# ALLSTARCODE

(https://www.allstarcode.org/)

# Curriculum

### **WEEKLY THEMES**

### **WEEK ONE Basic Computer Science**

**CS Curriculum:** Learn basic CS and use JavaScript to create loops, arrays, objects, etc... **All Star Curriculum:** LinkedIn workshop, Discussions on Growth Mindset, Intersectionality and Self Care **Milestone:** Students create a LinkedIn profile.

### **WEEK TWO Game Design**

**Curriculum:** Use a JavaScript library to build games and learn key game design concepts. **All Star Curriculum:** Networking workshop and Chelsea Piers team building

Milestone: Students create a Space Invaders game.

### **WEEK THREE Web Development**

**Curriculum:** Build your own personal website using HTML, CSS and JavaScript. **All Star Curriculum:** Mock Interview workshop and Chelsea Piers team building

Milestone: Students create a personal website.

### **WEEK FOUR Application Program Interface [API]**

**Curriculum:** Learn how to integrate APIs into web applications. **All Star Curriculum:** Resume and Managing Money workshop

Milestone: Students design a resume

### **WEEK FIVE Databases**

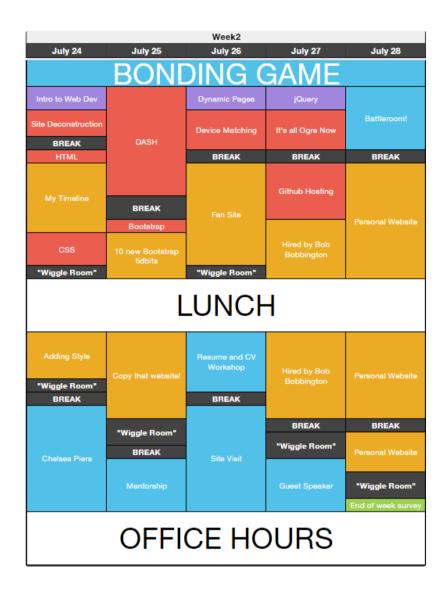
Curriculum: Students learn how to integrate the Firebase API into web applications.

All Star Curriculum: Public Speaking workshop and movie day Milestone: Students practice making a successful pitch.

### **WEEK SIX Demo Day**

Milestone: Students present a successful Demo Day project.

### SAMPLE OF WEEKLY SCHEDULE



**SAMPLE OF LECTURE** 

# WHAT IS P5.JS?

- A versatile JS library
- Visualizes code!
  - Simple shapes
  - Text



## **SAMPLE OF PROJECT**

(https://docs.google.com/document/d/1ArkcYHYit7DLHQo57L2xl5FuCNpX9YOe6nbk LkNAJPw/edit?usp=sharing)





### **Prompt: Mario Paint MVP**

Work in groups of 2-3

### Prompt:

You just learned the basics of p5.js. A great way to master a new skill is to recreate something you love.

Today you are going to recreate a minimal version of the Nintendo Classic - Mario Paint. Of course, trying to create an exact clone would be too difficult at this point. You're going to create a minimal viable product (MVP) to demonstrate your idea.

Your goal is to use p5.js application that lets the users create simple shapes when they drag their mouse across the p5.js canvas.

You will have the opportunity later on to come back and make this project awesome!

### Instructions:

- Use terminal to create a new project folder called YOURNAME-mariopaint (i.e. victor-mariopaint)
- 2. Inside of your project folder create an HTML file and a JS file. Be sure to link them together.
- 3. Import the p5.js CDN into your HTML header
- 4. Start your p5.js using the setup() function to define your canvas
- Create a function using the p5.js mouseDragged(). Inside of the function define a simple shape that will be drawn while the mouse is dragged.

WE BUILD an "Ecosystem of Access & Education" through programmatic initiatives that focus on education, mentorships, college guidance, industry exposure, parental education, and internship placement.



### **WE PRACTICE Growth Mindset**

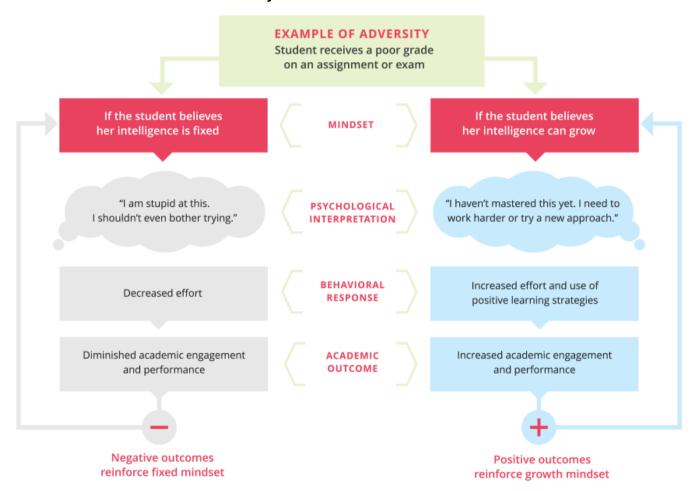
Decades of research show a powerful relationship between mindset and achievement.

Growth Mindset is the belief that intelligence can be increased through effort.

What Is Growth Mindset?

#### **LEARNING MINDSETS** Messages students Interpretation Thoughts, feelings, receive from their Learning of academic and and behaviors environment and about learning and achievement social difficulties they following these their interactions with and school in school teachers, family, experience in school difficulties and friends

### Why Does Growth Mindset Matter?



### WE TEACH hard skills and soft skills.

Hard skill outcomes include mastery of introductory CS related skills, mastery of introductory programming constructs, moderate understanding of the design and build process, and moderate proficiency in at least one programming language.

Soft skill outcomes include increased confidence and comfort with public speaking, presenting, networking, technical/business writing, collaboration, communication, entrepreneurial skills, and emotional intelligence.





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