

# Programming for Media Arts

AME 230

INSTRUCTOR

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# How to be successful in this course

- Attend class.
- Ask questions.
- Be curious about how things work.
- Do not wait until the last moment to work on assignments.
- If you need help with an assignment, come to office hours.
- Do every assignment, on time.

Language

IDE

Swift



4.2

Xcode



10.1

Do I need a Mac?

No. We have them here for you.

# Project Storage

- Cloud storage - Dropbox, Google Drive, etc.
- External Drive - usb drive, “flash drive”  
**DON'T USE THE FAT32 FILESYSTEM**
- Your personal laptop

A responsible, literate digital user has a backup plan.

# A note about Flash Drives

aka jump drives, usb sticks, thumb drives.

## Pros

Inexpensive, convenient, extremely portable, work across platforms.

## Cons

Most are slow, not secure, encourage use of lowest common denominator file systems, easily lost.

**DON'T USE THE FAT32 FILESYSTEM WITH XCODE**



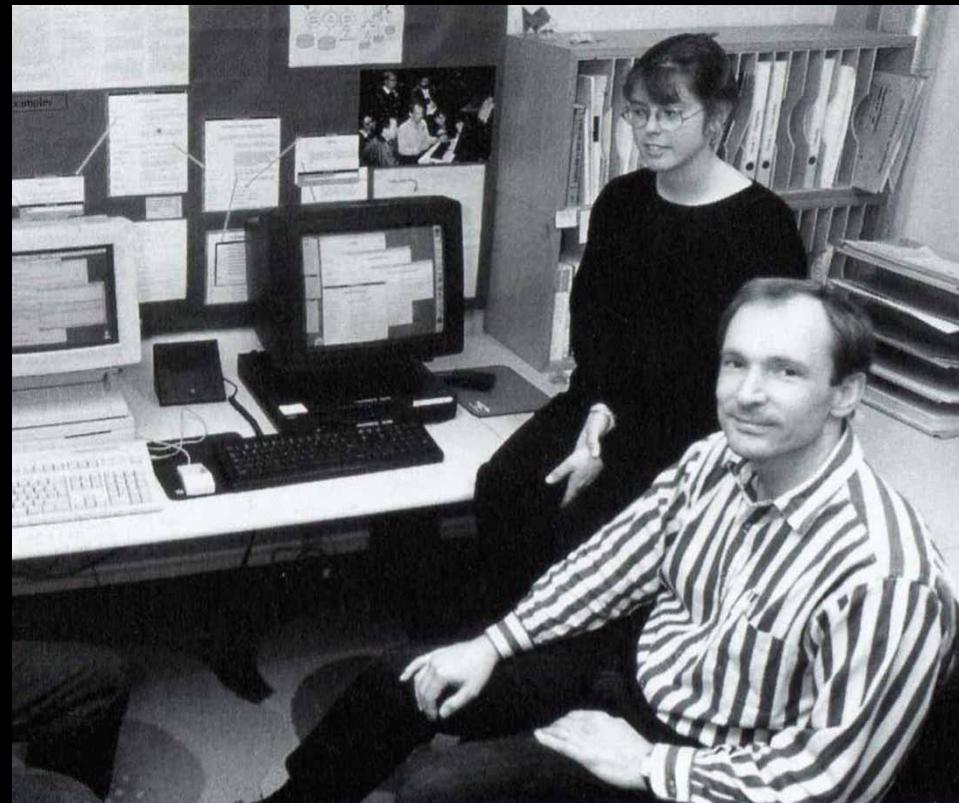
This is one computer. Built by IBM in 1944.



Dennis Richie and Ken Thompson working on a PDP-11 computer. (about 1970)



The original IBM PC. (1981)



Tim Berners-Lee and the World Wide Web. (CERN, 1991)



iPhone (2007)

# Why Learn to Code?

Programming is fun and creative.

# **Why Learn to Code?**

You want to be a programmer.

This skill is in demand.

Many people work as programmers creating the software  
that we use everyday.

# Why Learn to Code?

US Bureau of Labor Statistics			
Employment by Detailed Occupation (numbers are in thousands)			
<a href="https://www.bls.gov/emp/ep_table_102.htm">https://www.bls.gov/emp/ep_table_102.htm</a>			
	2014	2024 projected	
Software developers and programmers	1591	1790	
Civil engineers	281	305	
Electrical engineers	315	315	
Mechanical engineers	277	292	
Industrial engineers	266	270	
Architects	135	144	
Graphic designers	261	265	
Artists and related workers	189	195	
Musicians, singers, and related workers	255	264	
Photographers	125	128	
Television, video, and motion picture camera operators and editors	59	65	

# Why Learn to Code?

There are growing numbers of jobs that now include programming. Its not the primary focus, but now it uses programming as an important component.

eg. Web designer or Animation technical director

# Why Learn to Code?

There are growing numbers of jobs working on a team in a development project in which programming is important. You may work as an critical part of a group, you don't program, yet need to understand the process and work with people who do program.

eg. an artist working with a team creating a state of the art “AAA” game title.

# Why Learn to Code?

Programming teaches you how to think. – Steve Jobs

Many have said that everyone should learn to write, because it teaches you how to organize your thoughts and make an argument. Programming also does this, with an immediate and obvious feedback loop.

# Why Learn to Code?

“Program or Be Programmed.” – Douglas Rushkoff

Computing is transforming our lives, our culture. To be an educated, literate member of the future digital culture, you need to at least understand what programming is, and what the boundaries are that it creates.