Syllabus Quarter 1 : ***Intro. Computer Prog.& Game Dev.*** 2024-2025

Wednesdays 1:00pm - Library

Week	Description
1	In Class: Introduction to Computer Science & Game Development, programming & JavaScript Overview, HTML & CSS (Overview), Download: html5_tutorial.pdf + javascript_tutorial.pdf; first program "Hello World". Learn JavaScript Variables(types), Arrays, and simple output. Download I.D.E. Integrated Development Environment == Brackets(Editor), File Explorer(PC)/Finder(Mac) Homework: review week_1.pdf, html5_tutorial.pdf (pg 1-4) + Javascript_tutorial.pdf (pg 1-3)
2	In Class: Verify Brackets(Editor); Review JavaScript Variables(types), Arrays, HTML5, homework. Learn: Stacks, stack.push(), stack.pop(), stack.shift(), stack.unshift(), JavaScript: Reserved Words, Arithmetic Operators, Increment Operators, Comparison Operators, Logical Operators, Assignment Operators. HTML5 operators. www.learn-js.org (intro) Homework: {Using Brackets} write the program helloworld.html that states your name, grade, and age. Review: Javascript_tutorial.pdf (pages 4-6) + html5_tutorial.pdf (pages 5-6); week2.pdf
3	In Class: JavaScript (objects), {Dictionaries}, Web Server, Review: JavaScript, HTML5, & Brackets (topics). Learn: JavaScript (conditions) + Switch Statement. www.learn-js.org (continue) Homework: Review: Javascript_tutorial.pdf (pages 6-8) + html5_tutorial.pdf (pg:7-10), week3.pdf
4	In Class: Download web server(T.B.D.) PC or MAC; "Hello World" Title & Program from Web Server – c:\www "Localhost". Review: JavaScript, HTML5, & Brackets(topics) JavaScript (conditions) + Switch Statement. Introduce Loops(while, for, break continue). www.learn-js.org (continue). Web Server -> option<Mac – Terminal(PythonScript)> download Homework: Review: Javascript_tutorial.pdf (pages 6-9) + html5_tutorial.pdf (pg:10-13), week4.pdf
5	In Class: Continue – Web Server or Optional<Mac – Terminal(Python script); modify: "Hello World" Title & Program from Web Server – c:\www "Localhost". Review: JavaScript, HTML5, & Brackets. JavaScript (conditions) + Switch Statement, & loops. Introduce JavaScript Functions Homework: Review: Javascript_tutorial.pdf (pages 9-10) +html5_tutorial.pdf (pg:13-15), week5.pdf
6	In Class: JavaScript Arrays <push, Shift, Operators> JavaScript Objects & OOP - Object Oriented programming. Review: JavaScript, HTML5, & Brackets. JavaScript (conditions) + Switch Statement, & loops; Homework: Review: Javascript_tutorial.pdf (pages 1-13) +html5_tutorial.pdf (pg:1-17), week6.pdf
7	In Class: JavaScript Functions – Expressions, Dynamic HTML through JavaScript Functions. Functions as values or objects, Examples & Demo. Review: JavaScript, HTML5, & Brackets. Arrays, Objects & OOP (Object Oriented Programming) Homework: Review: Javascript_tutorial.pdf (pages 1-13) +html5_tutorial.pdf (pg:1-17), week7.pdf
8	In Class: Closures, JavaScript Events(HTML), importance of Getters/Setters in Game Framework. Review: JavaScript Functions, & OOP Homework: Review: Javascript_tutorial.pdf (all) +html5_tutorial.pdf (all), read week8.pdf

Your student will receive an overview of many game development design topics, and gain a better appreciation overall.

Welcome Intro. to Computer Programming with Game Development Students

Trinity is a great school, and we are glad you have selected our Game Development class for your schedule. We have seen the many benefits of Technology help students to succeed. **Learning builds confidence!**

Game development is a hot topic where students learn the design fundamentals & skills through JavaScript, HTML, CSS and more. Also students will expand their knowledge through example downloads, coding, debugging, sprites, tweens, sounds, and more. Modifying code and customizing to students choices brings ownership where learning is fun!

Our goal is to spark a love for technology within each student!

Instructor: Coach Arthur Alton brings 30+ years of both Software Engineering experience and church youth leadership. Leading Children's Church, Missions trips, VBS, Summer Camps, soccer, and more. **He has a passion to encourage our next generation of leaders** and Trinity technology instructor since 2017.

Our class meets Wednesdays 1:00pm in the Library. Please bring your notebook computer to every class. Please note: a Chromebook, MS Surface, or iPad will NOT work, because these O.S. do not support a "File Storage Structure", for weekly downloads (Please contact me for exceptions).

Every class will have a short lecture, demo, & weekly downloads available: https://www.alton4chess.com/trinity-2-computer-programming2.html

Every class's lesson is stored in a (*.pdf) week_(X).pdf and available for review, also good if a student misses a class.

Where to store your weekly Downloads:

Windows users: use {File Explorer}. Under(left side) "This PC" find "C:\" we will create a new directory called c:\Trinity , (then a subfolder) GameDev .
This directory c:\Trinity\GameDev
Will be the location for each week(s) subfolder, week1, week2, week3, …

Mac Users: {Finder}, under Desktop , create new folder "Trinity" then a folder "GameDev" , under this folder you will create week1, week2,…

If you have any questions, please email me at: Arthur@safecs.com
(Please include your student's class name) There are 6 technology classes.
I suggest about 10 – 20 minutes of homework per week; this is optional.