

Introduction to Information Systems

- Understanding the digital world

2 Bit, Bytes and Representation of Information

Liang Zhao ILA, Doshisha University

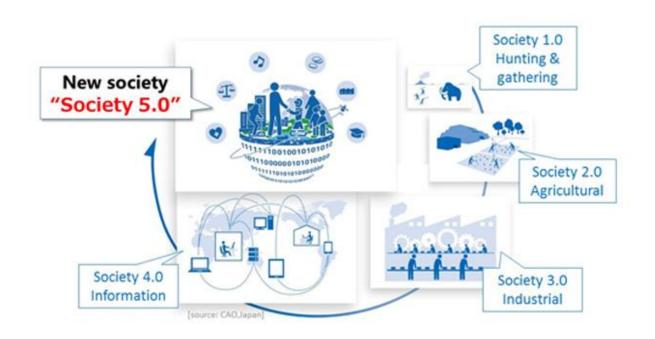
12001102, Fall, 2023



Today's schedule

- Review: Mini test #01 (CPU name)
- Why you need to understand the digital world (5')
- On the use of E-Class (15')
- Review of Chapters 1 & 2 of the textbook (15')
- Mini test #2 and homework (50')

Why you need to understand the digital world



The world is becoming digital (Society 5.0).

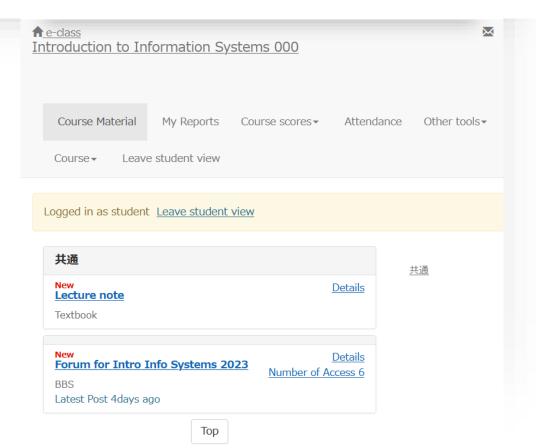
As a "digital native," you are expected to understand the digital world :-).

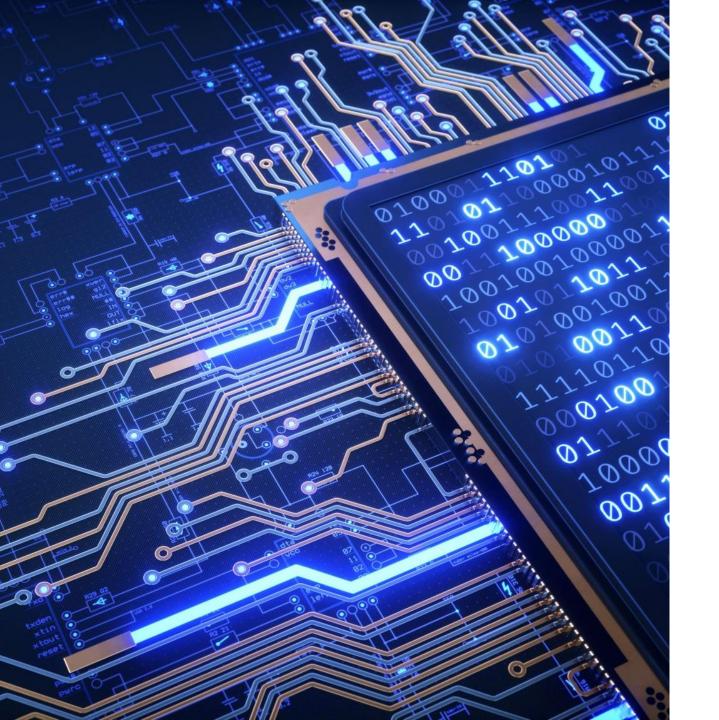
You are with the humanity discipline (culture, economics, law, etc). This human-centered approach is heavily biased, and a non-human-centered approach is needed.

On the use of E-class

- DUET: messages (emails) for contact
- E-class: lecture information
- Only 21 students accessed (Oct 2nd)
- Access: Doshisha -> Visitors Menu -> Current Students -> DUET or e-class





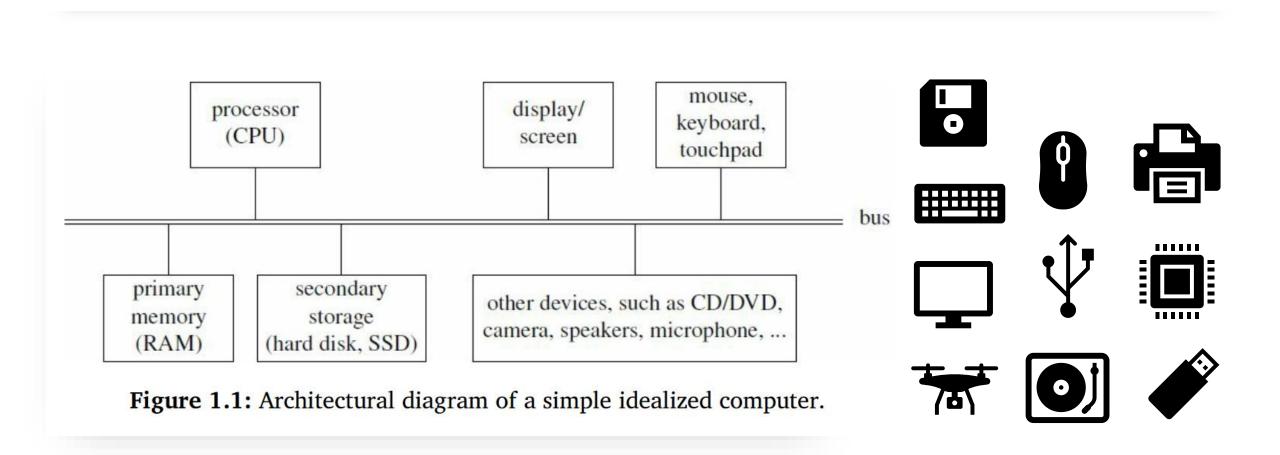


Review of Chapters 1 & 2 of the textbook

- Part I: Hardware
- Chapter 1: What's in a computer
- Chapter 2: Bit, Byte, and Representation of information

What's in a computer

CPU, RAM, Disk (HDD/SSD), bus, Motherborad, USB, etc



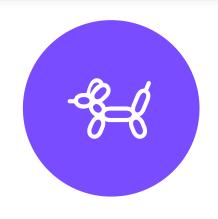
Bit, Byte, and Representation of information



- Analog and digital
- Bit: the smallest unit of information
- \checkmark
- Byte: a fixed group (usually 8) of bits
-))))))
- Base of numbers (binary, decimal, hexadecimal)
- How to convert numbers of different bases
- Why it is said that "There are only 10 kinds of people in the world—those who understand binary numbers and those who don't."?

Use the assigned number instead of your student no. for anonymous grading.

Mini test and homework





MINI TEST (45')

HOMEWORK: READ CHAPTER 3 OF THE TEXTBOOK

The test is open - the use of book, Internet, YouTube, etc, is OK - but please fill it by yourself. Don't worry if you cannot complete all now - You will learn them in this course.