AI Ready ASEAN

Hour of Code Guide

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Let's get AI-Ready in One Hour

AI is no longer the future—it's already part of our daily lives. It's in the recommendations we see on YouTube, the filters on our photos, and the apps that help us navigate traffic. Are we ready for AI? We have to.

But here's the big question: How to be ready?

The answer is, by understanding how it works first. When we understand how AI works, we can make smarter choices. We can spot fake news, protect our privacy, and use technology more effectively.

At its core, AI is built on the logic of coding. And coding isn't just for programmers—it's for anyone who wants to think critically, solve problems, and create something new. That's why Hour of Code exists: to make coding simple, fun, and accessible to everyone, no matter your background or experience.

What is the Hour of Code?

Imagine if learning to code was as fun as playing a game. That's what the *Hour of Code* is all about. It's a one-hour introduction to computer science designed to spark curiosity and break the myth that coding is hard. With interactive activities in 48+ languages, anyone can try it—whether you're a student, parent, or teacher.

Why Should We Learn to Code?

💻 Tech is Everywhere – From social media to online shopping, AI and technology are shaping our world. Why just consume when you can create?

💡 Problem-Solving – Coding teaches you how to think logically and solve problems creatively

📈 Future-Proof Career – Tech-related jobs are some of the fastest-growing careers worldwide, and understanding coding gives you a head start

😻 It's FUN! – Students rank coding as one of their favorite subjects, right up there with art and music

Why Start with Code.org to Learn AI?

- **Beginner-friendly**
  The activities are designed for all ages, whether you're a student, parent, or teacher
- **Hands-on activities**
  Instead of dry theory, you'll be learning through interactive games and activities featuring pop-culture characters
- **Simple setup**
  All we need is a smartphone, tablet, or a computer. Some activities don't even require a device at all

How to Join the Movement

1	2	3	4
Plan your event	Register at code.org	Pick an activity	Host the hour of code! 🚀

More Than an Hour? Go for It! 👏

The Hour of Code is just the beginning! Schools and educators can integrate coding into the curriculum, and anyone interested can explore more at https://studio.code.org/catalog

Guide for Teachers & Communities: Hosting Your Own Hour of Code Event

Welcome to the Hour of Code – a global movement that makes learning about coding and AI fun, accessible, and impactful. Whether you're a teacher, community leader, librarian, parent, or just someone excited to introduce others to coding, this guide is here to walk you through every step — no tech experience required.

Register at Code.org as a Teacher

Why Create a Teacher's Account on Code.org?

Setting up a *Teacher's Account* on Code.org is highly recommended to streamline the process of hosting an Hour of Code (HoC) event. With a teacher's account, you can:

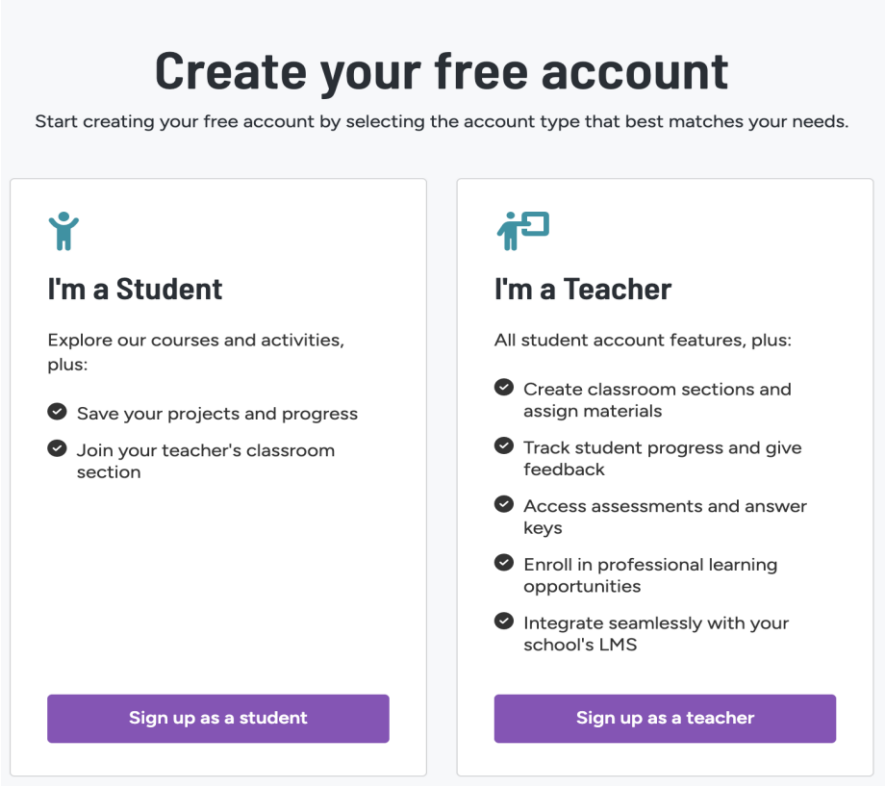
- Assign a set number of participants to specific classes.
- Track participant progress during the event.
- Simplify participant registration through pre-assigned login methods (Picture Password, Google Classroom, etc.).
- Provide co-teachers with access, allowing for collaborative event facilitation.
- Generate data summaries to support reporting requirements.

This not only makes your event easier to manage but also ensures that every participant gets a smooth experience when accessing the materials

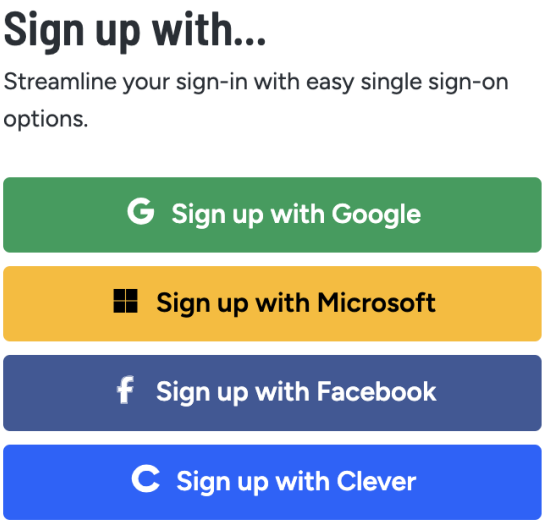
How to Create a Teacher's Account on Code.org

1. Go to https://code.org/
2. Click "**Create Account**"

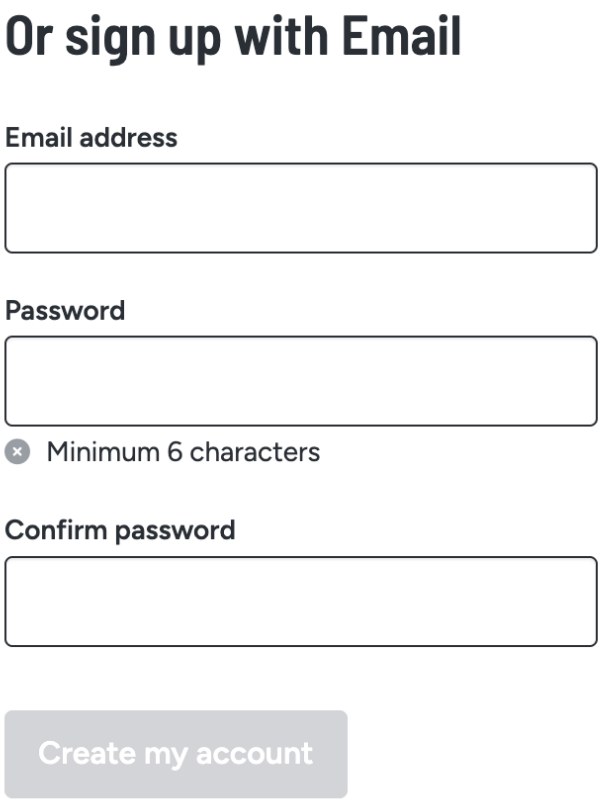
3. Click "**Sign up as a teacher**"



4. Choose a sign up method
    a. You can sign up using existing Google, Microsoft, Facebook or Clever account without having to set a password

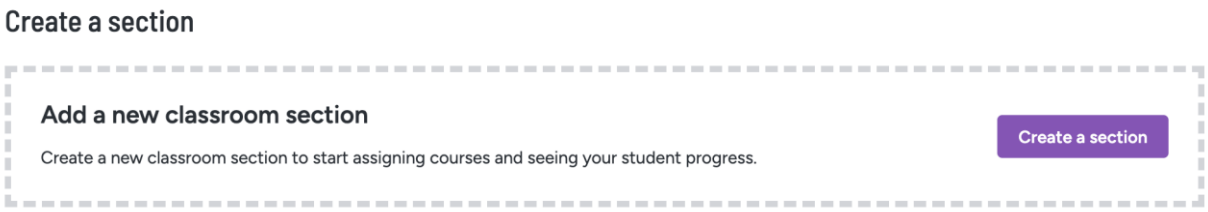


b. Or, you can sign up directly using email address & setting up password

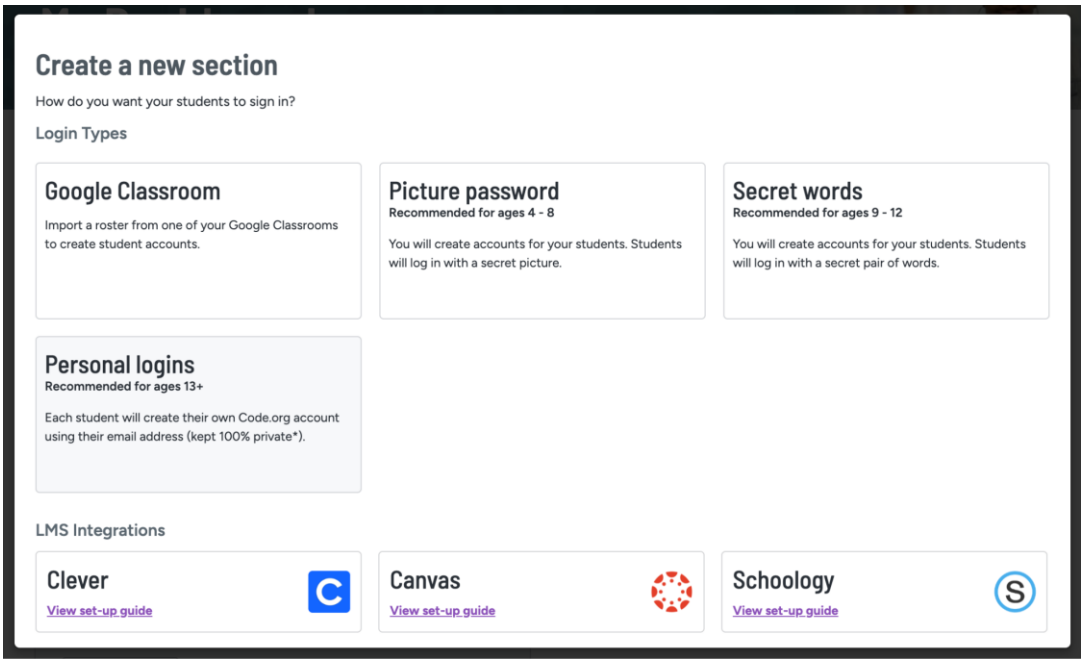


How to Create a Class as A Teacher

1. Go to https://studio.code.org/home,
   make sure you're already signed in to your teacher account
2. Click on "**Create a Section**"



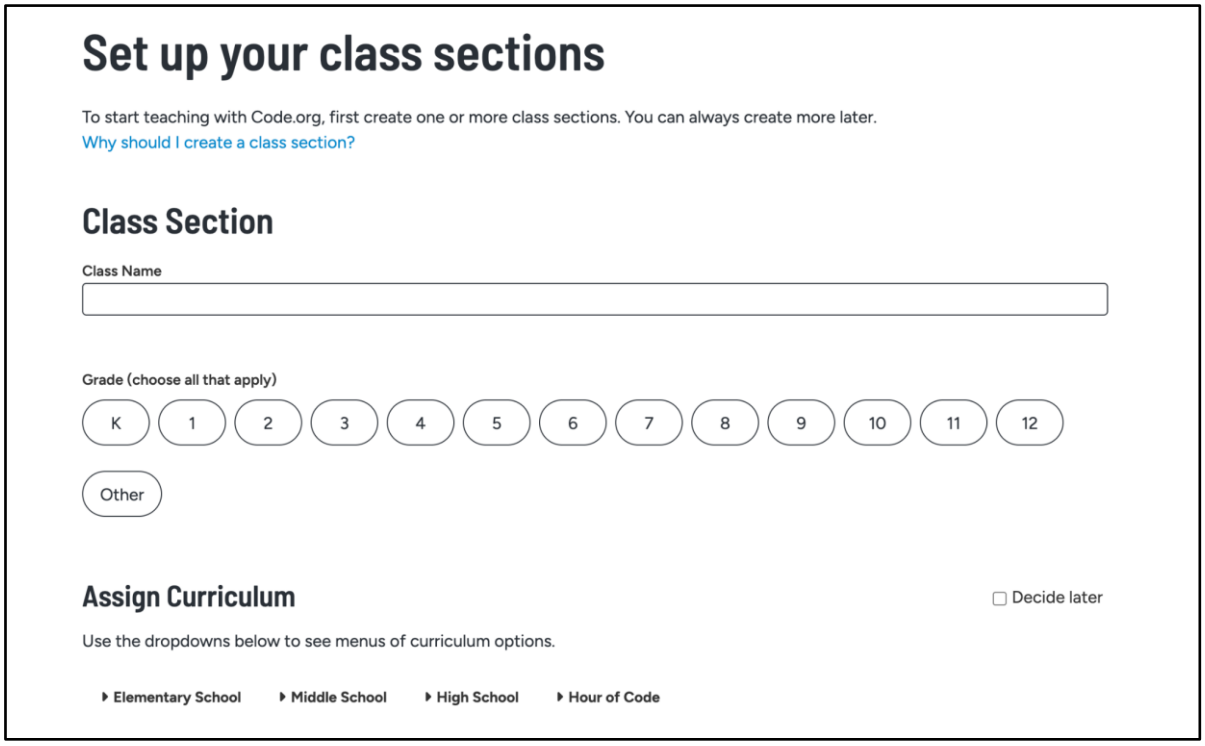
3. **Choose Student Login Method**
   When creating a new section, you will be prompted to choose the login method your student will use



Here are some things to consider when choosing a login method:

Login method	How it works	Best for	Age Group	Requires Email?
Google Classroom	You can import your student roster directly from Google Classroom	Schools/Institute using Google Classroom	All ages	✅ Yes
Personal Logins	Each student creates their own Code.org account using an email address	• Independent Students • Parents • Educators	13+	✅ Yes
Picture Password	• The teacher creates student accounts with auto-generated picture passwords • Students log in by selecting their assigned picture	Younger Students	4-8	❌ No
Secret Words	• The teacher creates student accounts with auto-generated secret words • Students log in by typing a unique two-word phrase	Elementary & middle schoolers	9-14	❌ No

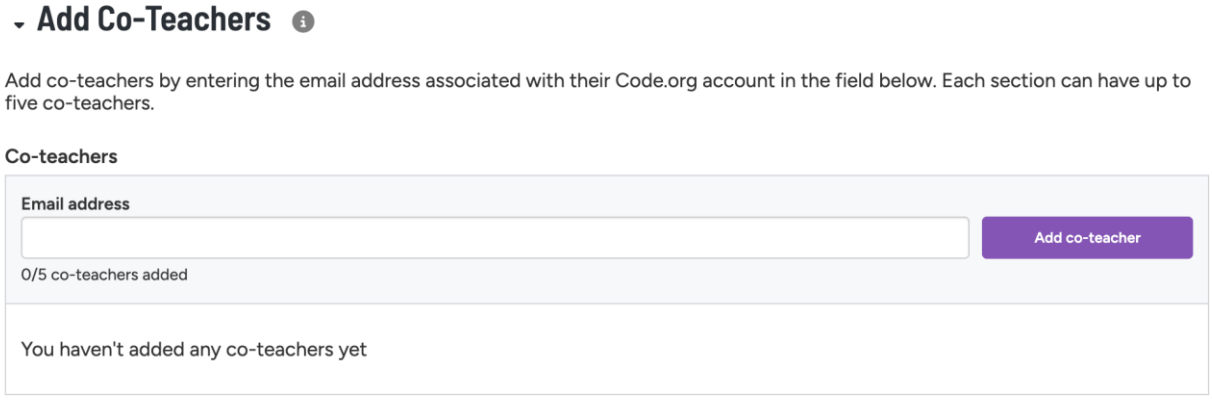
4. **Fill in the class creation form**



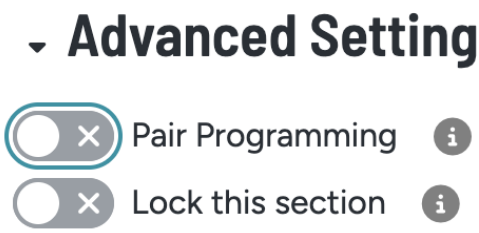
Note: you can choose not to assign any curriculum and tick the "decide later" box if you want

5. **Add Co-Teachers**

You may also add up to 5 co-teachers, but **make sure everyone already has an code.org account**



6. **Advanced Setting**

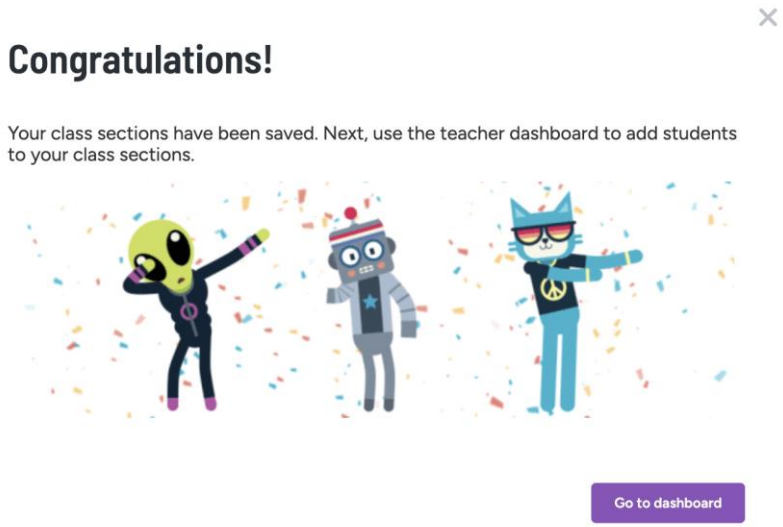


Notes:

a. Turning on **“Pair Programming”** means that you’ll allow more than one students to work on one laptop at the same time while sharing their progress
b. Turning on **“Lock this section”** means that students won’t be able to access your class without your invitation. If you want to make sure that only eligible students or participants are able to access the activity, you way want to turn this on.

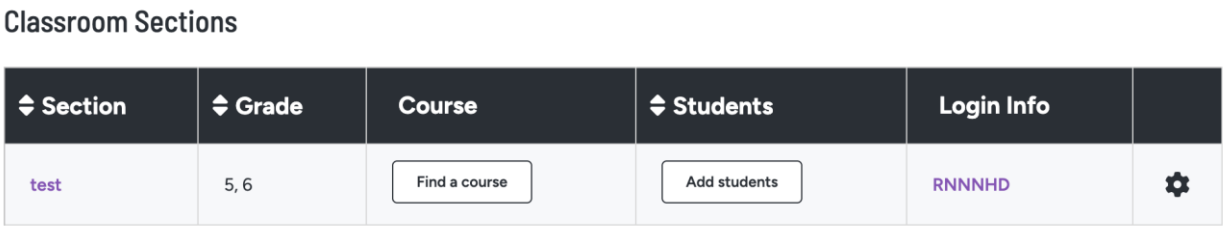
7. Click on **“Finish creating sections”**

8. Your class has been created! Click “Go to dashboard” to see the added class section

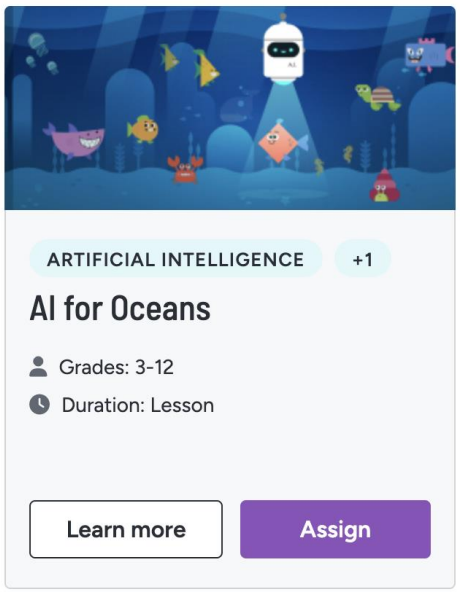


How to Assign Activity & Add Students to Class Section

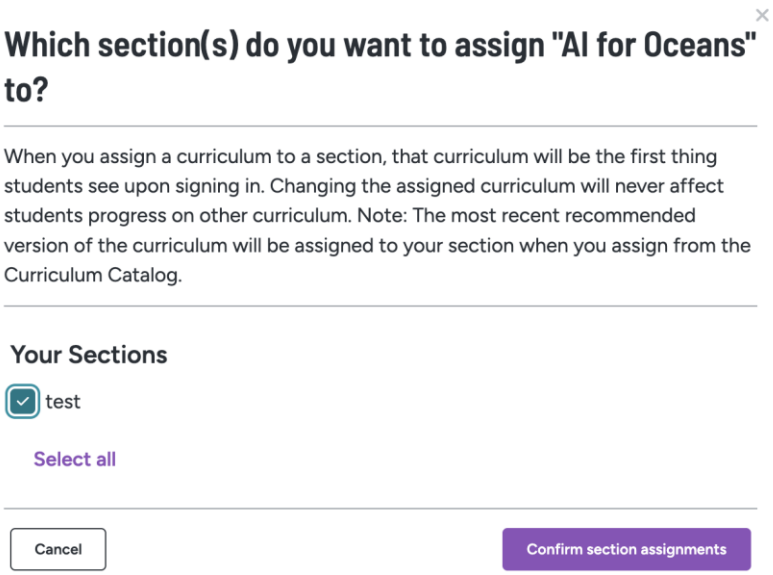
After your classroom section has been saved, you can see the classes you have created and add students or assign courses to the class from your dashboard



1. Click on "**Find a course**"
   You will be redirected to the course catalog
2. Pick an activity you want to assign and click "Assign"



3. A prompt will appear, asking **which class** you want to assign the course with. Checkbox all the sections you want to assign the activity to.



4. To add your students, simply click on "**Add Students**", you will be redirected to a guide on how to invite your students to your course

How to Host an Hour of Code

🗓 Plan your event

1. **Pick a date & time**
   Choose a one-hour time slot that works for your audience. Hour of Code can be held anytime–during school class, after school, or even as a community event.
2. **Select a location**
   Will it be an online or an offline event? You can host your event at:
   - Schools (classroom, library, computer lab)
   - Community Centers (public library, community space)
   - Online (Zoom, Google Meet, or other platforms)
3. **Prepare data collection**
   To support effective monitoring and evaluation of the AI Ready ASEAN Programme, **data collection during the HoC campaign is required**. Data should be collected at the *school or community level*, not on an individual (name/address) basis.

   The following data should be captured:

   - **School/University/Community Details** (Name, Type, Location/Country)
   - **Demographics** (Gender: Male, Female, Non-binary)
   - **Total Number of Participants** (by age group, if possible: 6-12, 13-17, 18-35, 35+)
   - **Type of Event** (Online/Offline/Hybrid)
   - **Date & Duration of Event**
   - **Activity Type** (Plugged/Unplugged)

🎮 Choose an activity

1. **Define your audience**
   Knowing your audience helps you choose the right activities, teaching approach, and support materials to ensure an engaging and impactful experience.
   a. **Who's Your Audience?**
      Each group has different needs and interests:
      i. Youth (15-35 years old) → Fun, hands-on activities that spark curiosity
      ii. Parents → Activities that help them support their child's AI learning
      iii. Educators → Teaching-focused activities with structured lesson plans
      iv. Trainers → In-depth AI literacy & teaching techniques

   b. **What do you want participants to learn?**
      Here are some key themes and corresponding AI activities you might want to consider:

      i. AI Basics (For complete beginners)
         1. Learn what AI is, how it works, and where it's used
         2. Example: AI in Everyday Life—Explore AI-powered apps and tools in daily routines.

      ii. AI Skills & Creativity (For hands-on learners)
         1. Learn to interact with AI through coding, content creation, and automation
         2. Example: Text-to-Game AI—Turn a written story into a playable AI-powered game!

      iii. AI Ethics & Security (For critical thinkers)
         1. Discuss the responsible use of AI and its societal impact
         2. Example: AI Misinformation Challenge—Identify deepfakes and misleading AI-generated content

      iv. AI for Impact & Careers (For future-focused learners)
         1. Discover AI's role in different industries and career paths
         2. Example: AI for Social Good—Learn how AI is used in climate research, healthcare, and disaster relief

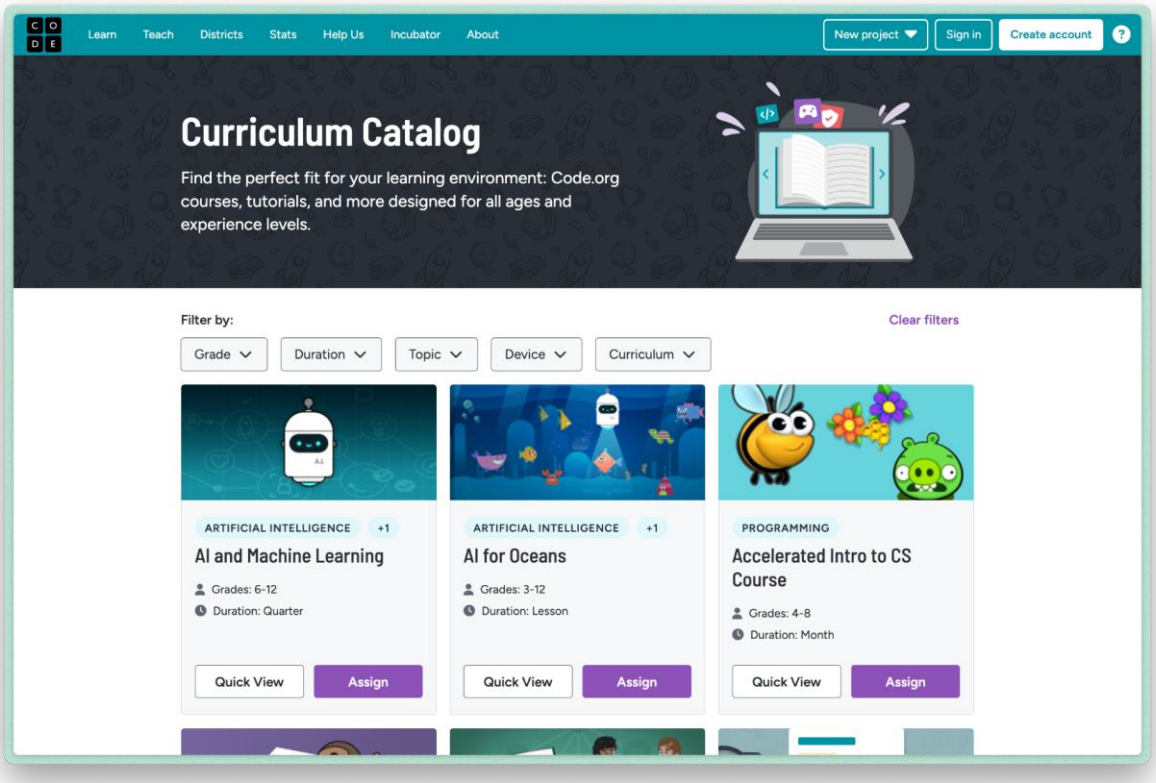
c. **What Type of Activity Works Best?**
Think about how your audience learns best. Pick an activity format that suits their style

i. Hands-on Coding (For interactive learners)
- Perfect for those who enjoy building, experimenting, and problem-solving
- Example: *Classic Maze*—Learn how programming logic works to help the character reach destination with block-coding.

ii. Game-Based Learning (For fun and engaging learning)
- Uses AI-powered games to teach AI concepts in a playful way
- Example: *AI for Oceans*—Train AI to recognize trash and clean the ocean!

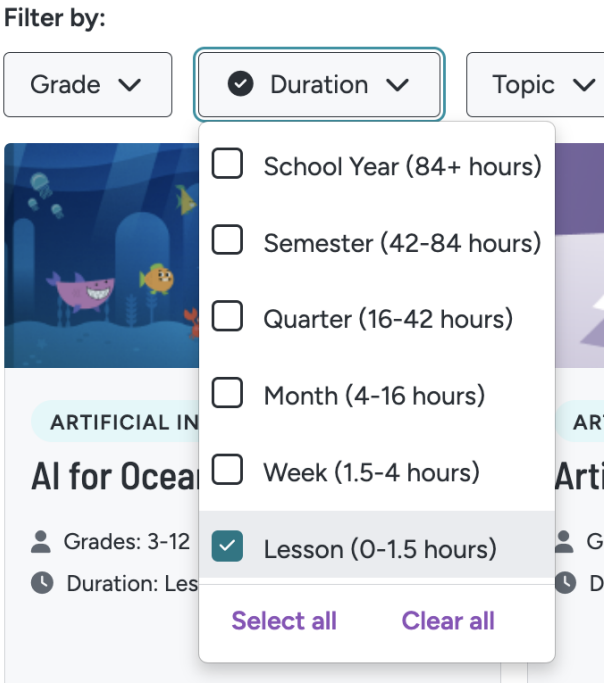
iii. Unplugged Activities (For screen-free learning)
- A flexible way to explore coding concepts without relying on technology, making learning more accessible
- Example: *AI & Ethics Discussion Game*—Use role-playing and decision-making exercises to explore how AI makes choices and the ethical dilemmas it faces

2. **Select the Activity**
   Choose one main activity based on your audience
   a. Visit the code.org catalogue
      Go to https://studio.code.org/catalog

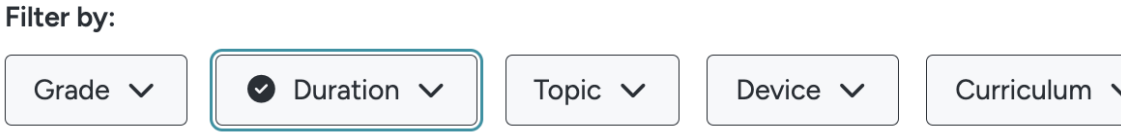


   b. Filter the activity based on your program needs
      i. Click on 'Duration' to filter out the activity based on how long it should be conducted. Since we are hosting an hour of code, we'll

choose ‘Lesson’.



ii. Use the filter menus to customize your search and discover activities that best fit your program



What Each Filter Means:

a. Grade - the appropriate grade level for your target audience
b. Duration - how long the activity should take
c. Topic - specific subjects you want to focus on (e.g. AI, robotics)
d. Device - filter based on technology that will be used by your audience on the day of the event (e.g. laptops, phones, tablets)
e. Curriculum - align activities with an educational framework or learning goal

iii. If you need help, refer to our Plugged Activity Playlist or Unplugged Activity Playlist to choose your activity

📣 Promote your event

You may invite your students, community members, or fellow educators to your event. Use social media, school announcements, and emails to invite participants. Engage local influencers, government agencies, or community leaders for support. You may also print posters or digital flyers to share with your audience.

Here are some resources you can use:

1. Email Templates
2. Poster
3. Videos

💻 Prepare for the event

1. **Prep the Venue (Offline Events)**
    a. PC/Computer/Tablets: if you are providing devices for your participants to use in the event, ensure that there are enough devices & the devices are working properly
    b. Internet access: if you're holding a plugged activity, make sure that the Wi-Fi strength is able to support your event & that each device are connected to the internet.
    c. Projectors/Speakers: check your presenting & sound devices
    d. For areas with limited or no internet access, consider these options:
        i. Use Unplugged Activities (hands-on coding exercises without devices).
        ii. Download and print all necessary materials (worksheets, prompts, and lesson guides) ahead of time.
        iii. Prepare a brief orientation so facilitators understand the flow before the event starts.
        iv. Use pre-recorded videos that can be shared offline (USB or offline devices)

2. **Prepare the Conference (Online Events)**
    a. Webcam & Sound: check the presenter's webcam & sound to ensure it's working properly before the event
    b. Share Screen: If you have a presenter for your event, check the share screen feature in the conference app that you're using (e.g. Zoom, Google Meet, etc) to make sure it's working properly

c. Capacity: Some conference apps are limiting the audience capacity. Please make sure that the app you're using is able to cater to the size of your audiences

3. **Prepare materials**
   a. Hand out guides/worksheets for younger students if needed
   b. Have a lesson plan ready for educators

Facilitate

The hour of code rundown is as follows:

Duration	Agenda	Description
5-10 mins	Opening	• Welcoming the participants • Introducing today's event & activities • Pre-test
25-45 mins	Main Activity	• Diving into activities • Engage in discussions
5-10 mins	Wrap up & Closing	• Reflect about today's learnings • Post-test • Handing out the certificates

Opening

1. **Start with an introduction**
   a. Explain the event, what coding is and why it's important
   b. Show an inspiring short video (e.g. Hour of Code intro videos)

2. **Guide participants through the activity**
   a. Let participants explore the activity at their own pace
   b. Encourage collaboration and problem solving
   c. Assist participants if they get stuck, but let them try to solve problems first!

3. **Celebrate success**
   a. Encourage participants to complete the challenge
   b. Take photos & share on social media using #HourOfCode
   c. Distribute certificates to recognize participants' efforts

Wrap up & Closing

1. **Closing remarks**
    a. Ask participants to share what did they learn today
    b. Discuss how coding is used in real life
    c. If you want, you may provide next steps for those interested in learning more

2. **Collect feedbacks**
    a. Use simple surveys or ask for verbal feedback
    b. Educators can ask: “Would you like more coding workshops?”
    c. We recommend using the pre & post assessment to capture the learners’ interest and attitude further.

Pre & Post-Assessment

Please use the pre- and post-assessment available in the same folder, which you can access through this following link:

- Pre-assessment
- Post-assessment

💬 Share your success

Post on Social Media

1. Share event highlights and participant experiences
2. Tag local communities, schools, and partners to increase visibility

✨ Congratulations! You’ve successfully hosted an Hour of Code! ✨

Computer Science with Code.org: Hour of Code Playbook

💡 Why Learn Computer Science?

Before we dive into AI, it's essential to understand the foundations of computer science (CS). AI is built on key CS concepts like logic, algorithms, data, and problem-solving.

🚀 Why should students learn CS?

- Critical Thinking & Problem-Solving – Learn how to break down problems logically
- Understanding the Digital World – Everything from social media to self-driving cars relies on CS
- Preparation for AI & the Future – AI is a tool; CS teaches how to build, use, and control it
- No Tech? No Problem! – CS concepts can be taught through hands-on activities, games, and discussions—no computers needed!

Why Start with Hour of Code?

- ⏳ Learn AI in Just 1 Hour – Quick, fun & interactive
- 🎮 Hands-On Activities – No lectures, just coding & play!
- 🌎 No Experience Needed – Perfect for all ages & backgrounds
- 🔥 Essential AI Skills – Understand how AI learns, thinks & makes decisions

📌 How to Start?

Learn more about how to do Hour of Code here

with support from Google.org

▶️ Plugged Activity Playlist

We've curated a list of activities to introduce Computer Science and AI from Hour of Code just for you. Keep in mind that for most of these activities, a stable internet connection is required. If you are looking for something that can be suitable for area with low or limited internet access, you might want to consider unplugged activities that do not require internet connection instead.

🖥️ Write Your First Computer Program (Classic Maze)

A fun, creative way to introduce AI decision-making while encouraging students and kids to think about how AI predicts patterns.

🎯 Learning Goal	Basic Coding, Computer Science Concepts
👥 Audience	Youth, Parents, Educators
⭐ Skills learned	Block-Based Coding, Debugging
⛹️ What you'll do	Learn coding fundamentals using blocks
🔗 URL	Classic Maze

💃 Dance Party AI

A fun, creative way to introduce AI decision-making while encouraging students and kids to think about how AI predicts patterns.

🎯 Learning Goal	AI Basic, AI Skills, Computer Science Concepts
👥 Audience	Youth, Parents, Educators
⭐ Skills learned	AI Decision-Making, Creative Coding
⛹️ What you'll do	Train AI to sync dance moves to music
🔗 URL	Dance Party AI

with support from Google.org

❄ Code with Anna and Elsa

Use simple coding concepts to create beautiful snowflake patterns with Anna and Elsa

🎯 Learning Goal	Geometry, Computational Thinking
👥 Audience	Youth, Parents, Educators
⭐ Skills learned	Block Coding, Drawing with Code
🏃 What you'll do	Program Anna and Elsa to draw patterns using code
🔗 URL	Code with Anna and Elsa

🐔 Make a Flappy Game

Create and customize your own version of the classic Flappy Bird game!

🎯 Learning Goal	Game Development, Event Programming
👥 Audience	Youth, Educators
⭐ Skills learned	Block Coding, Game Logic
🏃 What you'll do	Create a simple platform flappy bird game
🔗 URL	Flappy Bird

🌊 AI for Oceans

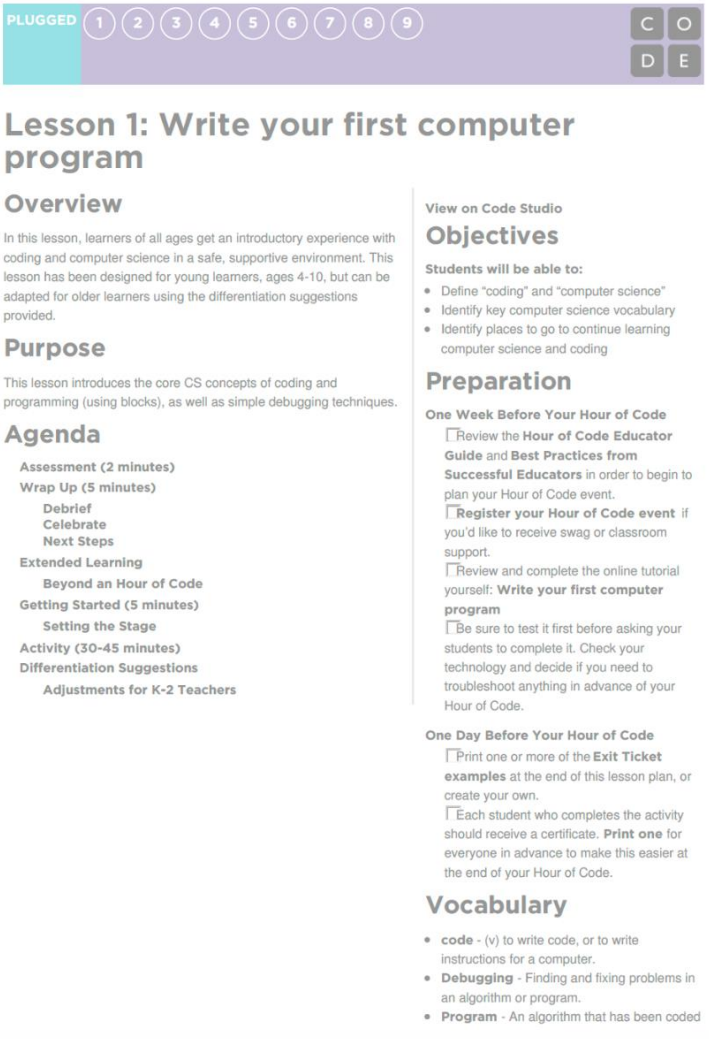
A great way to explore AI's role in solving real-world problems, how AI is trained using data, and start conversations about AI ethics and bias—how do we teach AI to make the right choices?

🎯 Learning Goal	AI Training, Machine Learning, Ethics
👥 Audience	Youth, Parents, Educators

⭐ Skills learned	AI Classification, Bias in AI
🏃 What you'll do	Train AI to recognize fish vs. trash
🔗 URL	AI for Oceans

📖 Teacher Guide & Lesson Plans for plugged activity

To make your Hour of Code sessions more structured and engaging, each activity comes with a lesson plan or teacher guide.
🔗 Plugged Activity Teacher Guide



PLUGGED 1 2 3 4 5 6 7 8 9 CODE

Lesson 1: Write your first computer program

Overview

In this lesson, learners of all ages get an introductory experience with coding and computer science in a safe, supportive environment. This lesson has been designed for young learners, ages 4-10, but can be adapted for older learners using the differentiation suggestions provided.

Purpose

This lesson introduces the core CS concepts of coding and programming (using blocks), as well as simple debugging techniques.

Agenda

Assessment (2 minutes)
Wrap Up (5 minutes)
- Debrief
- Celebrate
- Next Steps

Extended Learning
- Beyond an Hour of Code

Getting Started (5 minutes)
- Setting the Stage

Activity (30-45 minutes)
Differentiation Suggestions
- Adjustments for K-2 Teachers

View on Code Studio

Objectives

Students will be able to:
- Define "coding" and "computer science"
- Identify key computer science vocabulary
- Identify places to go to continue learning computer science and coding

Preparation

One Week Before Your Hour of Code
- ☐ Review the **Hour of Code Educator Guide** and **Best Practices from Successful Educators** in order to begin to plan your Hour of Code event.
- ☐ **Register your Hour of Code event** if you'd like to receive swag or classroom support.
- ☐ Review and complete the online tutorial yourself: **Write your first computer program**
- ☐ Be sure to test it first before asking your students to complete it. Check your technology and decide if you need to troubleshoot anything in advance of your Hour of Code.

One Day Before Your Hour of Code
- ☐ Print one or more of the **Exit Ticket examples** at the end of this lesson plan, or create your own.
- ☐ Each student who completes the activity should receive a certificate. **Print one** for everyone in advance to make this easier at the end of your Hour of Code.

Vocabulary

- **code** - (v) to write code, or to write instructions for a computer.
- **Debugging** - Finding and fixing problems in an algorithm or program.
- **Program** - An algorithm that has been coded

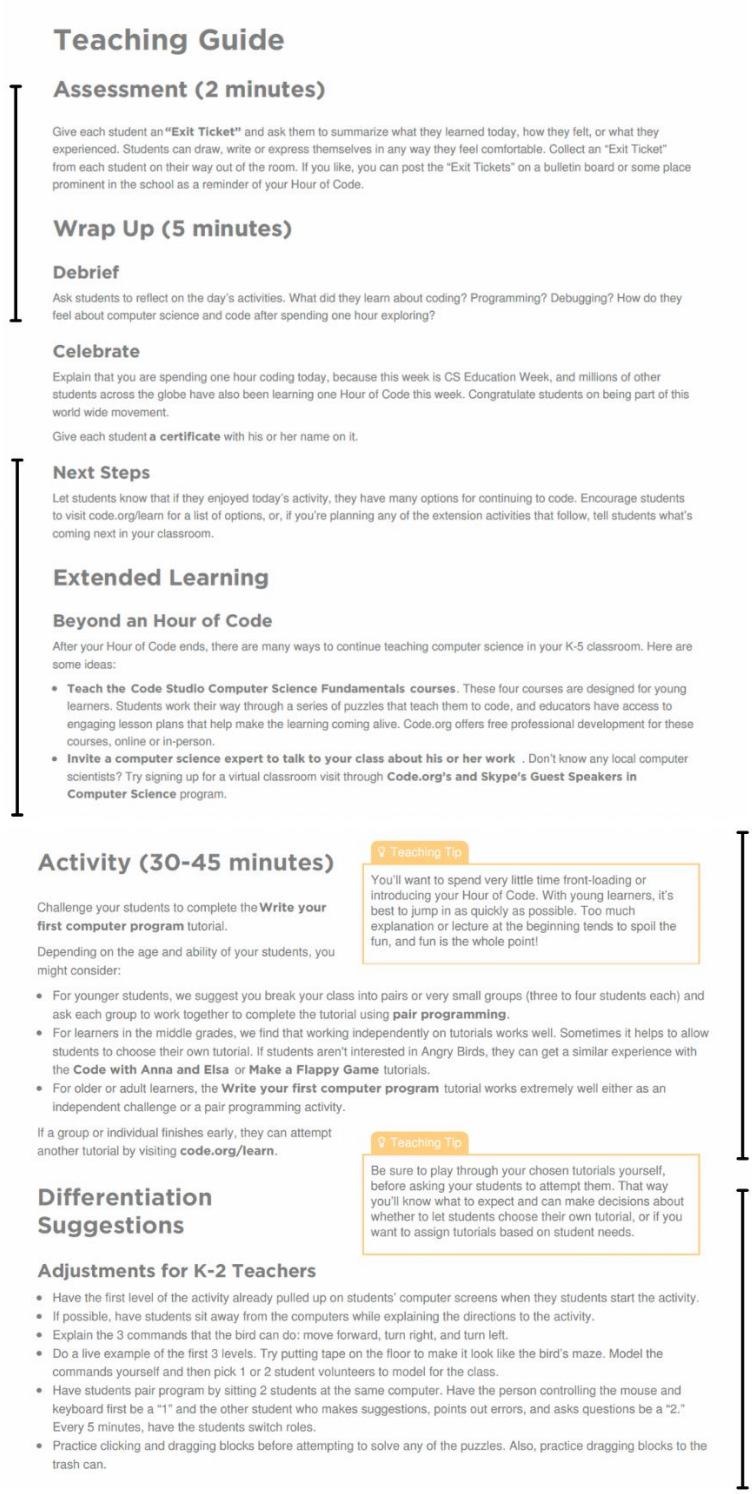
what students will learn

lesson structure & duration

preparation checklist

key terms used in the activity

with support from Google.org



Teaching Guide

Assessment (2 minutes)

Give each student an **"Exit Ticket"** and ask them to summarize what they learned today, how they felt, or what they experienced. Students can draw, write or express themselves in any way they feel comfortable. Collect an "Exit Ticket" from each student on their way out of the room. If you like, you can post the "Exit Tickets" on a bulletin board or some place prominent in the school as a reminder of your Hour of Code.

Wrap Up (5 minutes)

Debrief

Ask students to reflect on the day's activities. What did they learn about coding? Programming? Debugging? How do they feel about computer science and code after spending one hour exploring?

Celebrate

Explain that you are spending one hour coding today, because this week is CS Education Week, and millions of other students across the globe have also been learning one Hour of Code this week. Congratulate students on being part of this world wide movement.

Give each student **a certificate** with his or her name on it.

Next Steps

Let students know that if they enjoyed today's activity, they have many options for continuing to code. Encourage students to visit code.org/learn for a list of options, or, if you're planning any of the extension activities that follow, tell students what's coming next in your classroom.

Extended Learning

Beyond an Hour of Code

After your Hour of Code ends, there are many ways to continue teaching computer science in your K-5 classroom. Here are some ideas:

- **Teach the Code Studio Computer Science Fundamentals courses**. These four courses are designed for young learners. Students work their way through a series of puzzles that teach them to code, and educators have access to engaging lesson plans that help make the learning coming alive. Code.org offers free professional development for these courses, online or in-person.
- **Invite a computer science expert to talk to your class about his or her work** . Don't know any local computer scientists? Try signing up for a virtual classroom visit through **Code.org's and Skype's Guest Speakers in Computer Science** program.

Activity (30-45 minutes)

Challenge your students to complete the **Write your first computer program** tutorial.

Depending on the age and ability of your students, you might consider:

- For younger students, we suggest you break your class into pairs or very small groups (three to four students each) and ask each group to work together to complete the tutorial using **pair programming**.
- For learners in the middle grades, we find that working independently on tutorials works well. Sometimes it helps to allow students to choose their own tutorial. If students aren't interested in Angry Birds, they can get a similar experience with the **Code with Anna and Elsa** or **Make a Flappy Game** tutorials.
- For older or adult learners, the **Write your first computer program** tutorial works extremely well either as an independent challenge or a pair programming activity.

If a group or individual finishes early, they can attempt another tutorial by visiting **code.org/learn**.

Teaching Tip

You'll want to spend very little time front-loading or introducing your Hour of Code. With young learners, it's best to jump in as quickly as possible. Too much explanation or lecture at the beginning tends to spoil the fun, and fun is the whole point!

Teaching Tip

Be sure to play through your chosen tutorials yourself, before asking your students to attempt them. That way you'll know what to expect and can make decisions about whether to let students choose their own tutorial, or if you want to assign tutorials based on student needs.

Differentiation Suggestions

Adjustments for K-2 Teachers

- Have the first level of the activity already pulled up on students' computer screens when they students start the activity.
- If possible, have students sit away from the computers while explaining the directions to the activity.
- Explain the 3 commands that the bird can do: move forward, turn right, and turn left.
- Do a live example of the first 3 levels. Try putting tape on the floor to make it look like the bird's maze. Model the commands yourself and then pick 1 or 2 student volunteers to model for the class.
- Have students pair program by sitting 2 students at the same computer. Have the person controlling the mouse and keyboard first be a "1" and the other student who makes suggestions, points out errors, and asks questions be a "2." Every 5 minutes, have the students switch roles.
- Practice clicking and dragging blocks before attempting to solve any of the puzzles. Also, practice dragging blocks to the trash can.

assessment guide

extensions & follow up

detailed activity guide & tips

adaptation tips

with support from Google.org

How to Use the Teacher Guide Effectively

1. **Before the Session:**
    a. Read the lesson plan to familiarize yourself with the activity
    b. Test the activity yourself to anticipate student challenges
    c. Prepare the necessary materials (computers, devices, internet access)
    d. Plan student grouping if necessary (in pairs or small groups)
    e. If you're holding an offline event, you may want to consider printing the certificates ahead of time

2. **During the Session:**
    a. Set the stage by explaining key terms & relevant concepts mentioned in the guide
    b. Introduce the activity, give a quick demo or play a related video
    c. Encourage students to explore and try while you guide and support them
    d. Use the discussion prompt in the lesson plan to spark curiosity

3. **After the Session:**
    a. Reflect & discuss, ask the students what they have learned and enjoyed
    b. Celebrate achievements by handing the completion certificate
    c. Encourage students to continue learning by suggesting follow-up activities on code.org

▶️ Unplugged Activity Playlist

Not every classroom has access to computers—but that shouldn't stop students from learning about computer science and AI concepts! Unplugged activities use hands-on, interactive lessons to teach coding logic, algorithms, encryption, and data compression without needing a screen.

These activities help learners think like a computer scientist, solve problems, and collaborate—skills that are essential for AI and beyond. You may use the activities for a stand-alone hour of code or integrate it to the training.

🤖 Programming Unplugged: My Robotic Friends Relay

A team-based relay game where students write and debug programs using symbols to guide their "robotic friends."

🎯 Learning Goal	Computational Thinking, Teamwork, Debugging
👥 Audience	Youth, Parents, Educators
⭐ Skills learned	Algorithmic Thinking, Problem-Solving
🤸 What you'll do	Work in teams to create and debug symbol-based programs
🛠️ Materials	• Symbol Key (1 per group) • Cup Stack Pack (1 per group) • Disposable Cups or Paper Trapezoids (6 or more per group) • Blank paper or note cards (1 per person) • Writing Instrument (1 per person)

🖍️ Text Compression

Students learn how data is compressed by identifying patterns and representing information with fewer bits

🎯 Learning Goal	Data Representation, Computational Thinking
👥 Audience	Youth, Parents, Educators
⭐ Skills learned	Pattern Recognition, Problem-Solving
⛹️ What you'll do	Encode and decode text using compression techniques
🛠️ Materials	• Printed Text Compression Activity Guide & Handouts • Pencils • Paper

🔒 Simple Encryption

Students explore encryption by encoding and cracking secret messages using the Caesar Cipher and Random Substitution Cipher

🎯 Learning Goal	Cybersecurity, Computational Thinking, Cryptography
👥 Audience	Youth, Parents, Educators
⭐ Skills learned	Pattern Recognition, Problem-Solving, Encryption Basic
⛹️ What you'll do	Encrypt and decrypt messages using ciphers
🛠️ Materials	• Printed Cipher Wheels • Alphabet Charts • Pencils & Paper

💃 Dance Party: Unplugged

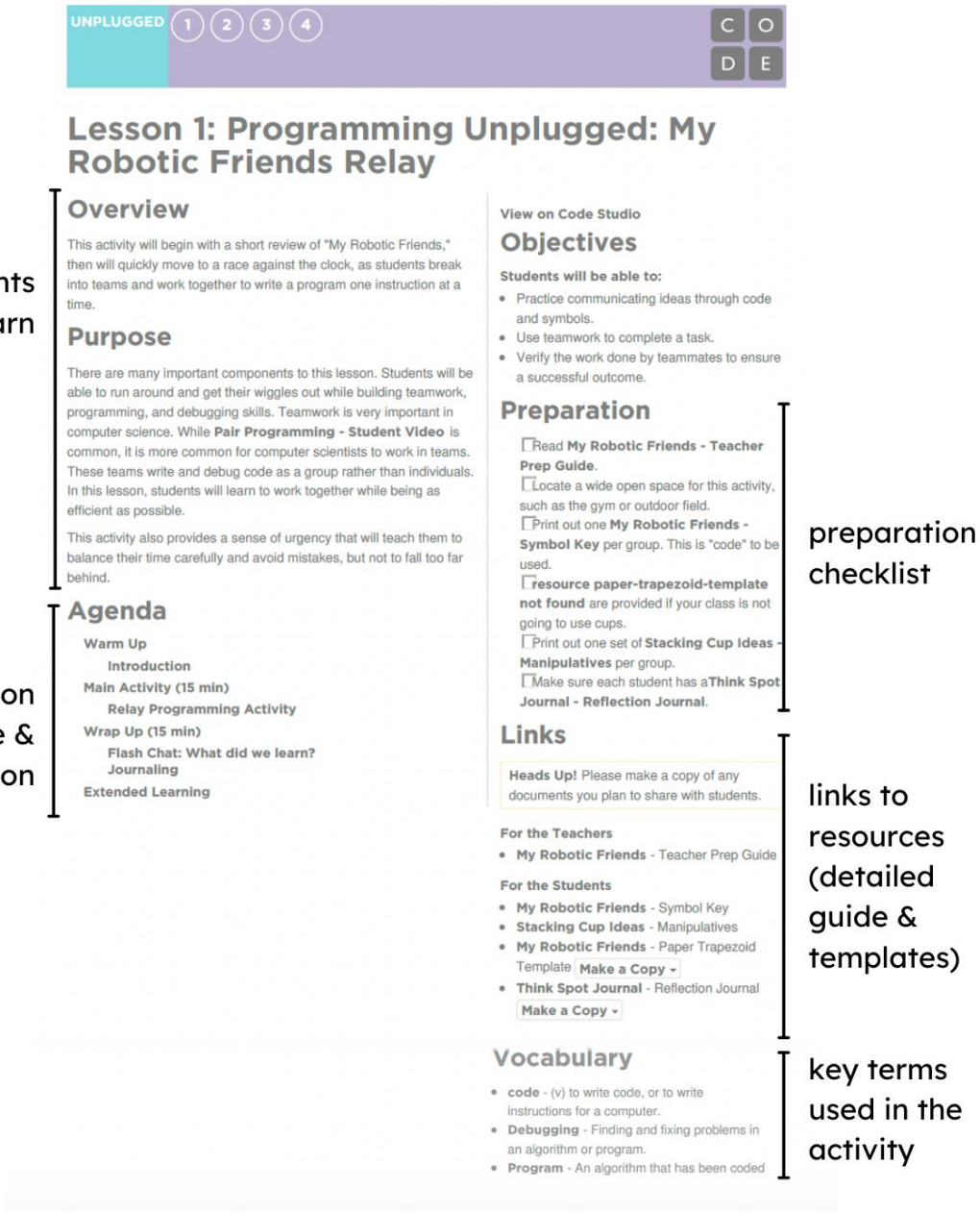
A high-energy activity where students use events to control dance moves, simulating how programs respond to user input

🎯 Learning Goal	Event-Based Programming, Computational Thinking
👥 Audience	Youth, Parents, Educators
⭐ Skills learned	Sequencing, Event-Driven Thinking
🤸 What you'll do	Respond to "event triggers" in a group dance activity
🛠️ Materials	• Music • Projector (optional, for teacher to show dance slides if needed) • Printed events controller

🕮 Teacher Guide & Lesson Plans

To make your Hour of Code sessions more structured and engaging, each activity comes with a lesson plan or teacher guide.

🔗 [Unplugged Activity Teacher Guide]



intro

step-by-step activity guide

Teaching Guide

Warm Up

Introduction

Recall that in "My Robotic Friends" we guided our teammate's Automatic Realization Machine (ARM) using arrows. Take a moment to go through a quick "My Robotic Friends" example as a reminder. It can either be one that you have already covered or one that is new.

We are going to do the same kind of thing today, but instead of controlling each other, we are going to work together to create a program one symbol at a time.

Main Activity (15 min)

Relay Programming Activity

The practice lesson was easy enough; let's add some action! We're going to do the same type of thing (create a program describing how the cups are stacked) but now we're going to do it in relay teams, one symbol at a time.

The rules of this game are simple:

- Divide students into groups of 3-5.
- Have each group queue up relay-style.
- Place an identical stack of cups at the other side of the room/gym/field from each team.
- Have the first student in line dash over to the cups, review it, and write down the first symbol in the program to reproduce that stack.
- The first student then runs back and tags the next person in line, then goes to the back of the queue.
- The next person in line dashes to the stack of cups, reviews the stack, reviews the program that has already been written, then either debugs the program by crossing out an incorrect symbol, or adds a new one. That student then dashes back to tag the next person, and the process continues until one group has finished their program.

Clarifications

Here are some clarifications that need to be shared from time to time:

- Only one person from each group can be at the image at one time.
- It is okay to discuss algorithms with the rest of the group in line, even up to the point of planning who is going to write what when they get to the cups.
- When a student debugs a program by crossing out an incorrect instruction (or a grouping of incorrect instructions) this counts as their entire turn. The next player will need to figure out how to correct the removed item.

teaching tips

First group to finish with a program that matches the stack of cups is the winner! Play through this several times, with images of increasing difficulty.

Wrap Up (15 min)

Flash Chat: What did we learn?

- What did we learn today?
- What if we were each able to do five symbols at a time?
  - How important would it be to debug our own work and the work of the programmer before us?
  - How about with 10 symbols?
  - 10,000? Would it be more or less important?
- Is it easier or harder to have multiple people working on the same program?
- Do you think people make more or fewer mistakes when they're in a hurry?

Extended Learning

Use these activities to enhance student learning. They can be used as outside of class activities or other enrichment.

Pass the paper

- If you don't have the time or room for a relay, you can have students pass the paper around their desk grouping, each writing one arrow before they move the paper along.

Fill It, Move It

- As the teacher, create a stack of cups with as many cups as children in each group.
- Have the students write as many symbols in the program as it takes to get to the next cup (including putting the cup down) before passing to the next person.

Debugging Together

Create a stack of cups at the front of the room. Have each student create a program for the stack. Ask students to trade with their elbow partner and debug each other's code.

- Circle the first incorrect step, then pass it back.
- Give the students another chance to review and debug their own work.
- Ask for a volunteer to share their program.

Ask the class:

- How many students had the same program?
- Anyone have something different?

extensions & follow up

How to Use the Teacher Guide Effectively

1. **Before the Session:**
    a. Read the lesson plan to familiarize yourself with the activity
    b. Test the activity with few other teachers to anticipate student challenges
    c. Prepare the necessary materials (printed handouts/templates, cards, etc)
    d. Plan student grouping if necessary (in pairs or small groups)
    e. Print the certificates ahead of time

2. **During the Session:**
    a. Set the stage by explaining relevant terms presented in vocabulary and guide
    b. Introduce the activity, give a quick demo or play a related video
    c. Encourage students to explore and try while you guide and support them
    d. Use the discussion prompt in the lesson plan to spark curiosity

3. **After the Session:**
    a. Reflect & discuss, ask the students what they have learned and enjoyed
    b. Celebrate achievements by handing the completion certificate
    c. Encourage students to continue learning by suggesting follow-up activities on code.org
    d. Each Local Implementing Partner (LIP) is required to gather at least five testimonials from HoC participants with the following criterions:
        i. The testimonials can be in video or written format
        ii. The testimonials should capture the impact, excitement, or personal changes participants experienced after joining Hour of Code (HoC)
        iii. Prioritize testimonials from vulnerable groups (e.g., people with disabilities, women, indigenous communities, those facing gender discrimination, or from low-middle income families)
        iv. Include a thank you message to Google.org and ASEAN Foundation for the opportunity to participate in the AI Ready ASEAN Programme and Hour of Code

    These testimonials will be valuable in showcasing the impact of the program

How to Promote the Hour of Code Event

Your Hour of Code event isn't just an activity, it's a movement. To inspire young minds, support educators, and empower parents across ASEAN, spreading the word is key. With effective promotion, you'll:

- Spark curiosity and excitement about coding
- Reach a diverse audience, from people with tech backgrounds to first-time coders
- Build anticipation and turn your event into a memorable community event

You can promote your event using email, poster, or even videos. We already have some pre-made promotion materials made in advance, but we also provide a guide in case you want to develop promotion materials yourself.

Email Templates

This section includes ready-to-use email templates to help streamline communication for the program. Whether you're sharing updates, sending invitations, or engaging stakeholders, these templates ensure clear and consistent messaging. Simply personalize the details as needed.

For Schools, Companies & Community Members

Subject: Imagine If Every Student Knew How to Code....

What if every student had the power to create apps, design games, or even build the next big tech innovation? The world is shaped by technology—yet most people never learn how it works.

That's why **Hour of Code** exists. A movement that has already introduced over **100 million students** worldwide to the magic of coding. Supported by Google, Apple, and Disney, it has inspired world leaders **to write their first lines of code!**

💡 This is your chance to be part of it.
🌎 Bring **Hour of Code** to your **school, company, or community** during **Computer Science Education Week (October 1 - December 18)**.

No experience? No problem. Hour of Code is designed for everyone—students, teachers, and professionals alike.

🚀 **Get started today at code.org and be part of the future.**

For Parents

Subject: The Hour of Code is Changing Students' Futures – Here's How

Dear Parents,

We all want a bright future for our children. In today's technology-driven world, success depends on understanding how technology works.

That's why **[School Name]** is excited to take part in **Hour of Code**, the world's largest learning event during **Computer Science Education Week (October 1 - December 18)**. With over 100 million students participating globally, this event helps children develop essential **problem-solving, teamwork, and computational thinking** skills—beneficial for any career path!

We need your support to make this event a success!
✨ Volunteer to assist during the event
📢 Spread the word in your community
🎉 Even host your own Hour of Code session at home!

Together, we can empower the next generation with 21st-century skills. Learn more at **hourofcode.com**.

Best regards,
[Your Name]
[Your Position]

For Media

Subject: Local School Brings the Excitement of Computer Science to Students

Computers are everywhere, shaping industries and redefining how we work and communicate.

This year, **[School Name]** is proud to be part of **Hour of Code**, the largest global initiative to introduce students to computer science. Featured on **Google, MSN, Yahoo!, and Disney**, this movement has reached over **100 million students worldwide**.

On **[Date]**, we are hosting an **exciting kick-off event**, where our students will take their first steps into coding. We would love for you to cover this inspiring initiative and witness the future of technology in action.

📍 **Event Details:**
🗓️ **When:** [Date & Time]
📍 **Where:** [Address & Directions]
📞 **Contact:** [Your Name], [Your Position], [Your Phone Number]

Looking forward to your presence and coverage!

Best regards,
[Your Name]
[Your Position]

For Politicians

Subject: Shaping the Future Together – Join Us in Empowering Digital Literacy

Dear **[Mayor/Governor/Council Member Last Name]**,

Your dedication to **[mention a relevant initiative, e.g., digital literacy, youth empowerment, or education]** is truly commendable. In a world increasingly driven by technology, ensuring that our students have access to essential digital skills is more important than ever.

At **[School Name]**, we are committed to preparing our students for the future by participating in **Hour of Code**—a global movement that has introduced **over 100 million students** to the fundamentals of coding.

We would be **honored** if you could join us at our **Hour of Code Kickoff Event** to witness our students take their first steps in coding. Your presence would **inspire the next generation** to not just consume technology, but to **create it**.

🗓️ **Date & Time:** [Insert Details]
📍 **Location:** [Insert Venue]
📞 **Contact:** [Your Name], [Your Position], [Your Phone Number]

We sincerely hope you can attend and support this initiative in shaping a brighter future for our youth.

Best regards,
[Your Name]
[Your Position]

How to Use a Promotional Video for the Hour of Code

Define Your Objective

Clearly state what you want your video to achieve:

- Awareness: Introduce Hour of Code to a wider audience
- Engagement: Encourage people to participate
- Call to Action (CTA): Get schools, students, or parents to join

Know Your Audience

- Youth: Make it fun, energetic, and visually appealing. If your target audience is 18+ you may also highlight the benefits of knowing coding for future career
- Educators & Schools: Highlight the benefits of teaching coding
- Parents: Show how easy and beneficial it is for kids

Script & Storyboard

Section	Duration	Description
Opening Hook	10s	A strong statement or question. *Example:* "What if you could teach AI to clean the ocean?"
Body	30s	Showcase the experience with visuals and testimonials. Use short clips of students coding, teachers guiding, and happy moments.
Call to Action (CTA)	10s	Encourage viewers to join. *Example:* "Sign up now and start your coding journey today!"

Record & Gather Footage

- Use **real footage** from past events, student reactions, or testimonials. Each Local Implementing Partner (LIP) is required to gather 5 testimonials in the form of video testimonials or text, you can utilize these testimonials if it already exist

- Supplement with animations if possible. You can use Canva, Powtoon, Adobe Premiere Rush, etc
- Ensure clear audio and natural lighting

Optimize for Different Platforms

- Instagram Reels & TikTok: 9:16 vertical, 30-60 seconds
- YouTube & Facebook: 16:9 horizontal, up to 2 minutes
- Twitter (X): Short and direct, 45-60 seconds

Final Review & Publish

- Test the video with a small group.
- Ensure accessibility (subtitles, clear fonts).
- Publish with an engaging caption and hashtags, for example: *#HourOfCode #AIReady #CodingForAll*

How to Design a Poster for the Hour of Code

Identify Key Information

A good poster should answer:

- **What?** Hour of Code – Free coding activity for all ages
- **Why?** Learn AI and coding in a fun, engaging way
- **When & Where?** Event date, registration link, or QR code if applicable
- **Who?** Organizers (Your community/school/organization, ASEAN Foundation, Google.org, etc.)

Choose the Right Tool

- Canva (best for beginners)
- Adobe Illustrator / Photoshop (for professional design)
- Figma (for web-based collaborative design)

Design Principles

- Colors: Add vibrant colors (blue, green, orange) for excitement when applicable

- Typography: Use bold fonts for the main message, readable body text
- Images: Include coding-related visuals, happy students, AI graphics
- Layout: Follow a clear hierarchy:
    - Main Message (largest text)
    - Supporting details (medium text)
    - CTA (bold and eye-catching)

Include Engaging Elements

- Icons (AI, coding symbols, kids learning)
- QR Code (to sign up or learn more)
- Social Media Handles (for more engagement)
- Hashtags (*#HourOfCode #AIForEveryone*)

Test & Publish

- Get feedback on readability and engagement
- Export in high resolution (PNG, PDF for print, JPG for social media)
- Share on social media, schools, community boards