JAVA COURSE AGENDA 2021 === 80 HOURS

WEEK 1: (5 HOURS)

INTRO + GOALS (1 HOUR)

WHAT IS JAVA? + WHY LEARN JAVA? + HELLO WORLD (3 HOURS)

LAB + QUESTIONS (1 HOUR)

WEEK 2: (5 HOURS)

VARIABLES, CONSTANTS, INPUT/OUTPUT, CASTS AND CONVERSION (2 HOURS)

IF, FOR, WHILE, DO WHILE (3 HOURS)

WEEK 3: (5 HOURS)

CONNECTING THE DOTS (2 HOURS)

BREAK, CONTINUE, SWITCH. (2 HOURS)

=== LAB (1 HOUR)

WEEK 4: (5 HOURS)

METHODS, PROBLEM SOLVING (BASIC LEVEL), RECURSION

WEEK 6: (5 HOURS)

WHAT IS A DATA STRUCTURE, ARRAYS, 2D ARRAYS (3 HOURS)

RANDOM, DATE, MATH CLASS (1 HOUR)

LAB (1 HOUR)

WEEK 7: (5 HOURS)

OOP INTRO, CLASS, OBJECTS, CONSTRUCTORS (4 HOURS)

LAB (1 HOUR)

WEEK 8: (5 HOURS)

ARRAY OF OBJECTS, Passing Arrays to Methods (2 HOURS)

STATIC METHODS, Method Overloading (3 HOURS)

WEEK 9: (5 HOURS)

GIT (1 HOUR)

=== PROJECT #1

- (INCLUDES LOOPS, CONDITIONS, ARRAYS, CLASSES)
- DIVIDE STUDENTS INTO GROUPS
- PRESENTATIONS

WEEK 10: (5 HOURS)
PILLARS OF OOP (4 Hours)
ENCAPSULATION + INHERITANCE + ABSTRACTION + POLYMORPHISM
Lab (1 HOUR)

WEEK 11: (5 HOURS)
EXCEPTIONS AND ERROR HANDLING (2 HOURS)
INPUT AND OUTPUT, FILE CLASS, FILE IO, Writing Text Files (3 HOURS)

WEEK 12: (5 HOURS)

DATA STRUCTURES, COLLECTIONS

QUESTIONS (1 HOUR)

WEEK 13: (5 HOURS) SORTING ALGORITHMS, SEARCHING ALGORITHMS

WEEK 13: (5 HOURS)
GENERICS + Naming Conventions + CLEAN CODE
=== PROJECT #2

WEEK 14: (5 HOURS)
GUI (2 HOURS)
DB (JDBC) (3 HOURS)

WEEK 15: (5 HOURS)
DESIGN PATTERNS (OVERVIEW) + HOW TO SUCCEED IN INTERVIEWS

WEEK 16: (5 HOURS)
=== PROJECT #3 (FINAL PROJECT)
--- WHATS NEXT (INTRO TO WEB APPLICATIONS)