

Al Classes for Children

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Empower children

Topic

Objective

Curriculum Structure

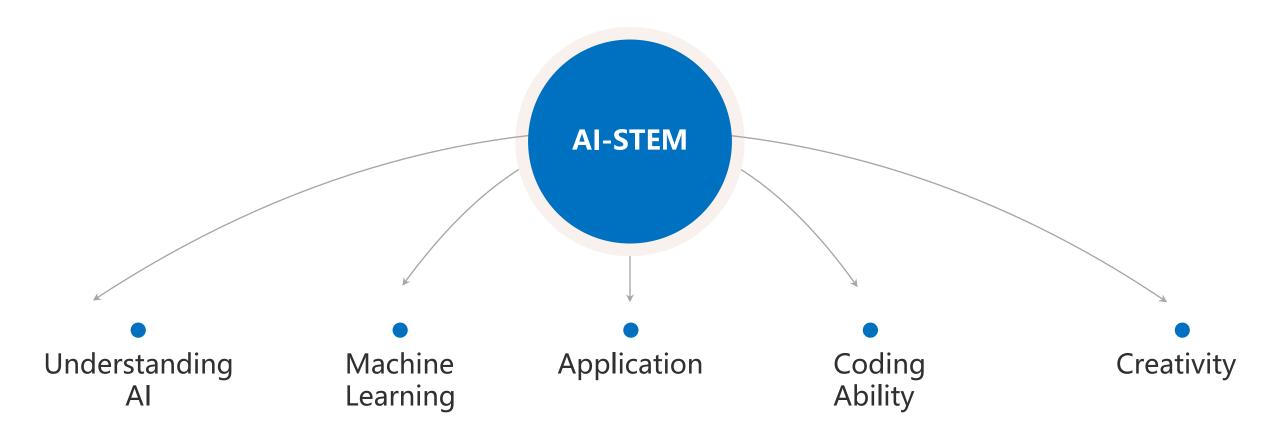
Course Selection

Learning Management

Our Teachers

About us

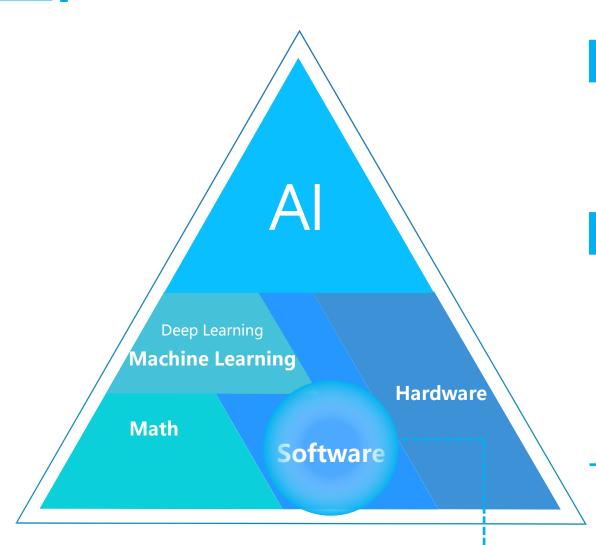
Spark interest, learn coding, understand Al



While learning programming, learn Artificial Intelligence, so that students can apply these skills to real world and see where and how AI can be used (games, smart homes, etc.).

Competitive Programming

What is AI-STEM?



Coding

■ Teaching children programming in the form of games, animations, and building blocks in a modular manner

Robotics

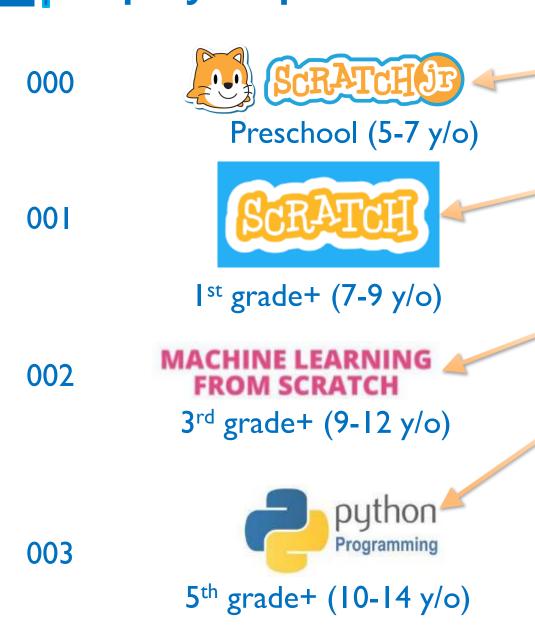
☐ Teach children assembling, building, and programming the robot

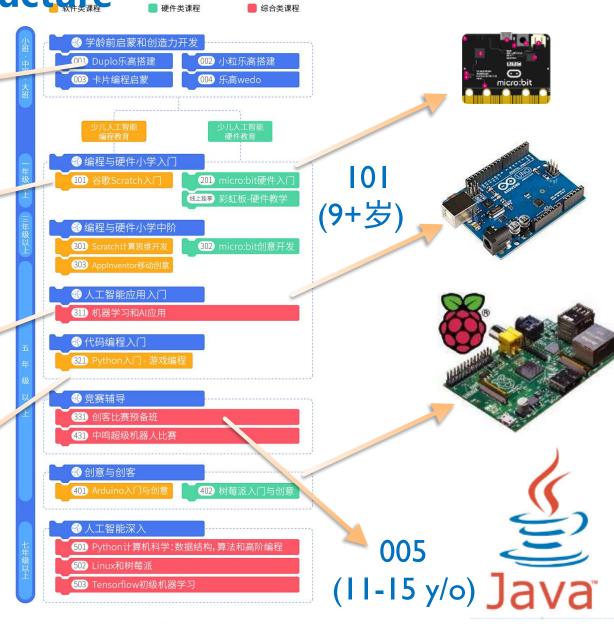
Coding is the foundation of learning Al

AI: algorithm, data, computing power

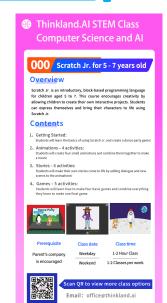
广问AI

Step-by-Step Curriculum Structure





Course Flyers





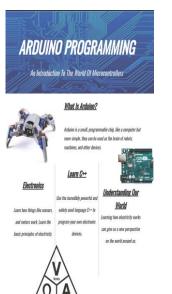


















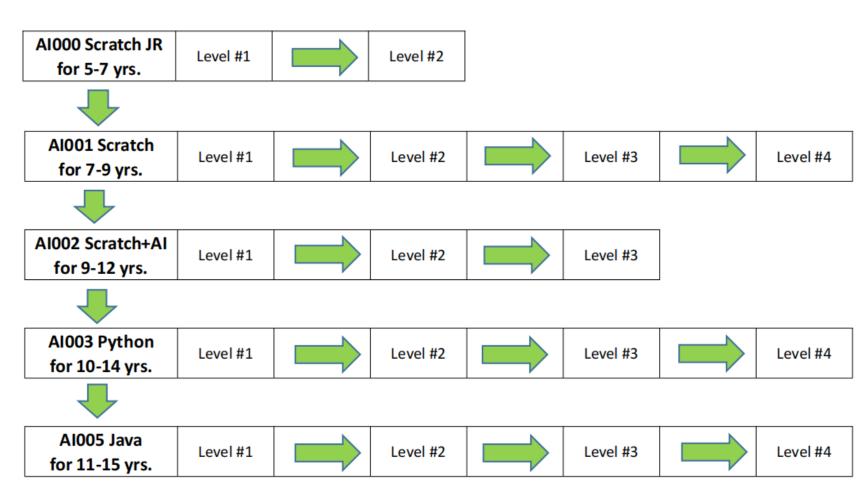


The Core









^{*}Each level is 16 hours of class

Structured Curriculum

Core: 000, 001, 002, 003, 005

Competition: 006, 301

Extension: 001+, 003+, 201

Hardware: 100 (Micro: bit), 101(Arduino), 102(Raspberry Pi)

Course Name	Age/Grade	Level (16 hours each)		Course Intro		
Children's AI Programming 000 Scratch Jr.	Age 5-7	1	2			AI000ScratchJr
Children's AI Programming 001 Scratch	Age 7-9	1	2	3	4	AI001Scratch
Children's AI Programming 001+ Scratch Game Design	Age 8+	1	2			AI001+GameD
Children's AI Programming 002 Scratch+AI	Age 9-12	1	2	3		AI002ScratchAI
Children's AI Programming 003 Python	Age 10-14	1	2	3	4	AI003Python
Children's AI Programming 003+ Python PyGame	Age 10-14	1	2			AI003+PyGame
Children's AI Programming 005 Java	Age 11-15	1	2	3	4	<u>AI005Java</u>
Children's AI Programming 006 Data Structures	Age 12+	1	2	3	4	AI006DS&A
Children's AI Robotics 101 Arduino	Age 9-12	1	2	3		AI101Arduino
Children's AI Programming 201 HTML&CSS	Age 9+	1	2			AI201WebD
Children's AI Programming 301 Python+AI	Age 12+	1	2			AI301ML

Scratch

Thinkland.AI STEM Class
Computer Science and AI

OOO Scratch Jr. for 5 - 7 years old

Overview

Scratch Jr. is an introductory, block-based programming language for children aged 5 to 7. This course encourages creativity by allowing children to create their own interactive projects. Students can express themselves and bring their characters to life using Scratch Jr.

Contents

1、Getting Started:

Students will learn the basics of using Scratch Jr. and create a dance party game!

2. Animations – 4 activities:

Students will create four small animations and combine them together to make a movie

3、Stories - 6 activities:

Students will make their own stories come to life by adding dialogue and new scenes to the animations!

4、Games - 5 activities:

Students will learn how to make four basic games and combine everything they learn to make one final game.







Prerequisite

Class date

Class time

Parent's company is encouraged

Weekday

1-2 Hour Class

Weekend

1-2 Classes per week

Scan QR to view more class options

Email: office@thinkland.ai

Thinkland.AI STEM Class Computer Science and AI

001

Scratch Coding Based on Google CS First

Overview

Based on Google's CS First Curriculum, Al001 is designed for children aged 7 to 9 to systematically learn programming, explore storytelling techniques, build fun games, and craft presentations. This course allows students to showcase their creativity through the medium of programming and digital design.

Contents



1. Dialogue, 2. Check It Out, 3. Settings, 4. Premise,

5. Characterization, 6. Interactive Storytelling,

7. Personal Narrative, 8. Innovation Story

1.Gaming Story、2.Racing Game、3.Maze Game、4.Platform Game、5.Escape Game、6.Launcher Game、7.Quest Game、8.Cave Surfing Game





Victory Celebration, 2. Sports Commentary, 3. Net Sports,
 Fitness Gadget Commercial, 5. All-Star Passing Drill,
 Batter Up, 7. Extreme Sports, 8. Post-Game Interview"

Sports

oporto

Prerequisite

Weekday

Class time 1-2 Hour Class

No Prior Experience Required

Weekend

Class date

1-2 Classes per week



Scan QR to view more class options

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001+ Scratch Coding+: Game Design

Overview

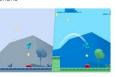
Scratch+ Game Design is centered around the various logic concepts used within many common games. Students will apply their basic knowledge of scratch as well as new important logic and computer science concepts through recreating existing and original games. Students can express their creativity through game design. The course focuses on the application of code in original game mechanics created by the students

Contents

- · Level 1 Classic Games · Level 2 Modern Games
- 1. Maze Game
- 2. Platformer
- 3. Tower Game
- 4. Breakout
- 5. Snake

· Level 2 - Modern Game

- 1. Top-down Shooter
- 2. Scrolling Platformer
- 3. Online multiplayer Board Game
- 4. Online Multiplayer Fighting Game
-









Prerequisite

Prior Scratch
Experience Required

Class date

Weekday

Class time 1-2 Hour Class

1-2 Classes per week



Scan QR to view more class options

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Thinkland.AI STEM Class Computer Science and AI

002

Introduction to Machine-learning based
Artificial Intelligence using Scratch

Overview

Using our proprietary Scratch with Al Platform, this course introduces children aged 9 and up to concepts in machine learning and how to apply them in real world scenarios.

Contents

- Session 1 (16 Hours)
- Introduction to Machine Learning
- Image Recognition & Spongebob and Friends
- 3. Natural Language Processing & Simple Smart Home
- 4. Sentiment Analysis & Praises and Criticisms
- Session 2 (16 Hours)
- 5. Facial Recognition & Facelock
- 6. Decision Trees & Flappy Bird
- 7. Decision Trees & Pacman
- 8. Speech + Speaker Recognition & Voice Lock

• Session 3 (16 Hours)

9. Brainstorming Ideas + Workshop

10. Create your own project & Implement Machine Learning Concepts





Prerequisite

Prior Scratch

Experience Requied

Class date

Weekday Weekend Class time 1-2 Hour Class

1-2 Classes per week

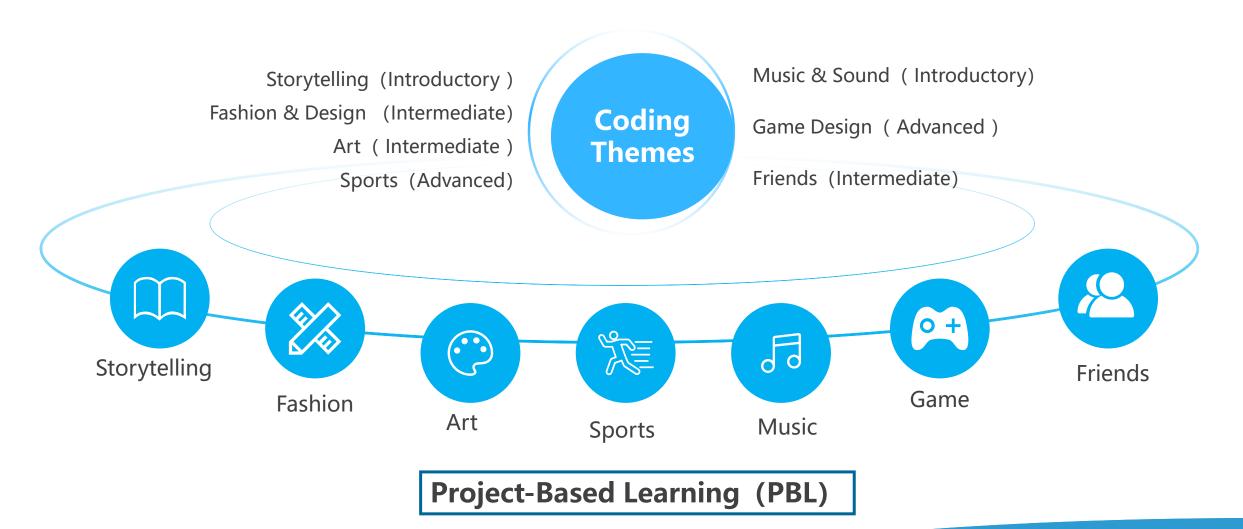


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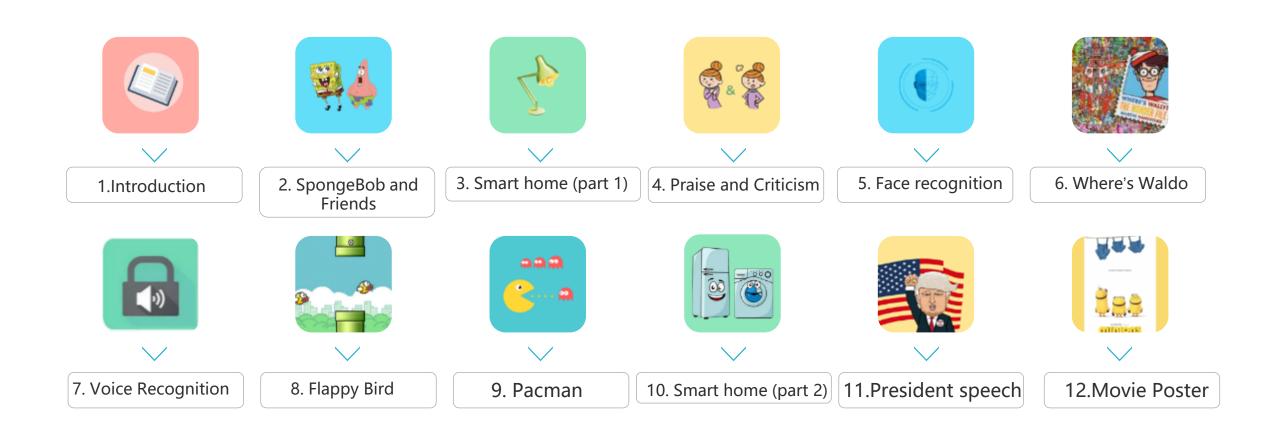
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001 Scratch Coding based on Google CS First

Scratch 3.0



002 Al + Machine Learning Projects Library



Scratch+Al

Make Projects, Smart Games, Team Works

Competitive Coding













006 Data Structure + Algorithm

Overview

An in-depth course about two of the fundamental topics in computer science — data structures and algorithms. This course is designed for those who have basic knowledge of Java programming and ready to move a step beyond programming language. It covers everything you need to know for competitive programming, from basic concepts to practical experience. Most importantly, this course develops the skills of modeling and logical thinking, and clears the way towards advanced topics in computer science and artificial intelligence.

Contents



Introduction, 2. Recursion, 3. Dynamic Promgramming,
 LinkedList & Two Pointers, 5. Sort, 6. Tree & Binary
 Search Tree, 7. Divide & Conquer

Binary Search、 2. Recursion、 3. Dynamic Programmin、
 Sort: Two Kinds、 5. Introduction to Queue/Stack/Heap、





Level 3

Introduction to Map/Set, 2. Graph, 3. Breadth-First
 Search, 4. Best First Search, 5. Prefix Sum,
 Bit Operation, 7. Greedy

Prerequisite

Class date

Class time

Prior Java Experience Required

Weekend

1-2 Hour Class
1-2 Classes per week



Scan QR to view more class options

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USACO

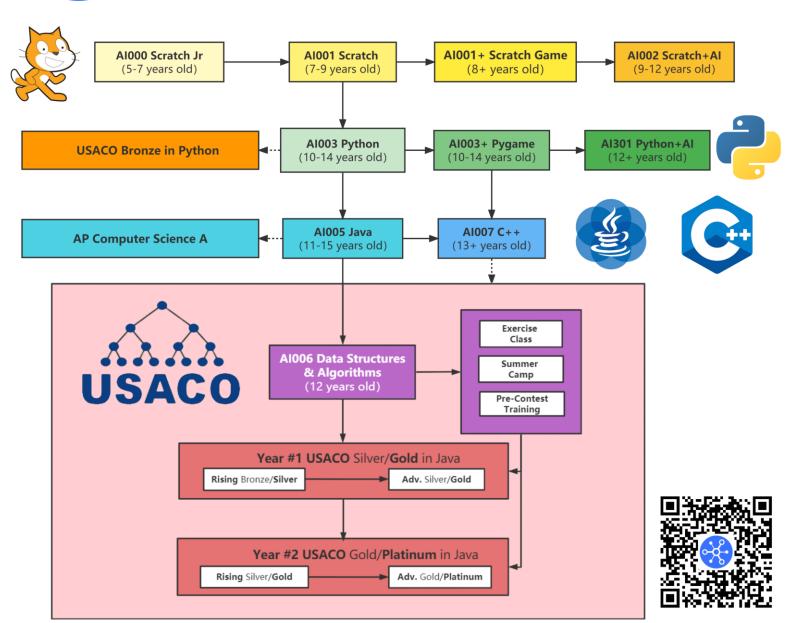
USA Computing Olympiad





Thinkland.AI USACO Plan

School@thinkland.ai



Knowledge Exam

TTK Coding Test

This is for students to evaluate their progress throughout the classes with a quick 30 minute to 1 hour open note test. There will be four sections: basic understanding, project understanding, debugging, and creating. There is a total of 70 points.

https://school.thinkland.ai/ttktest/



AI000 Scratch Jr

Scan QR or Clink <u>link</u> to test Scratch Jr now.



AI001 Scratch

Scan QR or Clink <u>link</u> to test Scratch now.



AI002 Scratch+AI

Scan QR or Clink <u>link</u> to test Scratch+Al now.



AI003 Python

Scan QR or Clink <u>link</u> to test Python now.

Al Coding Competition Hackathon for Children

FutureHacks is a free hackathon – coding competition – that encourages 7-18 year old elementary and middle school students to show their coding ability, explore their creativity and socialize and find others with common interests. Participants can participate to win prizes or just attend free courses.

I: 2020/09/19-20II: 2021/03/27-28III: 2021/08/27-29

V: 2023/04/15-16

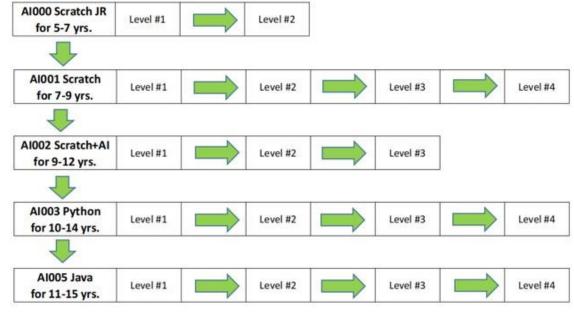
http://futurehacks.net



Course Selection – Customizable

Student Age	Coding Experience	Course to Choose	Course We Recommend	
5-6 y/o Kindergarten	None / Scratch Jr	000	000	
7 y/o Grade 1	None / Scratch Jr	001	001	
	Scratch	001*	001	
8-9 y/o Grade 2-3	None / Scratch Jr	001	001	
	Scratch	001* / 002 / 003	-	
	Python	002 / 003*	002	
10-11 y/o Grade 4-5	None / Scratch Jr	001	002	
	Scratch	001* / 002 / 003		
	Python	002 / 003* / 005	003	
12-14 y/o Grade 6-7-8 Middle School	None / Scratch Jr	001 / 003	003	
	Scratch	003 / 005	(00.1)	
	Python	003* / 005	(004)	
	Java	003 / 005*	005	
15 y/o Grade 9 High School	None / Scratch Jr	003	005	
	Scratch	003 / 005		
	Python	003* / 005	005	
	Java	003 / 005*		

Course ID	Course Name Scratch Jr	Course Level			
AI000 Sc		Session #1			
AI001	Scratch	Session #1	Session #2	Session #3	Session #4
AI002	Scratch+AI	Session #1	Session #2	Session #3	
AI003	Python	Session #1	Session #2	Session #3	Session #4
AI005	Java	Session #1	Session #2	Session #3	Session #4



^{*}Each level is 16 hours of class

Learning platform: school.thinkland.ai

Teaching

This educational platform is formed around our curriculum, a combination of videos, and an emphasis on hands on learning, through the form of interactive projects.

Educational Tool

As the product's foundation, it aims to show machine learning in understandable ways using trainable machine learning models.

Teaching Platform

Using our platform, we integrate our curriculum to optimal effects. Teachers screen share so that students can follow along.

Combining real teachers and such an educational platform to optimizes one's learning experience!

- Encourage students, teachers, parents, and schools to create accounts with varying roles and levels of permissions.
- ② Easily accessible online classroom
- ③ Teaching material are available on the platform
- Programming environments for scratch, python, java, makecode, etc.
- S As a learning platform, students can see content and submit homework
- 6 As a teaching platform, it provides teachers with class, timetable and content management
- ⑦ Parents can check up on students
- Supports mainstream Al platforms

Class Management



7am in the morning of the class day

30 minutes prior to the class time

Reminder Before each class



Summer Al005-1 Wed 10:00am-12:00pm

Teacher: Vikram Sharma

Class status: • class is ON (good job!)

Submit time: 6/16 10:01:29

Class No-Show 6/16: Al003-13

Thinkland Office

to Bryan, Teacher, me, bryanotq2008 -

Dear Bryan Ong's parents,

It is 6:07pm now. Bryan has not shown up in Al003-1 Wed 6/16).

To join the Zoom meeting class:

Call Attendance
Beginning of each class



Class Report



Teacher: Vikram Sharma

Session#2-1. Control Flow Structures and Boolean Logic

Class Summary

Reviewed for and while loops

class Content

Video Link click here

Report
After each class

TTKCare students: Class Report and Evaluation

Class Report



A picture of me!

Session#1



Class Summary

Class 2



Class Content

- Students learned the different operators used to perform arithmetic (for addition, subtraction, multiplication, division) and additional mathematical operators (such as modulo, exponents, parenthesis, and true division).
- Students also learned about using operators on strings. The first operator was "+", which results in concatenation (combining two strings together). The second operator was "*", which results in duplicates
- Students were taught about the concept of variables and valid
- Lastly, they learned about comments and their purpose in code.



Class Performance

Ryan shows shows a lot of enthusiasm and asks great questions in class. He always tries to participate in class activities and asks questions whenever he wants to learn more (or needs help). He gave great answers and asked thoughtful questions about the concepts, showing his engagement and interest in the subject. For his success in the class, he should continue to exhibit his current performance.



♠ After-class Requirements

None. He can choose to review the PowerPoint provided in class, but that is optional.

https://thinkland.ai/myclass

Timmy's Evaluation

Class Participation

Timmy participates in class with high frequency. He constantly volunteers and always tries his best to answers the questions that are asked.

Class Attention

I never have to repeat myself to Timmy. He pays close attention to every detail of the lesson. I can tell that he is interested in class because of the meaningful questions he asks and his great participation.

Homework Completion

Timmy completed all homework assignments. I have never had a complaint about him not practicing after class.

Knowledge

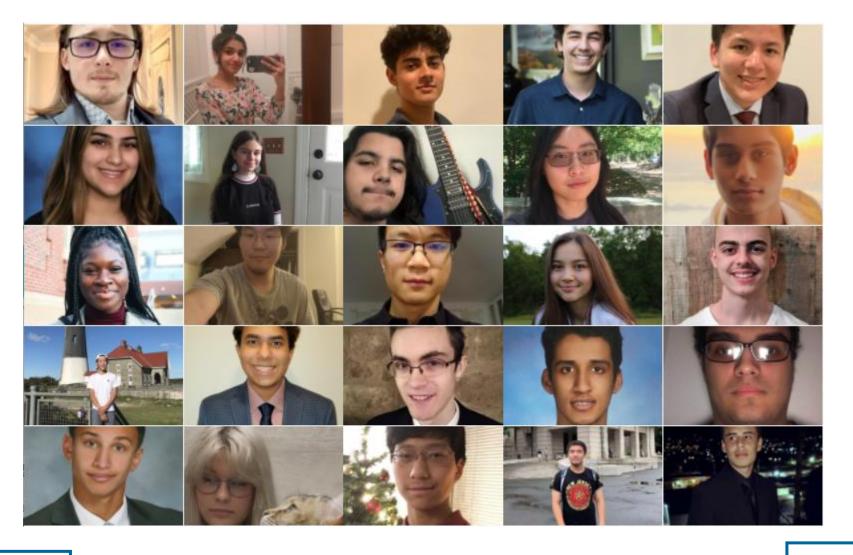
Timmy is extremely knowledgeable. He knew much before entering the class, but was open to learning new things. He mastered every topic introduced throughout all the classes and sometimes would even stay after class to learn more from.

Conclusion

The effort that I see from Timmy is breathtaking. He is an exemplary student and showed this in every class with his participation and interest. I noticed from the first day that he had a lot of potential and room for growth. He will definitely benefit from more advanced Python lessons. I hope to see him in future classes!

Class recommendation: Al003 Python Level 2

600+ (and growing) teachers from all over America



International

Teaching for Leadership – Serving Communities

- 1. Free Training \rightarrow TA \rightarrow Teacher
 - Training System
- 2. STEM for All program
 - for Low-income & Unprivileged
- 3. School Club
 - Teaching club





















AI Class Signup

Registration link:

https://school.thinkland.ai/schedule



AI Website



- classification and prediction
- data collection-examples and counter-examples
- training and testing
- applications
- text, chatbot, sentiment analysis
- visual recognition, voice recognition
- game strategies



Coding

- Programming basics
 data controls operators blo
- data,controls,operators,block functions
- Scratch programming
 motion, looks, sound, sensing
- Event-based programming
 events, messaging





How to future-proof your kids?

school.thinkland.ai

Spark Interest, Learn Coding, Touch Al

AI Classes for Children

Core Course

AI000 Scratch Jr. for Ages 5 - 7

AI001 Scratch for Ages 7 - 9

AI002 Scratch + AI for Ages 9 - 12

AI003 Python for Ages 10+

A1005 Java for Ages 11+

A1007 C++ for Ages 13+

AI101 Arduino for Robotics

Extension Course

AI001+ Scratch Game Design AI201 Web Development: HTML&CSS AI003+ Python Application and PyGame

Competition Course

AI006 Data Structure & Algorithms (USACO) AI301 Python + AI: Machine Learning

Phone#: 1-201-238-5309 Email: office@thinkland.ai

100% GUARANTEE

Your 100% Satisfaction is Guaranteed:

- 1st class tryout: If the student dislikes it and doesn't continue to attend, the first class is FREE.
- Easy and quick REFUND: if you are dissatisfied or the student is not interested in continuing at any time, you can request
 - 1. change of teacher;
 - 2. change of class;
 - 3. refund (for the remaining classes). No questions will be asked.
- Retake class: the student can take the same level class again, for FREE, if not ready to move onto the next level.

https://school.thinkland.ai/100/

Empower Children - Think



About Mike:

https://www.linkedin.com/in/mlasking/