Y.E.P. CODING CAMP CURRICULUM GUIDE

THEME: EMPOWER. CODE. LEAD.
Flexible Duration: 2–4 Weeks
Daily Time Block: 2–4 Hours
Levels: Beginner to Intermediate
Delivery: In-person, Hybrid, or Virtual

WEEK 1: FOUNDATIONS OF CODE
GOAL: UNDERSTAND BASIC CODING LOGIC AND STRUCTURE
LEADERSHIP FOCUS: TEAM ICEBREAKER + SETTING LEARNING GOALS

Topics:
- Introduction to programming & computer science
- Scratch (block-based coding)
- Variables, loops, conditionals
- Hands-on activity: Create an animated story or game

WEEK 2: WEB DEVELOPMENT
GOAL: BUILD PERSONAL WEB PAGES USING REAL CODE
LEADERSHIP FOCUS: PEER FEEDBACK AND TECH JOURNALING

Topics:
- HTML: Structure your webpage
- CSS: Styling and design basics
- JavaScript (optional for older students): Buttons & interactivity
- Hands-on project: Design a 'My Future Self' webpage

WEEK 3: GAME & APP DESIGN
GOAL: CREATE A SIMPLE GAME OR MOBILE APP PROTOTYPE
LEADERSHIP FOCUS: PRESENTING IDEAS + PITCH PREP

Topics:
- Game planning & storytelling
- Intro to tools like Code.org's App Lab or Tynker
- Sound, scoring, user interaction
- Hands-on project: Group game or app demo

WEEK 4: DATA & FINAL SHOWCASE
GOAL: ANALYZE AND DISPLAY DATA + PRESENT FINAL PROJECT
LEADERSHIP FOCUS: PUBLIC SPEAKING + REFLECTION

Topics:

- What is data? Where do we see it?
- Collecting, sorting, and graphing with Google Sheets
- Visualizing data in fun, creative ways
- Final Project Showcase: Students present any project (web/game/data)

Sample Daily Schedule

Time	Activity
9:00–9:15	Icebreaker or Morning Motivation
9:15–10:00	Direct Instruction (Mini-lesson)
10:00–10:45	Hands-on Coding Practice
10:45–11:15	Group Collaboration or Journaling
11:15–12:00	Project Work + Support Time

Y.E.P. CODING CAMP DAILY PACING GUIDE

Week 1: Foundations of Code

Day 1:
  • **Topic: Intro to programming & Scratch basics**
  • **Leadership Focus: Icebreaker & goal setting**

Day 2:

- **Topic: Using loops & motion blocks**
- **Leadership Focus: Collaboration challenge**

Day 3:
- **Topic: Conditionals and storytelling in Scratch**
- **Leadership Focus: Feedback practice**

Day 4:
- **Topic: Build-your-own mini game**
- **Leadership Focus: Leadership roles**

Day 5:
- **Topic: Finalize and demo project**
- **Leadership Focus: Reflection & celebration**

Week 2: Web Development

Day 1:
- **Topic: Intro to HTML structure**
- **Leadership Focus: Personal branding prompt**

Day 2:
- **Topic: CSS basics & styling practice**
- **Leadership Focus: Peer critique activity**

Day 3:
- **Topic: Interactive elements (optional)**
- **Leadership Focus: Mentorship moments**

Day 4:
- **Topic: Build a 'My Future Self' page**
- **Leadership Focus: Presentation prep**

Day 5:
- **Topic: Show & share websites**
- **Leadership Focus: Goal setting for next week**

Week 3: Game & App Design

Day 1:

- **Topic: Game planning: theme, characters, rules**
- **Leadership Focus: Idea pitching**

Day 2:
- **Topic: Building scenes & controls**
- **Leadership Focus: Teamwork rotations**

Day 3:
- **Topic: Adding scoring and sound effects**
- **Leadership Focus: Encouraging feedback**

Day 4:
- **Topic: Finalize game/app**
- **Leadership Focus: Walkthrough rehearsals**

Day 5:
- **Topic: Game showcase & play day**
- **Leadership Focus: Creative celebration**

Week 4: Data & Final Showcase

Day 1:
- **Topic: Intro to data collection & surveys**
- **Leadership Focus: Discuss real-world data**

Day 2:
- **Topic: Create and collect sample data**
- **Leadership Focus: Graphing & interpretation**

Day 3:
- **Topic: Turn data into presentations**
- **Leadership Focus: Supportive peer review**

Day 4:
- **Topic: Final Project Work Time**
- **Leadership Focus: Leadership in action**

Day 5:
- **Topic: Final Showcase Day**
- **Leadership Focus: Reflection & celebration**