Unit 1: Intro to Java

Content Area: **Business**
Course(s): **Generic Course**
Time Period: **Semester 1 & 2**
Length: **4 weeks**
Status: **Published**

Standards

TECH.8.2.12.E	Computational Thinking: Programming: Computational thinking builds and enhances problem solving, allowing students to move beyond using knowledge to creating knowledge.
TECH.8.2.12.E.2	Analyze the relationships between internal and external computer components.
TECH.8.2.12.E.4	Use appropriate terms in conversation (e.g., troubleshooting, peripherals, diagnostic software, GUI, abstraction, variables, data types and conditional statements).
TECH.8.2.12.E.CS1	Computational thinking and computer programming as tools used in design and engineering.

Enduring Understanding

Variables are used to store and access both primitive data and objects in order to perform different tasks in a computer program.

An object represents an instance of a class, while a class is a blueprint which define the variables and methods for an object.

Essential Questions

What are objects and primitive data?

How do you create and use objects?

Knowledge and Skills

- Introduce the Java programming language
- Describe the steps involved in program compilation and execution
- Declare and use variables and constants
- Perform mathematical operations
- Use both println and print methods
- Get user input using objects of the Scanner class

Transfer Goals

Students will be able to explain how various types of data are stored and accessed by computer programs.

Deconstructing a problem into components allows you to tackle complicated tasks.

Resources

Repl.it Teams for Education

Teacher created Computer Science Google site

CSAwesome

CodingBat