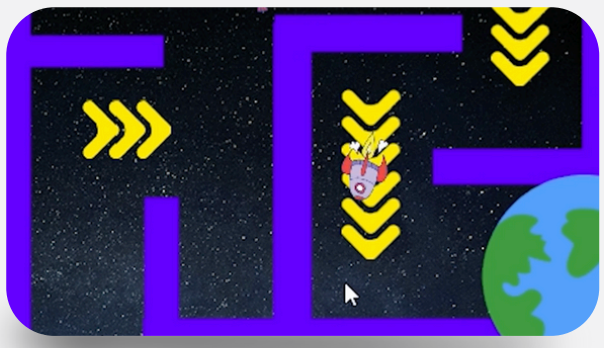
JURASSIC JUMP

Create an Infinite Jumper Game
In this game, you will play as a dinosaur, aiming to reach the highest levels possible.



THE GREAT MAZE

Create a multi-level maze filled with enemies.



Python Basics

Level 1



Introduce your child to Python with Basics 1! Kids will start coding with variables and data types, learning how to store and work with information. They'll explore conditionals and boolean logic to make decisions in their programs, and practice using for and while loops to repeat actions. Along the way, they'll build and manipulate lists and write their own functions—laying the foundation for problem-solving and real-world programming skills.

Level 2



Continue your child's Python journey with Basics 2! Kids will learn the power of classes and objects, using constructors to organize their code. They'll practice looping through collections, explore libraries and modules, and discover how to read documentation to find answers on their own. By the end, they'll be building programs with structure and independence—ready to take on more advanced coding challenges.

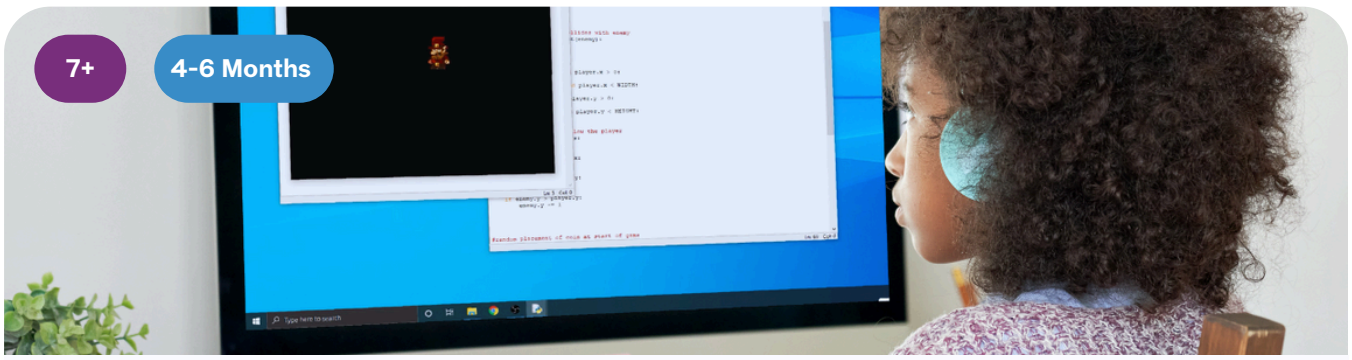
Python Game Development

Level 1



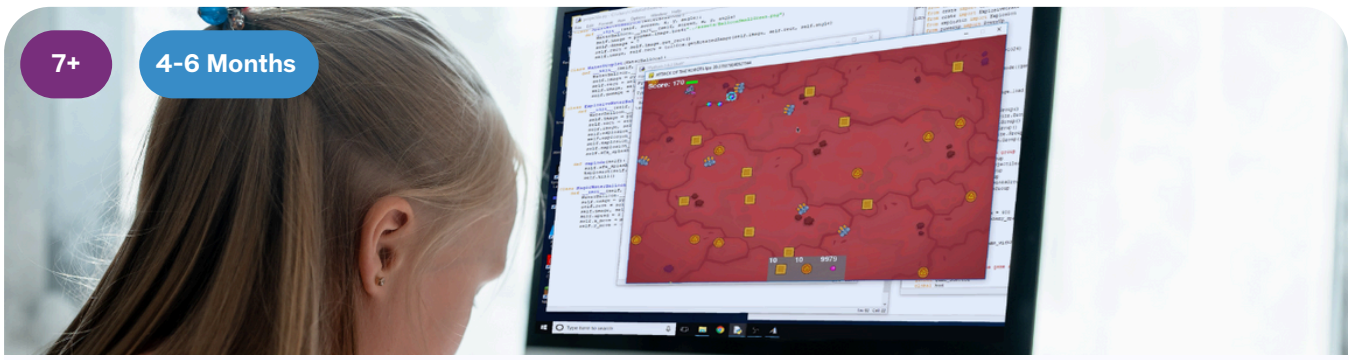
Bring coding to life with Python Game Dev Level 1! Kids will apply core Python skills—variables, loops, and conditionals—while learning to structure code with functions, classes, and modules. Using Turtle and Pygame Zero, they'll create graphics, movement, and collisions, then add scoring, timers, and spawns to polish their first games—making a smooth leap from block coding to text-based programming.

Level 2



Level up with Python Game Dev 2! Kids will strengthen their Python skills with classes, functions, loops, and coordinate systems while learning to organize projects with modules and imports. They'll build game architecture using loops, events, and object tracking, then design mechanics like movement, collisions, scoring, and progression—creating more complex, interactive games with confidence.

Level 3



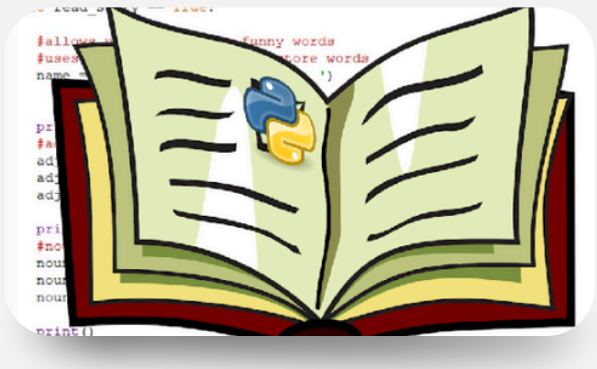
Take coding to the next stage with Python Game Dev 3! Kids will tackle advanced Python skills like dictionaries, complex conditionals, modules, and simple state machines. They'll create full 2D gameplay with sprites, animation, and projectiles, then add polish with title screens, menus, HUDs, and textures. Finally, they'll explore multiplayer foundations—building lobbies, syncing players, and adding customization—for their most ambitious games yet.

Python Game Development Sample Projects

Level 1

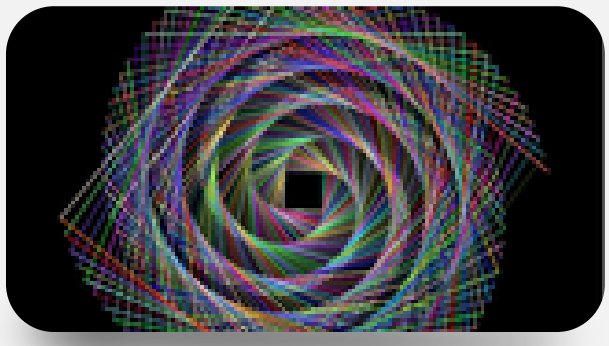
CODABOT STORIES

Craft Unique Stories by Coding Mad Libs



ART EXPLOSION

Explore the fascinating world of art creation using Python programming!



CATCH THE COIN

Design an arcade game featuring a leprechaun on a quest for gold and the ultimate high score.



Level 2

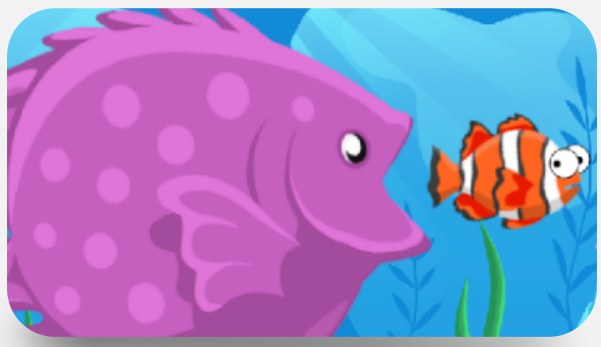
INFINITE FLIER

Design an Infinite Flyer Arcade Game



FISH EAT FISH

Create a game in which you consume smaller fish to grow larger and ultimately become the largest fish in the sea.



ATTACK OF THE ROBOTS

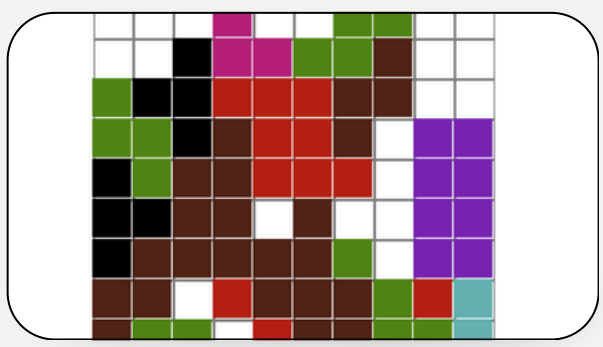
Defend your territory from invaders and purchase power-ups in this entertaining arcade game!



Level 3

TETRIS

Develop a Tetris game that allows players to compete for high scores.



CODASMASH

Design a battle game that allows you to fight against opponents.



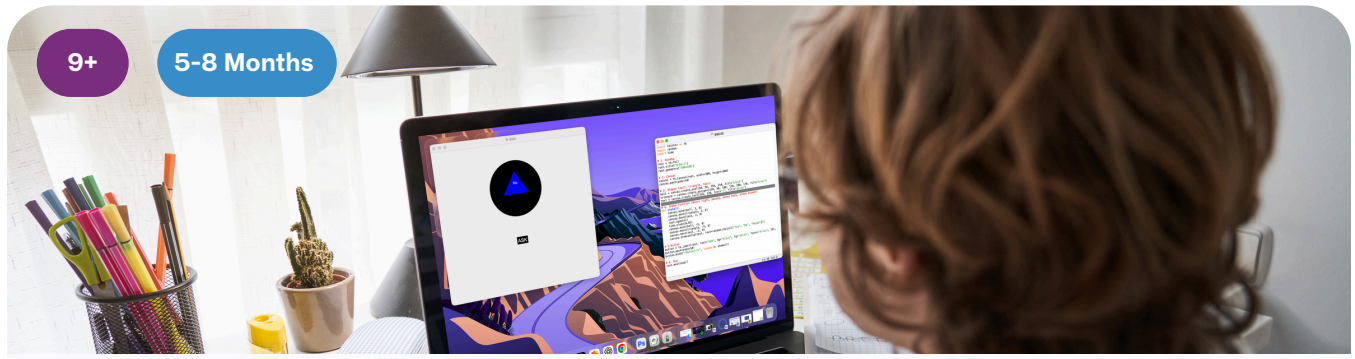
GET CONNECTED

Design an extraordinary multiplayer game.



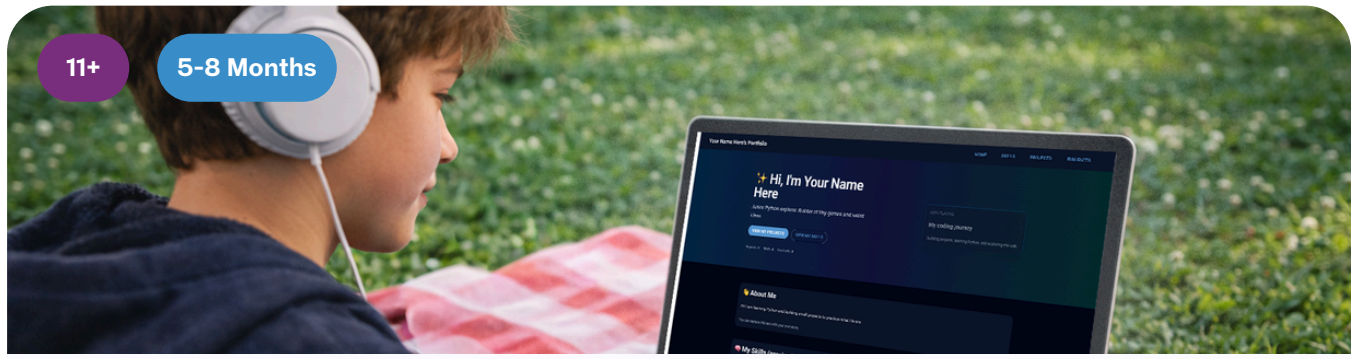
Modern Python

Level 1



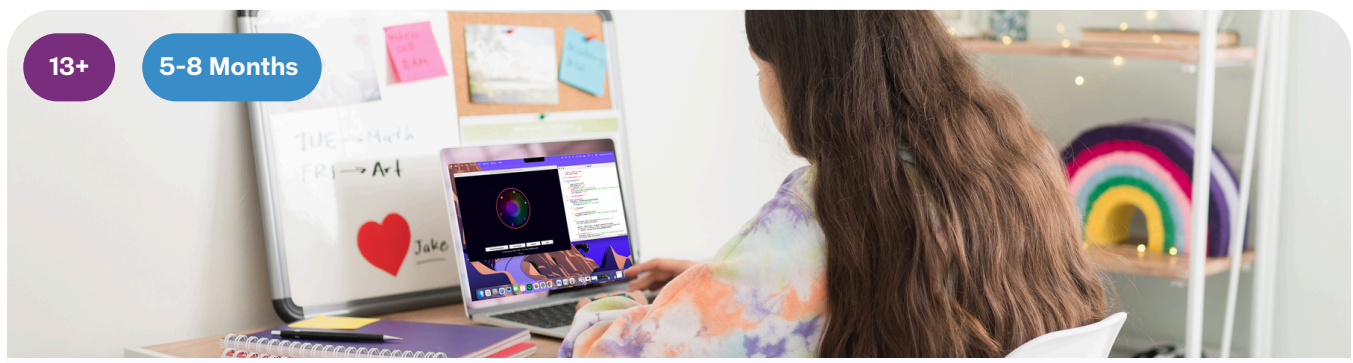
Start strong with Modern Python 1. Students move past basics by building a bunch of quick, satisfying mini tools, then level up into visuals with Turtle and clean data charts with Matplotlib. The course wraps with a big “I made a real app” win: a desktop web browser built with Qt.

Level 2



Level up with Modern Python 2! Kids shift from “scripts” to “apps” by building interactive graphics and real GUIs, including Turtle projects and a full Wordle-style game in Tkinter. They also explore modern skills like running a local AI character chat with GPT4All, plus packaging and shipping projects like a Notepad app and a simple web app with NiceGUI.

Level 3



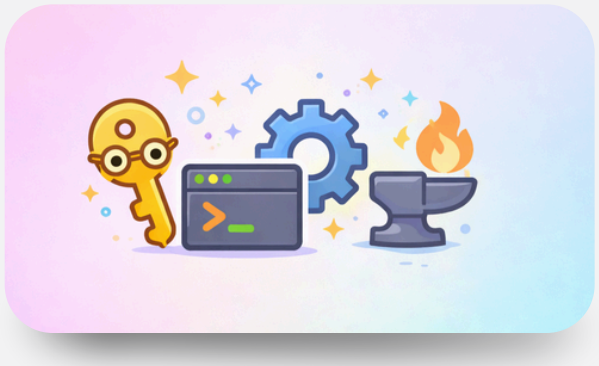
Then Modern Python 3 goes full “power builder.” Students tackle bigger builds like a random maze game with a shortest-path solver, a full digital paint studio, and a music visualizer driven by real audio data. They also get a taste of modern dev concepts with automated web-change alerts (GitHub Actions + Discord webhooks) and even building a mini programming language (CatScript).

Modern Python Sample Projects

Level 1

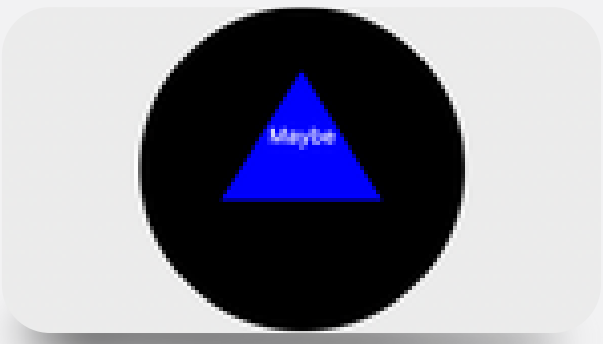
SPY-KEY FORGE

Students learn the Python while embracing their inner spy by creating password and QR code generators, and mission countdown.



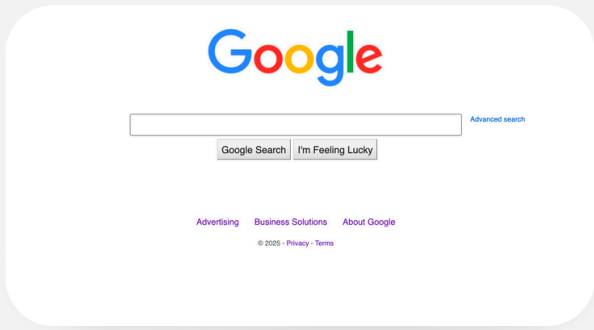
MAGIC 8 BALL

Students explore the world of Tkinter while creating an interactive Magic 8 Ball application.



BROWSER BUILDER

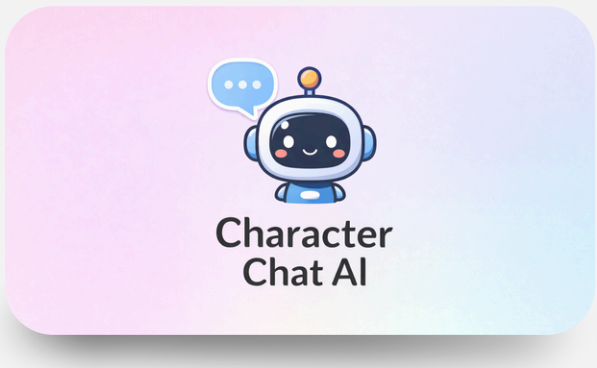
Students create a web browser using Python and package it into a desktop application!



Level 2

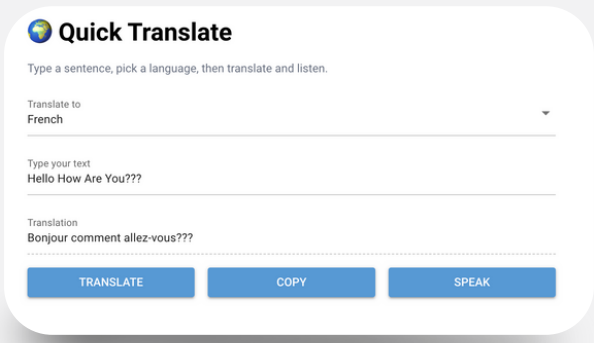
CHARACTER AI

Students design a local chatbot that reflects the personality of their favorite character.



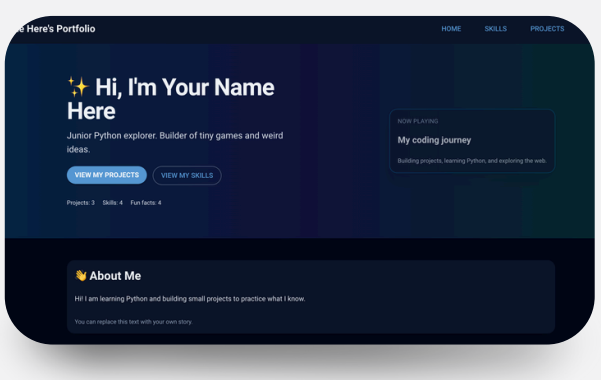
QUICK TRANSLATE

Students develop a web application in Python that has the capability to translate anything!



PYTHON PORTFOLIO

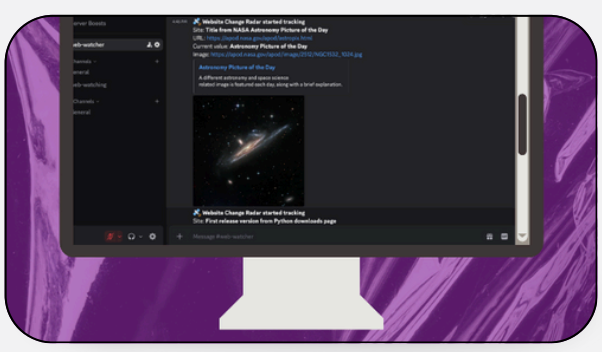
Defend your territory from invaders and purchase power-ups in this entertaining arcade game!



Level 3

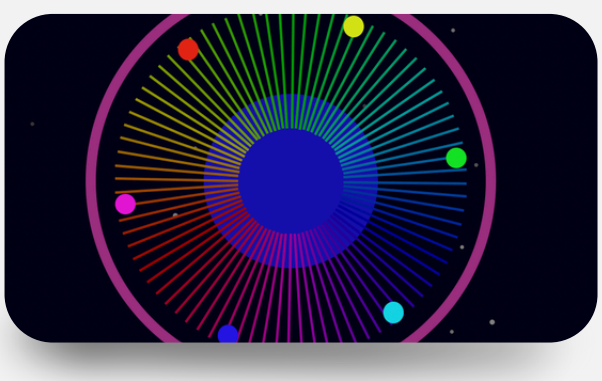
WEB WATCHER

Students create a website watcher that sends them personalized messages on Discord whenever there is a change!



MUSIC VISUALIZER

Students explore advanced Python to create a music visualizer that responds to their music.



CATSCRIPT

Students create their very own programming language!



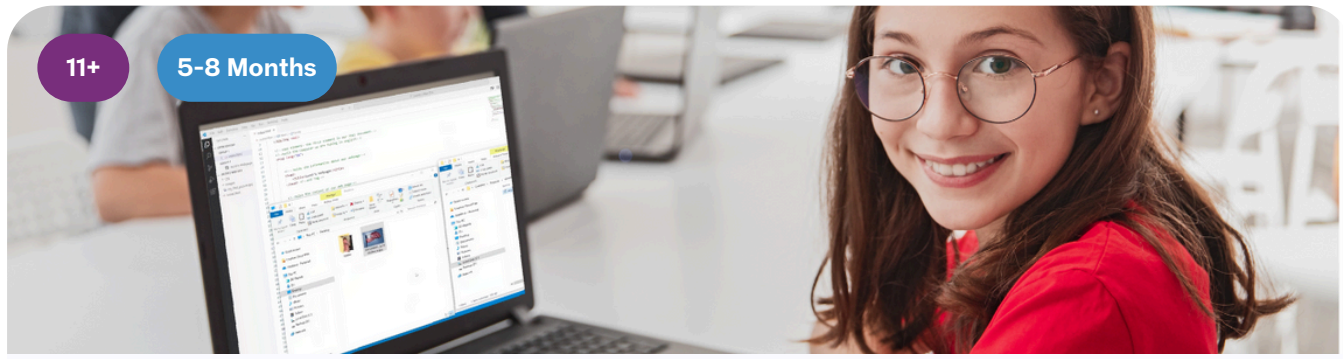
Web Development

Level 1



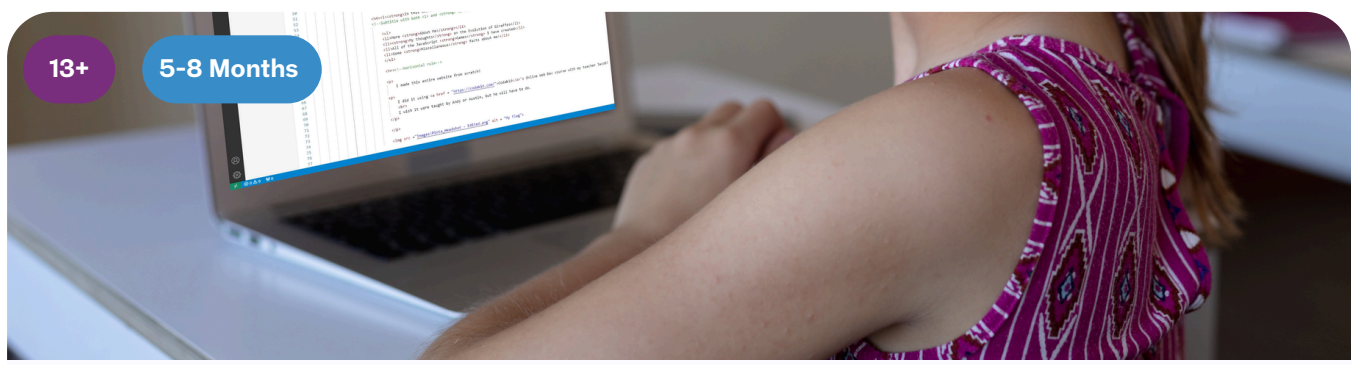
Web Dev Level 1 has students build a real four-page portfolio website with shared navigation, then style it with CSS so it looks polished and consistent. Next, they add JavaScript interactivity (events, variables, arrays/objects, conditionals) with features like a click counter, greeting, and color picker. They finish by adding animations and fun effects using CSS transitions/keyframes and a little JS to make the whole site feel alive.

Level 2



Turn up the speed with Web Frenzy (Level 2). Students build five standalone mini apps that each add a new "real web dev" skill: a truly responsive landing page, stronger JavaScript projects, SCSS/SASS styling upgrades, simple single-page routing, and a final project that connects to a database via an online API

Level 3



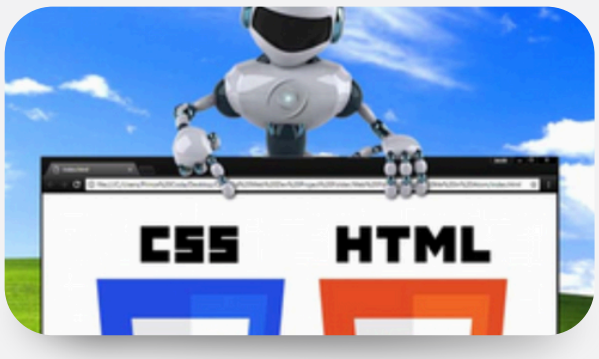
Go full builder mode with The Stackable Super Projects (Level 3). Students create 5–6 polished mini projects covering advanced JS, advanced CSS with SCSS/SASS, database requests, multi-page apps, SEO/AEO, and external APIs, then stack the parts together into one bigger capstone-style app.

Web Development Sample Projects

Level 1

HTML/CSS PORTFOLIO

Create a real 4 page portfolio from scratch with clean HTML structure and CSS styling that instantly looks like a legit website.



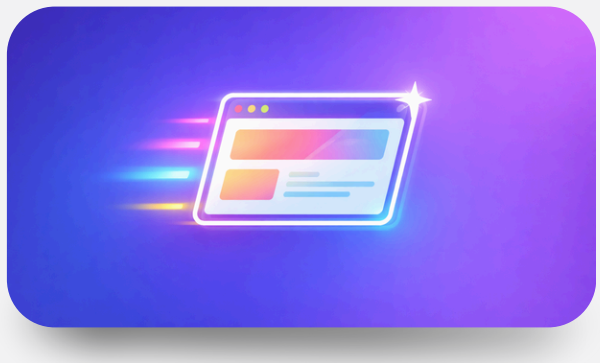
INTERACTIVE PORTFOLIO

Power up that same portfolio with JavaScript by adding click features, smart messages, and user driven effects using the DOM and events.



CSS ANIMATIONS

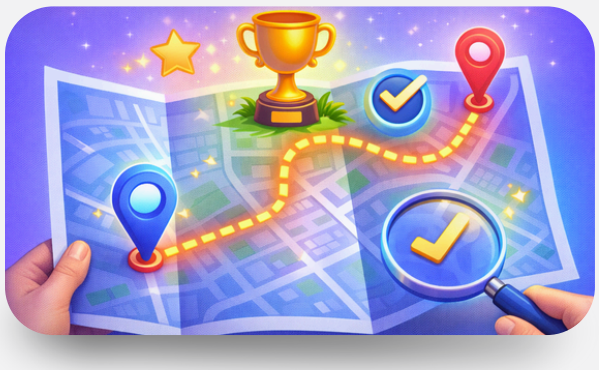
Add slick CSS transitions and keyframe animations plus a few JavaScript powered effects so the portfolio moves, glows, and feels alive.



Level 2

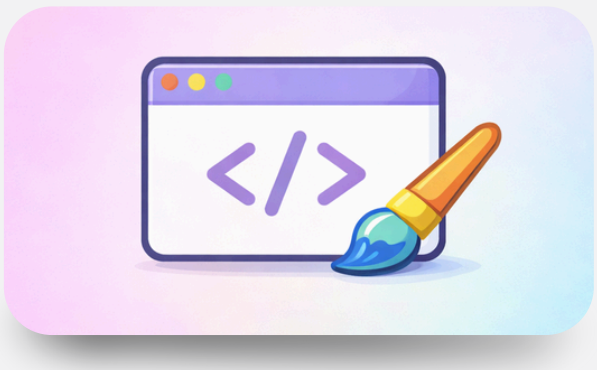
CHALLENGE TRACKER

Build a mini productivity app that saves your progress and makes your goals feel addictive.



THEME BUILDER

Unlock CSS superpowers by theming a site fast with SCSS variables, mixins, and reusable styles.



LANDING PAGE

Create a landing page that looks amazing on phone, tablet, and desktop.



Level 3

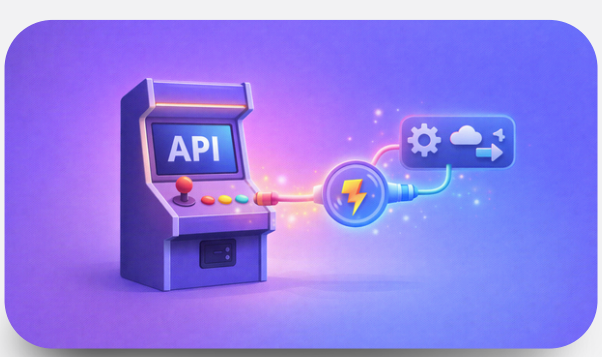
PIXEL ARMOR UI

Build a slick UI kit with pro layouts, components, and polish you can reuse in every project.



API ARCADE

Pull in real live data with APIs and turn it into a fun, interactive feature that feels like a real app.



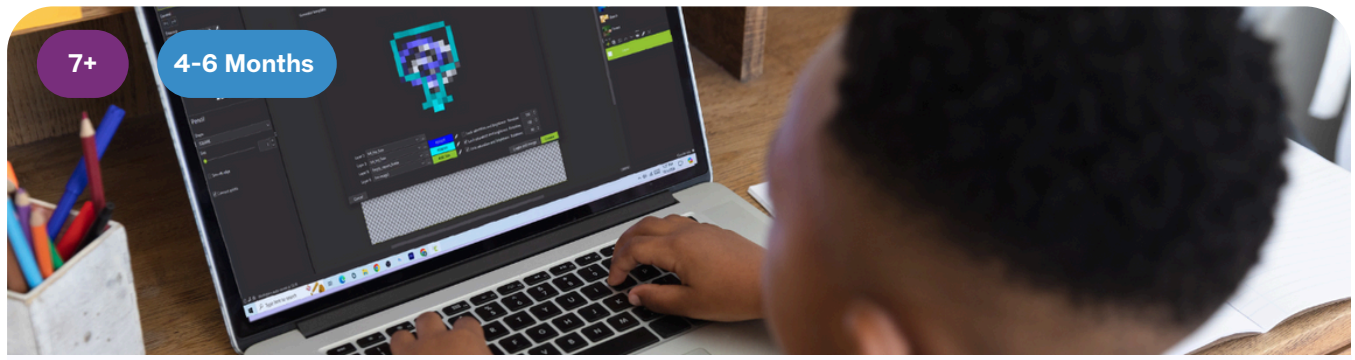
ROUTE RACER

Make a single-page site feel like multiple pages with real routes and smooth navigation.



Minecraft Modding

Level 1



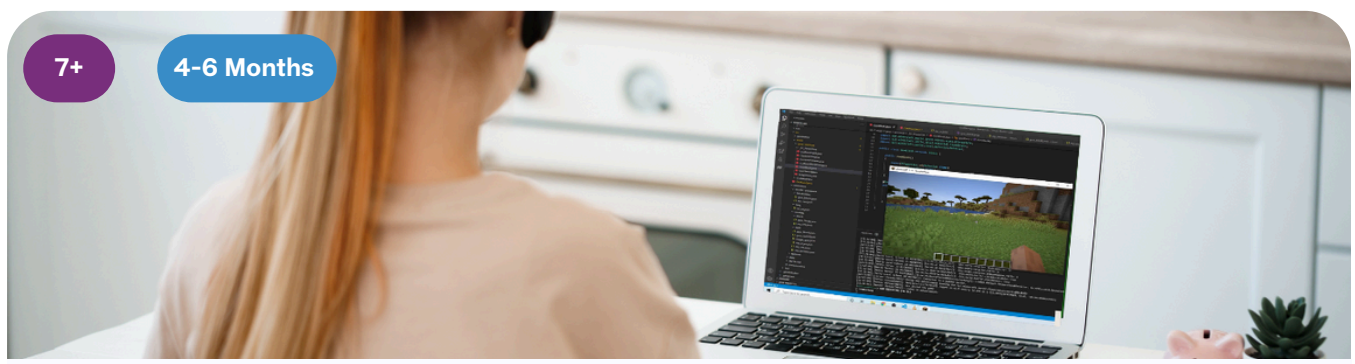
Jump into Minecraft Modding Level 1! Kids will use block-based tools to design custom items and blocks, set properties, and add simple crafting recipes. They'll create interactive event behaviors like clicks, ticks, and hits, then test their mods right in the game. To finish, they'll export a playable .jar file and learn basic troubleshooting—building their very first Minecraft mods from scratch.

Level 2



Take modding further with Minecraft Modding Level 2! Kids will dive into Java fundamentals—variables, conditionals, classes, and methods—while building mods with real code. They'll design custom creatures with unique AI, spawning, and taming behaviors, then create arenas with combat rules, spawners, and scoring systems. Along the way, they'll add polish with textures, basic 3D models, and imported assets to bring their mods to life.

Level 3



Take coding to the next stage with Python Game Dev 3! Kids will tackle advanced Python skills like dictionaries, complex conditionals, modules, and simple state machines. They'll create full 2D gameplay with sprites, animation, and projectiles, then add polish with title screens, menus, HUDs, and textures. Finally, they'll explore multiplayer foundations—building lobbies, syncing players, and adding customization—for their most ambitious games yet.

Minecraft Modding Sample Projects

Level 1

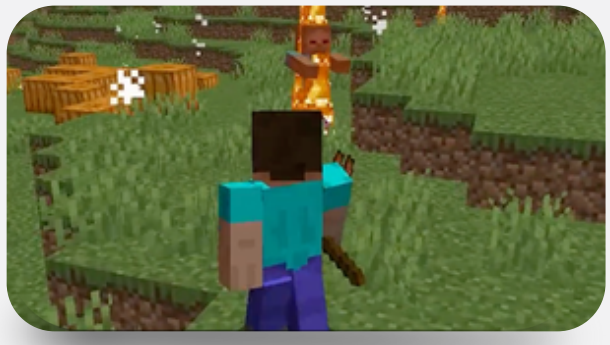
CUSTOM ARMOR

Design Custom Minecraft Armor with Unique Abilities



PROJECTILES

Design a unique slingshot that allows for customization and features a variety of effects.



CUSTOM BIOME

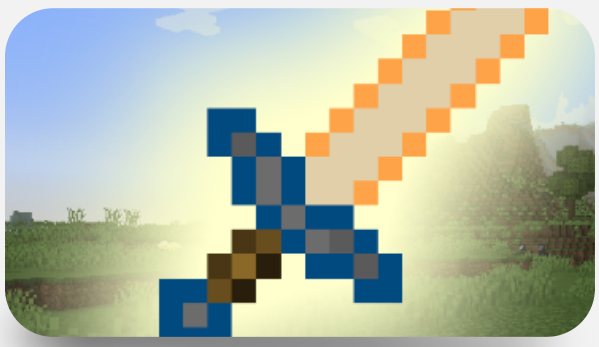
Design a Personalized Biome in Minecraft with Your Choice of Colors, Creatures, Trees, and More!



Level 2

FORGE YOUR SWORD

Create a Custom Minecraft Sword That Outshines All Others!



POWER ORE

Create your own ore, ingot, and pickaxe!



CREATE A CREATURE

Create a unique creature in Minecraft by blending features from various creatures into something entirely your own!



Level 3

EPIC WEAPONS

Design Three Truly Epic Minecraft Weapons **Hint:** One of them is a Cow Gun!



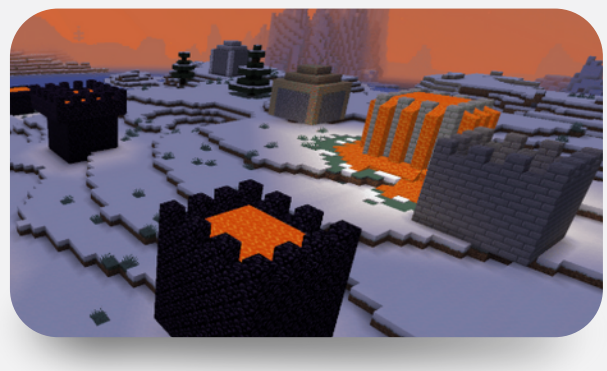
LUCKY BLOCK

Craft a mysterious lucky block!



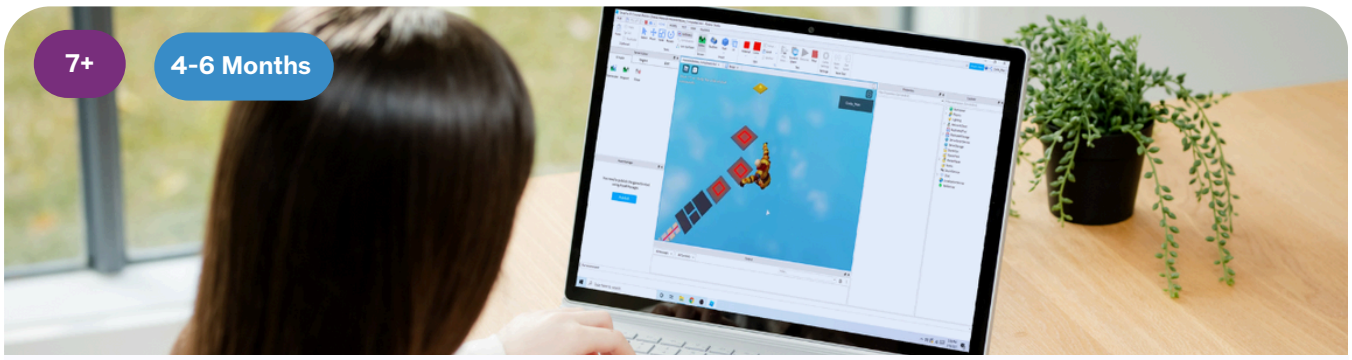
HOUSE IN A BOX

Design a house block that enables you to fit your entire home into a box, allowing you to spawn it anywhere you desire.



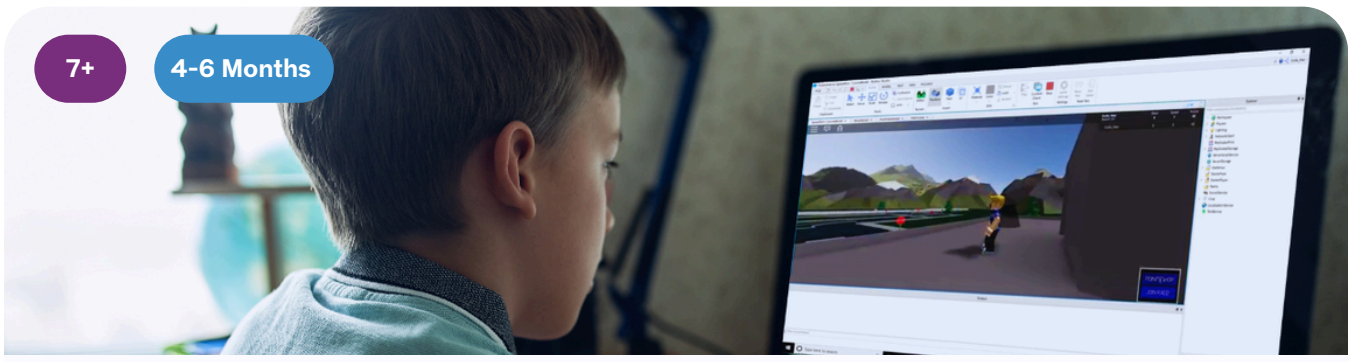
Roblox Game Development

Level 1



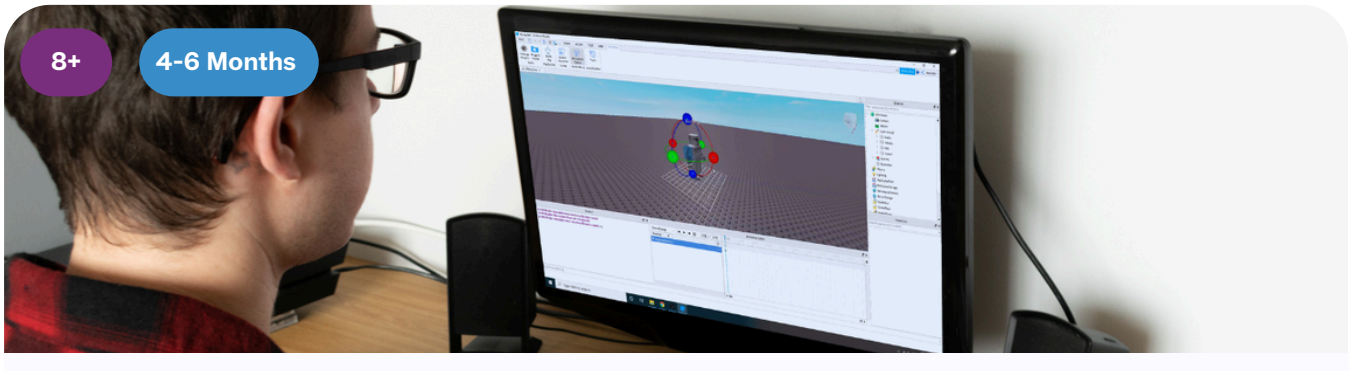
Start building in Roblox Game Dev Level 1! Kids will learn core Lua basics—variables, functions, events, loops, and tables—while exploring Roblox Studio's tools like Parts, Properties, and the Explorer. They'll create classic obby mechanics with jumps, checkpoints, and hazards, then practice with timers, collisions, quests, and coding challenges to level up their skills as game creators.

Level 2



Level up with Roblox Game Dev 2! Kids will expand their Lua skills with conditionals, loops, events, and reusable functions while learning to organize their scripts. They'll build game systems with teams, rounds, scoring, and respawns, then manage data and state using flags, cloning, and properties. Along the way, they'll sharpen their Studio workflow—referencing the Explorer, structuring code, and playtesting like real developers.

Level 3



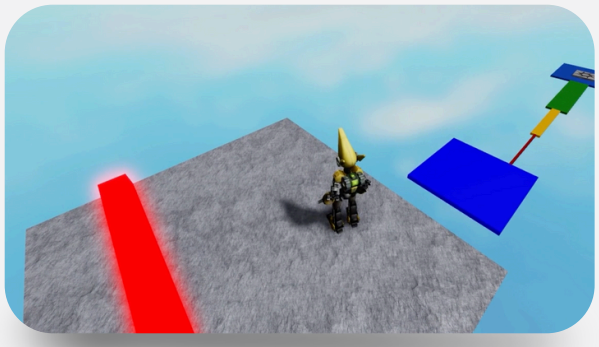
Build like a pro with Roblox Game Dev 3! Kids will master client/server scripts, ModuleScripts, and replication while creating combat with hitboxes, storm zones, animations, and simple state machines. They'll add economy and persistence using DataStores, currencies, inventories, and leaderboards, then finish with monetization and UX—game passes, developer products, and custom GUIs for polished Roblox experiences.

Roblox Game Development Sample Projects

Level 1

OBBIES

Create Custom Obbies Featuring Moving Platforms, Speed Blocks, and More!



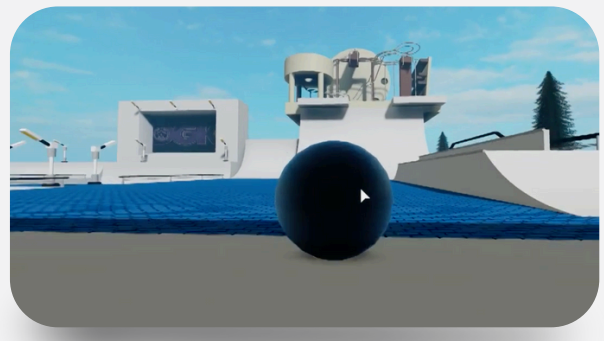
ADVENTURE MAPS

Create an Advanced Adventure-Style Obby with Enhanced Tools and Features



MARBLES

Transform your character into a marble ready to explore the skate park!



Level 2

RAGDOLL CANNON

Create a cannon that propels you! Along with other exciting features in the game.



VEHICLES

Create custom vehicles that are ready to be driven!



BATTLE ROYALE!

Students design a personalized battle royale in Roblox, bringing their wildest combat to life.



Level 3

SPEED SIMULATOR

Develop a speed simulator game in which players unlock features as they progress by walking.



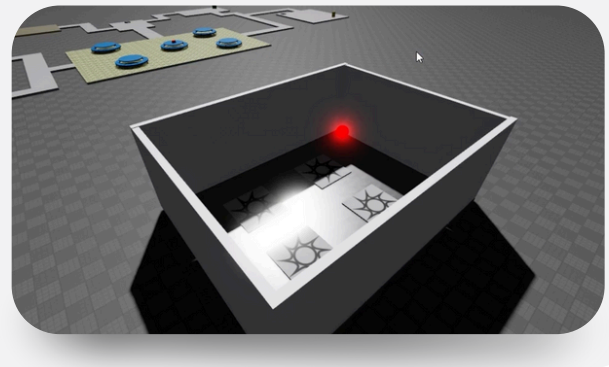
TYCOON

Develop a multiplayer infinite tycoon game.



IMPOSTERNAUTS

Design a multiplayer game inspired by Among Us.



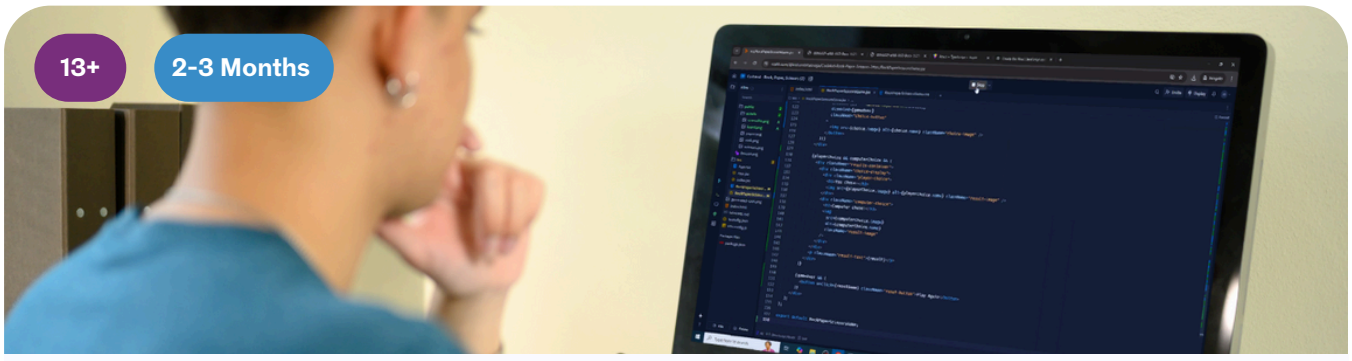
Artificial Intelligence

Level 1



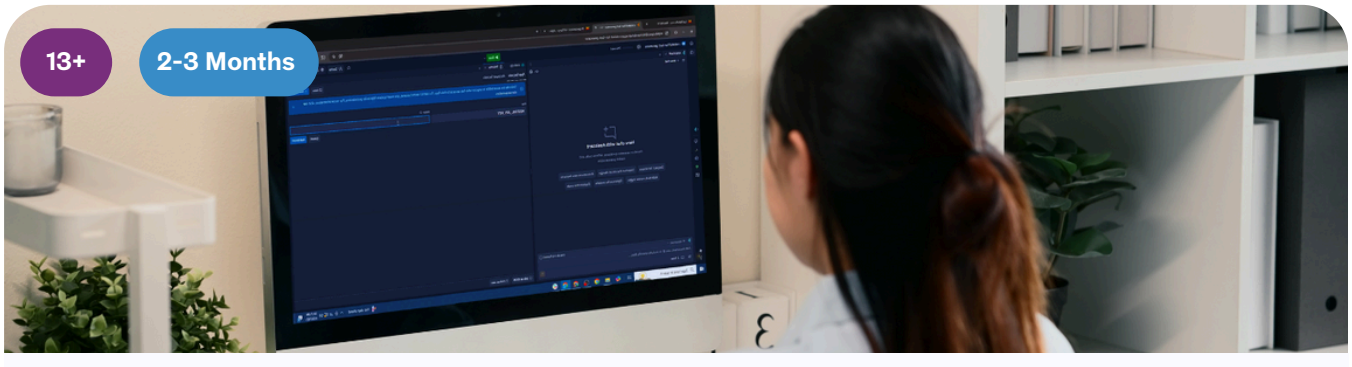
Discover the power of AI in Level 1! Kids will learn how generative models work and where they're most useful, then dive into prompt engineering with roles, constraints, and step-by-step examples. They'll experiment with multimodal creation across text, images, and simple audio, and practice iterating—critiquing outputs and refining them into stronger results.

Level 2



Level up with AI Pair-Programming in Level 2! Kids will learn to plan, scaffold, and refactor code with an AI assistant while setting up a core stack in JavaScript/HTML/CSS or Python. They'll build mini games, utilities, and data projects with AI support, then streamline their workflow by turning prompts into reusable snippets, using version control, and keeping clear documentation.

Level 3



Master real-world AI skills in Level 3! Kids will explore API fundamentals like authentication, rate limits, pricing, and JSON schemas, then work with providers to call LLM, vision, and speech endpoints from code. They'll build apps and automations such as chat tools, content pipelines, and scheduled jobs, while learning to handle data with prompt templates, context windows, and simple caching.

Artificial Intelligence Sample Projects

Level 1

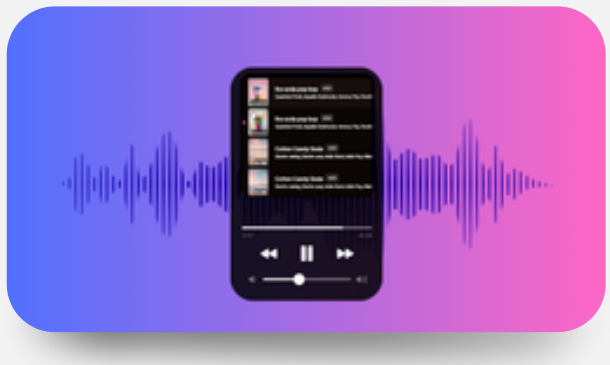
MEME GENERATOR

Generate Custom Memes with the Help of Generative AI!



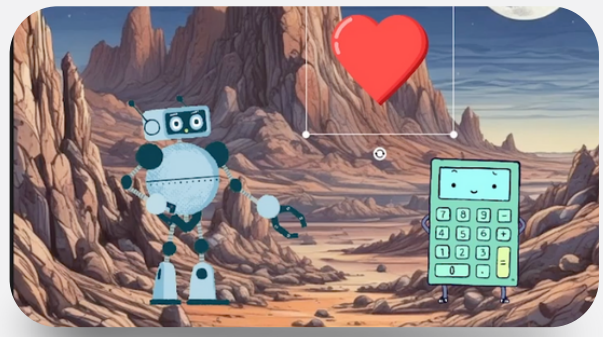
AI MUSIC PRODUCER

Craft Personalized Music with Vocals and Assemble Your Own Album



CARTOON CREATOR

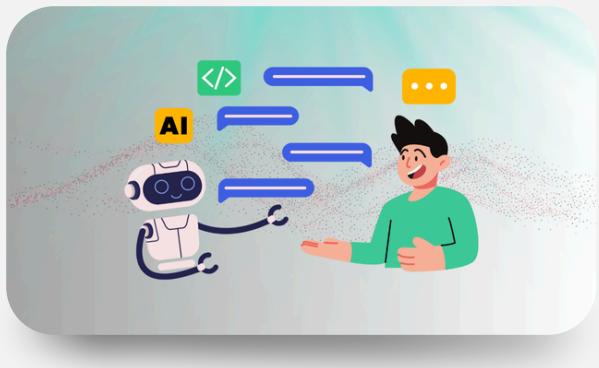
Create a complete cartoon using a variety of AI tools.



Level 2

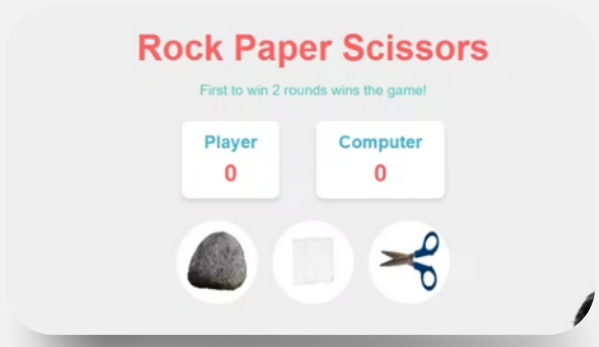
PROMPT ENGINEERING

Discover How to Prompt AI for Amazing Websites, Games, and Beyond



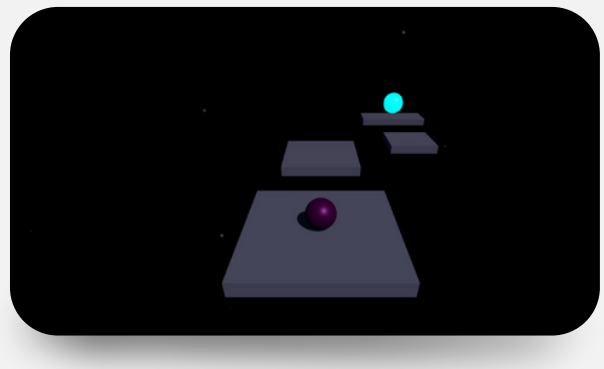
ROCK, PAPER, SCISSORS

Create a Rock-Paper-Scissors Game Using Only Prompts and AI



VIBE CODING

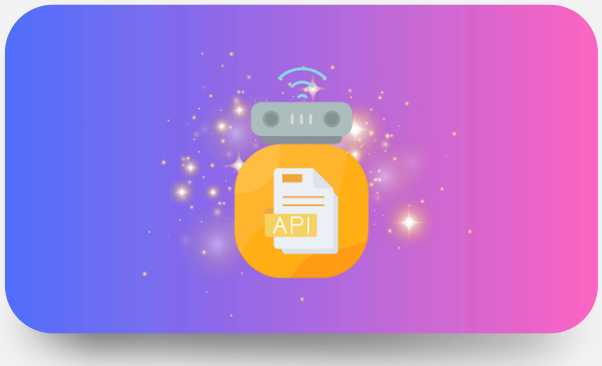
Learn to Develop Complete 3D Games Utilizing Vibe Coding Principles



Level 3

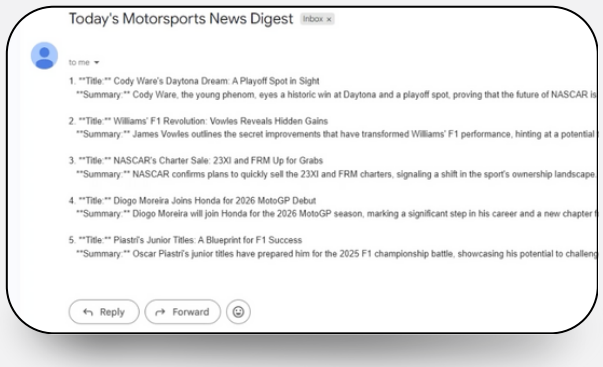
INTRO TO APIS

Explore the process of using APIs to gather information and craft exciting generators, such as a fantasy name generator.



AI AUTOMATIONS

Learn to harness APIs to set up email automations that deliver news summaries, jokes, and much more directly to your inbox.



FUN FACT GENERATOR

Create an engaging fact generator that retrieves interesting facts directly from an AI API.



Unity Elective

Unity



Build full 3D games with Unity! Kids will learn core Unity and C#—scenes, GameObjects, components, prefabs, and scripting. They'll add physics with Rigidbodies, WheelColliders, torque, and collisions, then design tracks with terrain, textures, checkpoints, and laps. Gameplay comes alive with power-ups, camera follow, and HUD elements, plus pause and restart controls. Finally, they'll polish with lighting, audio, and performance tweaks before exporting a playable build for PC or Mac.

Sample Project

CODACART

Students will develop a professional-level game using Unity and C# by creating a go-kart racing game reminiscent of Mario Kart! This course offers an exciting opportunity for aspiring game developers.





Java Script Game Development Elective



8+

2-4 Months

Create games for the web with JavaScript! Kids will start with core skills—variables, functions, classes, and conditionals—then build game architecture with update loops, spawning systems, and collisions. They'll design mechanics like infinite runner scrolling, enemy waves, power-ups, and tower defense stages, while adding UI polish with menus, difficulty scaling, and game-over screens. With mobile-friendly setup and guided coding challenges, students will practice and reinforce each feature as they go.

Sample Projects

INFINITE RUNNER

Students create an infinite runner game using JavaScript that is sure to impress!

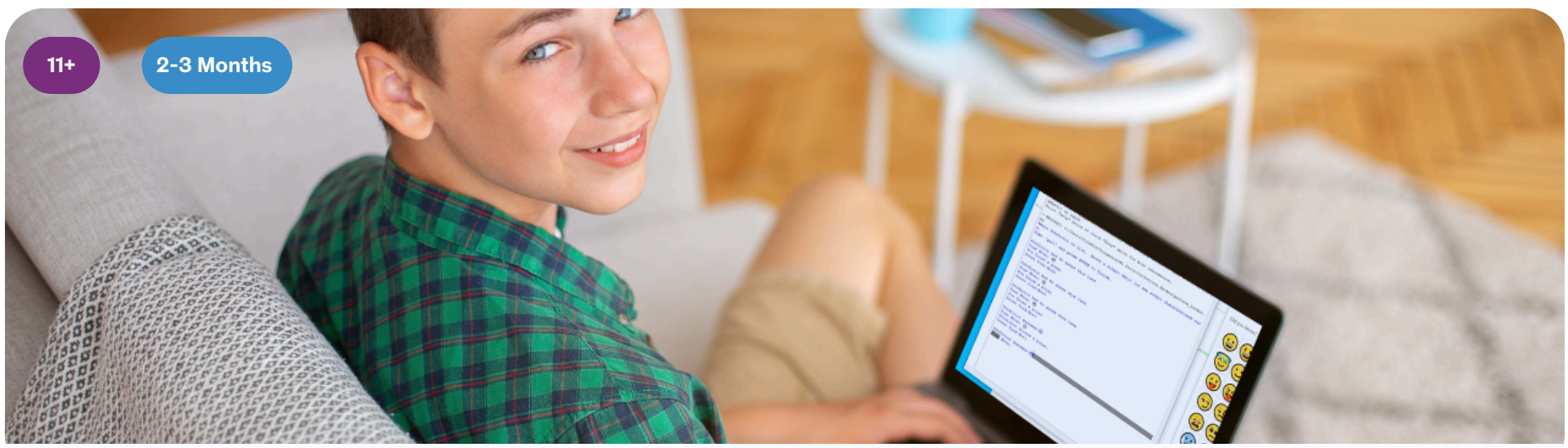


TOWER DEFENSE

Students develop a game reminiscent of Bloons Tower Defense.



Machine Learning Elective



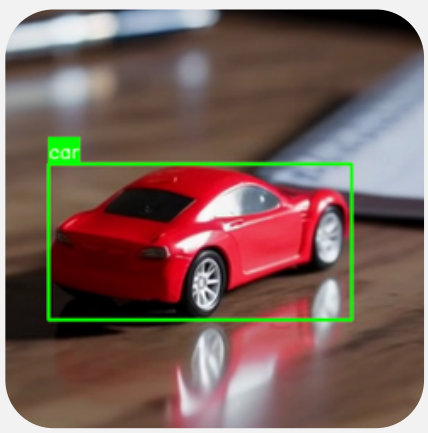
11+ 2-3 Months

Explore real AI with Machine Learning! Kids will start with data prep—collecting, labeling, splitting, and preprocessing datasets—then dive into supervised and unsupervised learning with image and text classification, evaluation metrics, and K-Means clustering. They'll build computer vision projects with object detection and real-time inference, explore NLP with sentiment analysis and text generation, and experiment with reinforcement learning through states, rewards, and Q-learning. By the end, they'll understand core ML concepts while creating exciting, hands-on projects.

Sample Project

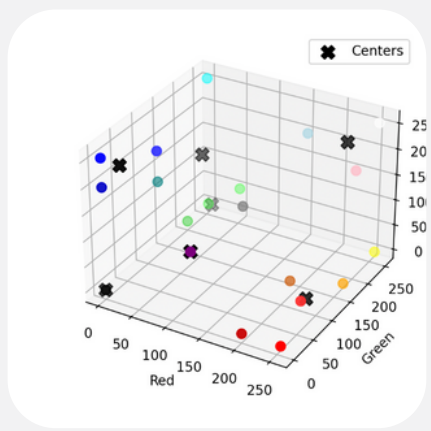
CAR SPOTTER

Students are developing an image recognition engine capable of real-time tracking specific objects, ranging from cars and scooters to people.



COLOR CLUSTER

Students explore the concept of k-means clustering and gain insight into how computers interpret data. They also discover how this data can be visually represented through creative projects.

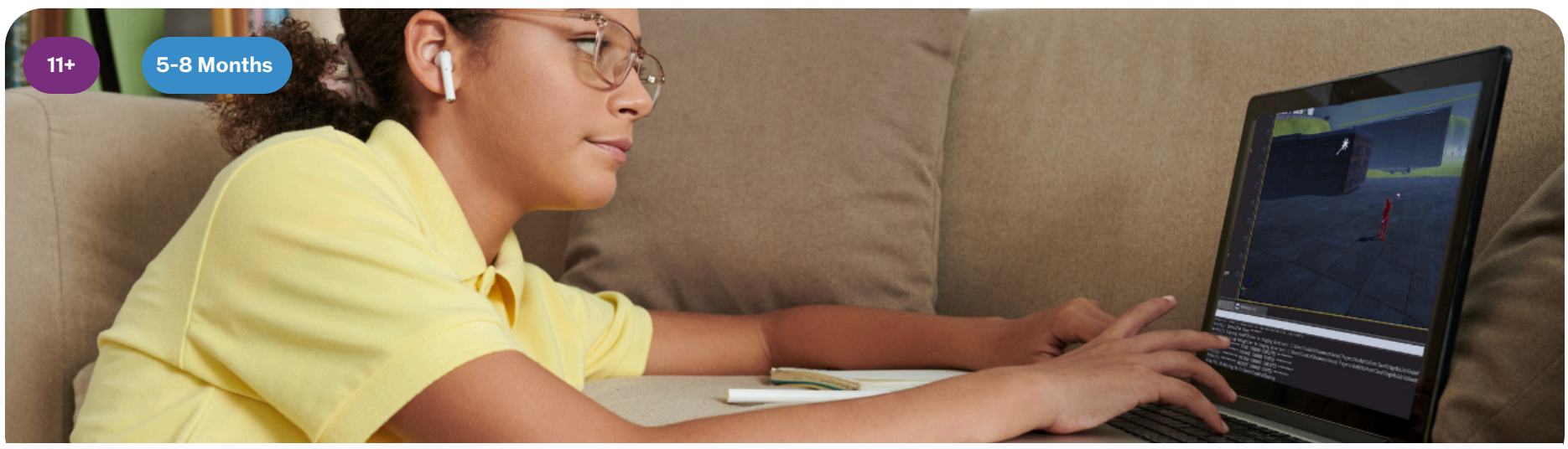


MICRO-MODEL

Students create a beginner chat model from the ground up that learns as they provide it with information.



Unreal Engine Elective



11+

5-8 Months

Create games in Unreal Engine! Kids will start with editor fundamentals—making a project, navigating the interface, and quick playtesting—then design worlds with maps, vehicles, spawners, and pickups. They'll explore game modes like parkour, battle royale, and prop hunt with teams and rounds, while learning Verse basics to script devices and verify changes. Finally, they'll add UI and scoring with HUDs, win conditions, and publish settings to share their finished game.

Sample Projects

PARKOUR

Students will create and design a parkour game within the UEFN system.



PROP HUNT

Students Develop a Popular Prop Hunt Style Game



COIN RACE

Students organize an exciting race where collecting coins leads to victory.



Upcoming Electives

Advanced AI

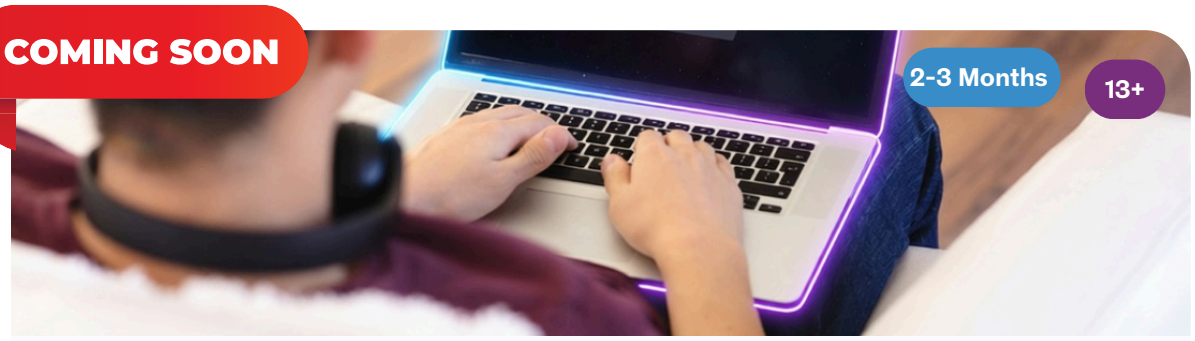
COMING SOON



In Advanced AI, students go beyond a traditional curriculum by building real apps, learning what's happening behind the scenes, and tackling much more than just the basics.

Web Dev With React

COMING SOON



In Web Dev with React, students keep building real web development skills while adding the React framework to level up and create modern, professional websites.

Entrepreneurship

COMING SOON



Students learn real entrepreneurship foundations through a curriculum built by real business owners, with hands-on projects that turn ideas into something real.

Roblox AI Builder

COMING SOON



In Roblox AI Builder, students take their Roblox skills to the next level by using the new Roblox AI to build faster, improve quality, and ship more complete games.

{coda}kid™ Coding & AI for Kids & Teens



100,000+

Students Taught

Parents · CNN · TECH.CO · FOX NEWS channel · Inc. · CBS NEWS

PARENTS' CHOICE
Gold Award for Best Coding Solution

CERTIFIED
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SIIA CODIE
Finalist for Best Coding Solution

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BrainChild Award for Best Coding Solution

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Scottsdale, AZ, 85251

480-405-2734

It Works! Just Ask Our Parents.

Amy Seaver
9 reviews
★★★★★ a year ago
We enrolled in a variety of camps and classes. My son loves them. Teachers have been patient with him; communication and customer service have been great. I have no complaints and would recommend it.

Tracy Fischetti
3 reviews
★★★★★ 4 years ago
Coda Kid is amazing and fun for my kids! My tech loving son loves learning how to code and create. Best part for me was the communication with their tech team if he ran into a problem. I am always able to get help within a reasonable time for my son. They are patient and professional. I highly recommend.

Eric Nilsson
6 reviews · 1 photo
★★★★★ 7 years ago
My son is in his 3rd year of CodaKid and it is amazing for him! Not to mention he is only 9! An alternative to sports this is a practical skill that gets him into things he actually enjoys! My daughter, 6, is excited to get into it too. Appreciate the great staff.