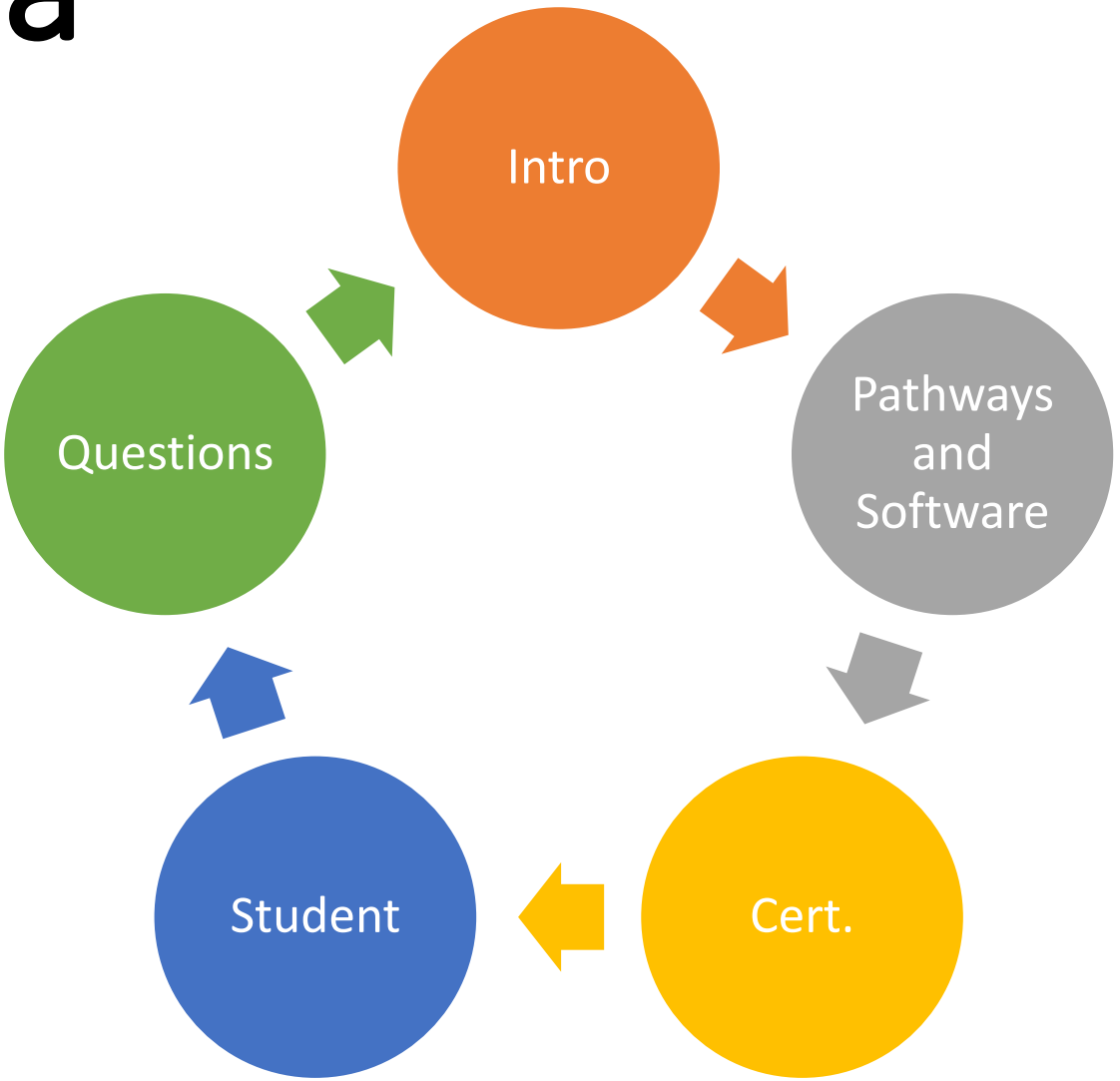
Software & App Design

8th Grade Virtual Open House

February 9, 2021

Agenda

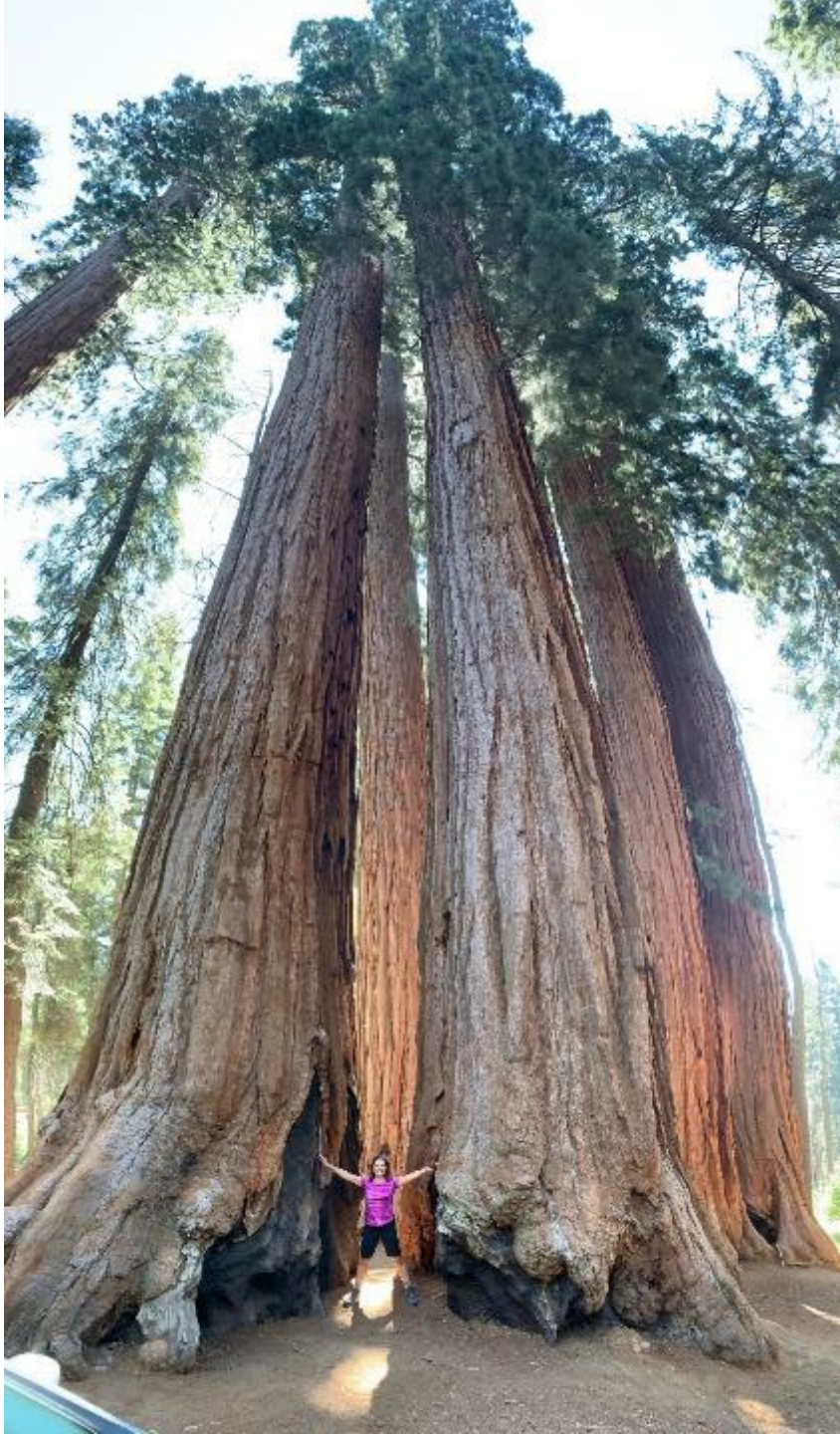


Simple Burke Bio

mburke@lhusd.org

- BA in Marketing from **St. Bonaventure University**
- Masters in Edu Tech at **NAU**
- **21 Years** Teaching Experience
- **Year 3** – Coding Instructor
- AZ Tech Teacher of the Year
- Microsoft Innovative Teacher


The SENATE



Jobs and Graduates in Arizona

There are currently
12,934
open computing jobs with an average salary of
$87,658

There were
1,014
computer science bachelor's degrees earned in 2018.

Source: Arizona CS Policy Fact Sheet - Code.org

Demand = high!

Software & App Design

Classes	Sections
Intro	2
Intermediate	1
Advanced	2
Advanced B	

* Year long classes

Languages:

- JavaScript
- GML (GamerMaker)
- C# (Visual Studio /Windows Forms)
- Python
- Java


PREMIER

Software Used:

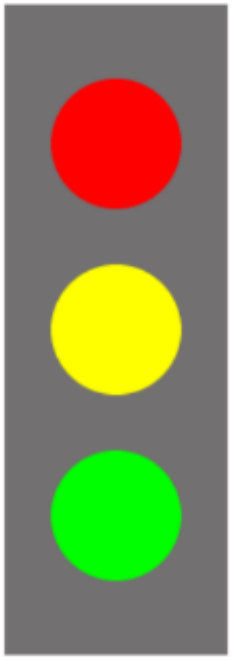
- CodeHS
- GameMaker
- FlowLab.io
- CodeCombat
- Google Classroom

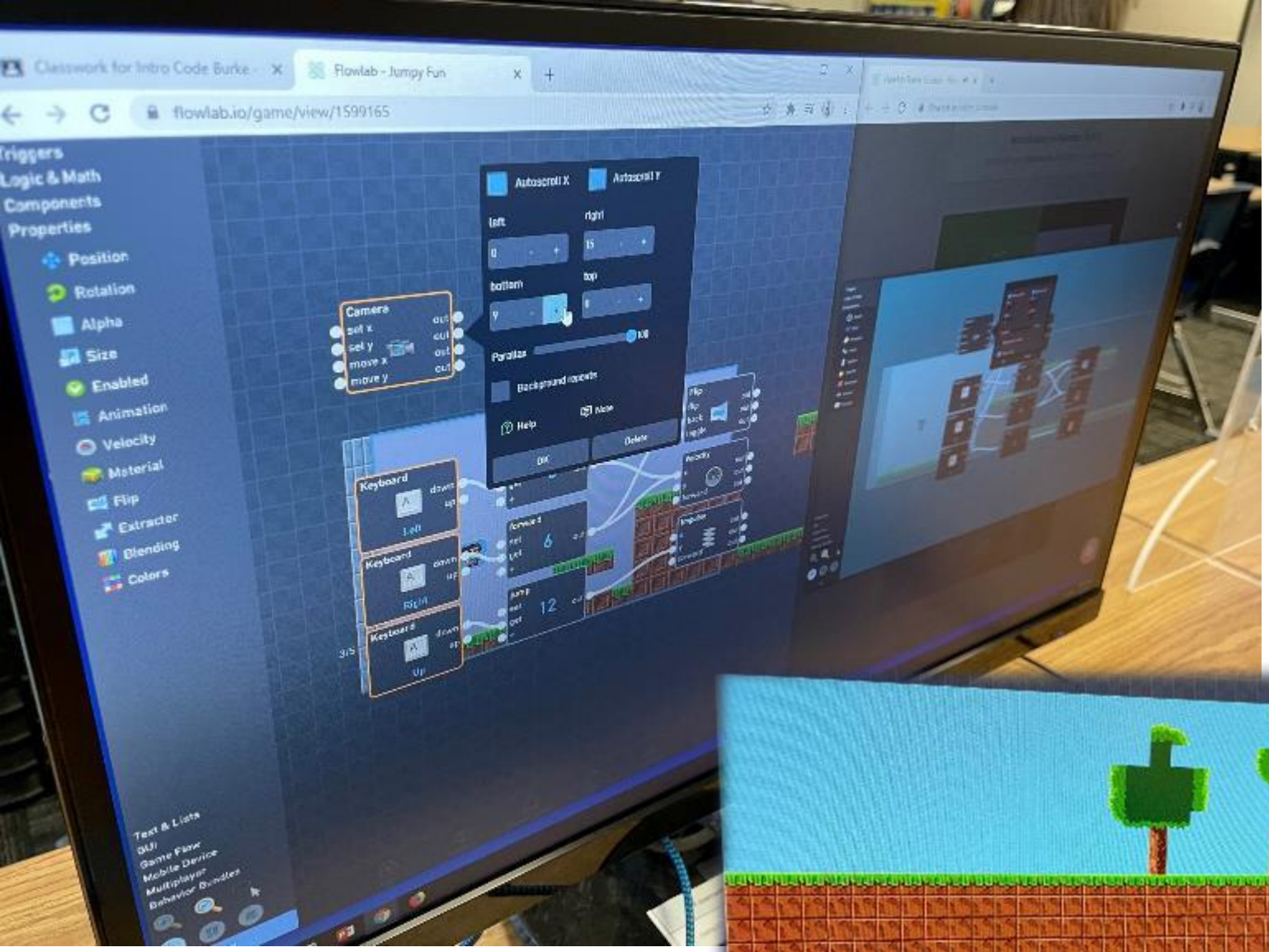
Software Used:

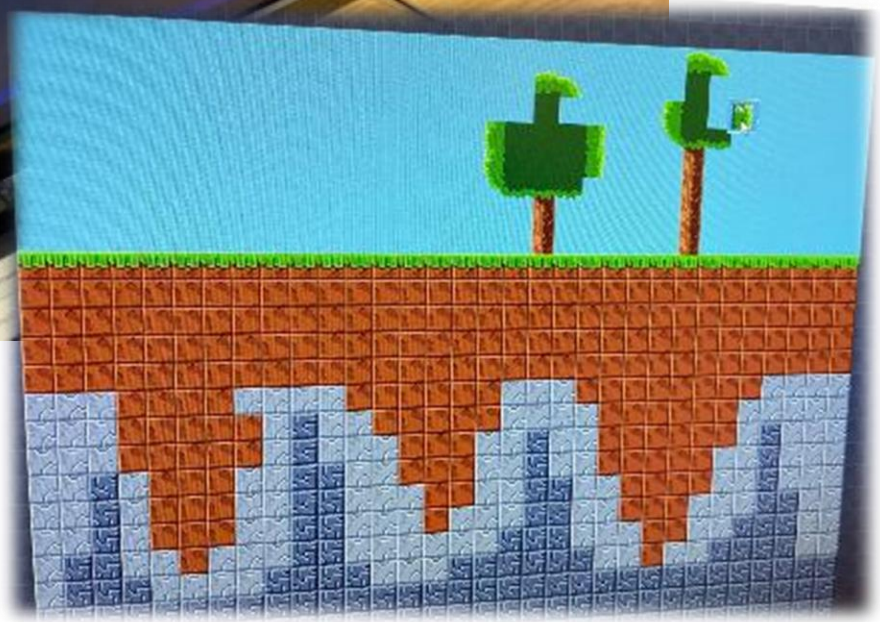
- Code.org
- Kahoot
- Quizlet
- Visual Studio
  - Windows Forms
- *Unity**

```
var LIGHT_RADIUS = 35;
var STOPLIGHT_WIDTH = 120;
var STOPLIGHT_HEIGHT = 350;
var BUFFER = 100;
var GRAY_COLOR = "#737071";
var centerX = getWidth() / 2;
var centerY = getHeight() / 2;
var DIST_BETWEEN_LIGHTS = 100;

function start(){
var rect = new Rectangle(STOPLIGHT_WIDTH, STOPLIGHT_HEIGHT);
rect.setPosition(centerX - STOPLIGHT_WIDTH / 2, centerY - STOPLIGHT_HEIGHT / 2);
rect.setColor(GRAY_COLOR);
add(rect);
drawCircle(Color.red, centerY - DIST_BETWEEN_LIGHTS);
drawCircle(Color.yellow, centerY);
drawCircle(Color.green, centerY + DIST_BETWEEN_LIGHTS);
}

function drawCircle(color, y){
var circle = new Circle(LIGHT_RADIUS);
circle.setPosition(centerX, y);
circle.setColor(color);
add(circle);
}
```

CodeHS




Classwork for Intro Code Burke
Flowlab - Jumpy Fun
flowlab.io/game/view/1599165
Triggers
Logic & Math
Components
Properties
Position
Rotation
Alpha
Size
Enabled
Animation
Velocity
Material
Flip
Extractor
Blending
Colors
Autoscroll X
Autoscroll Y
left
right
bottom
top
Parallax
Background repeats
Help
Mute
OK
Delete
Camera
set x
set y
move x
move y
Keyboard
Left
Right
Up
Text & Lists
GUI
Game Flow
Mobile Device
Multiplayer
Behavior Bundles



flowlab

Required Testing

Microsoft®

Technology Associate

MTA Test
Certiport Exams

9 out of 10 Advanced students passed MTA Software (Spring 2020)
1 out of 2 Advanced Year 4 students passed MTA Security (Spring 2020)

Course (98-361) - Software

- Understanding core programming (15-20%)
- Understanding object-oriented programming (20-25%)
- Understanding general software development (15-20%)
- Understanding web applications (15-20%)
- Understanding desktop applications (15-20%)
- Understanding databases (15-20%)

Course (98-367) - Security

- Understand security layers (25–30%)
- Understand operating system security (35-40%)
- Understand network security (20–25%)
- Understand security software (15–20%)

2-year Technical Skills Assessment (TSA)

State Course Completion Exam

A little humor . . .

Student Voices

Questions
Comments