Open Source Software Practice [SWE2021]

JinYeong Bak

jy.bak@skku.edu

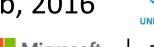
Human Language Intelligence Lab, SKKU

Instructor

- JinYeong Bak (jy.bak@skku.edu, hli.skku.edu)
- Leader @ Human Language Intelligence (HLI) Lab
- Research
 - Machine Learning
 - Natural Language Processing
- Education
 - Ph.D. @ KAIST, 2020 KAIST
 - BS @ SKKU, 2011



- Employment
 - Junior Data Scientist, United Nations Pulse Lab, 2016
 - Research Intern, Microsoft Research, 2013





Teaching Assistant

- YeongJun Hwang
- Ph.D. student @ Human Language Intelligence (HLI) Lab
- Research
 - Machine Learning
 - Natural Language Processing
 - Conversational AI
- Education
 - Ph.D. @ SKKU, 2024 ~



- M.S. @ SKKU, 2021 ~
- BS @ SKKU, 2021

Teaching Assistant

- Suhyun Han
- MS student @ Human Language Intelligence (HLI) Lab
- Research
 - Natural Language Processing
- Education
 - M.S. @ SKKU, 2024 ~
 - BS @ SKKU, 2024

Teaching Assistant

- Kyungdon Lee
- MS student @ Human Language Intelligence (HLI) Lab
- Research
 - Natural Language Processing
- Education
 - M.S. @ SKKU, 2024 ~
 - BS @ SKKU, 2024

Course Logistics

- Purpose
 - To learn the basics on open source software techniques
 - To practice the basics on open source programming techniques
- Time: Wednesday 18:00 20:30
- Course website: icampus.skku.edu
- Background assumed
 - -C
 - Python
 - Linear Algebra
 - Probability

Course Policies

- Any violation of academic integrity will result in 'F' in the course
 - Copying/showing any part of reports
 - Copying/showing any part of exams
 - Use of banned resources (e.g., smartphones, smart watch) during the exam
 - Faking attendance
 - Helping anyone to fake attendance
- Academic integrity handbook: https://integrity.mit.edu

Course Schedule (Tentative)

| Week | Topic |
|------|--------------------------------------|
| 1 | Introduction |
| 2 | VSC |
| 3 | No Class (National holiday) Python |
| 4 | No Class (National holiday) |
| 5 | Docker |
| 6 | No Class (National holiday) Markdown |
| 7 | Bash Programming |
| 8 | Git Basic |

Course Schedule (Tentative)

| Week | Topic |
|------|---------------------|
| 9 | Git Advanced 1 |
| 10 | Git Advanced 2 |
| 11 | Open Source License |
| 12 | Personal Homepage |
| 13 | Git Advanced 3 |
| 14 | Git Advanced 4 |
| 15 | Latex |
| 16 | Final Exam |

Course Structure

| Time | Task | Note |
|---------------|---|--|
| 18:00 | Come to the classroomCheck your attendance by your phoneSolve a weekly quiz (icampus) | See Attendance slide for details |
| 18:05 | Review the quiz | |
| 18:10 | Listen to the lecture | |
| 18:40 | Do the weekly assignment practice | Time could be changed |
| 19:30 – 19:45 | Have a break time | TAs have a break time too |
| 20:30 | Leave the classroom | Students can leave early if they finish the practice |
| 23:59 | Submit your practice work (icampus) | |

Grading

- Attendance: 20%
 - 10 weeks and more (w/o 1st & exam week)
- Quiz: 25%

Sum up top 10 scores

You will get a zero score on a one-week quiz if you do not attend the class.

• Final exam: 25%

You will get a zero exam score if your attendance score is not full.

You should take the final exam; otherwise, you will get an F grade.

Weekly Assignments: 30%

You will get a zero score on a one-week assignment if you do not attend the class.

SKKU School rule 47-2:

Students must attend at least 3/4 of the total class hours for that subject to be eligible to take the exam.

https://rules.skku.edu/state/current/current_rul
ebook.do?mode=recent&srRuleCd1=747

SKKU School Rules

- 47-2
 - Students must attend at least 3/4 of the total class hours for that subject to be eligible to take the exam.
- 48-2
 - A grade of F shall be given in the following cases:
 - 1. All semester grades (excluding educational laboratory grades) of students who have been disciplined by suspension or who are unable to attend 3/4 or more of the total number of class hours or take the final examination due to other circumstances
 - 2. Grades for courses for which attendance was less than 3/4 of the total number of class hours

Reference

- https://rules.skku.edu/state/current/current_rulebook.do?mode=recent&srRuleCd1=747
- https://rules.skku.edu/state/current/current_rulebook.do?mode=recent&srRuleCd1=747&s
 rRuleCd2=2790

Grading - Example

Student A

Attendance: 18%

Final exam score: 90/100

=>

Attendance: 18%

• Final exam score: 0/100

• Final grade: Based on the total score

Student B

Attendance: 20%

Final exam score: Not taken

=>

• Final grade: F

Attendance

Classroom

- Come to the in-person classroom
- Check your attendance using by SKKU attendance app (https://attend.skku.edu)
- Attendance Time Tracking Standards: 18:00 18:40

More rules & tips

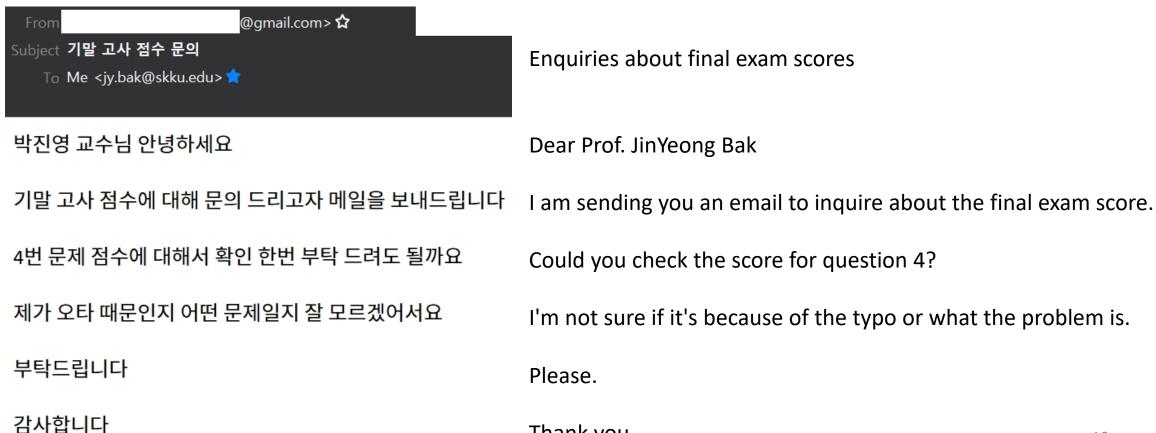
- No late-in
- No excuse except reasonable reasons (i.e., entering a hospital, family funeral, reserve forces training) with official documents
- Check your attendance status by yourself (https://attend.skku.edu)
- Come directly after the lecture time if you meet any problems. We might accept your claim if we can see you during that time.

How We Communicate in the Class

- Channels
 - Classroom
 - Email
 - Office Hours
- Instructor & TAs will ignore other channels

Email

- Students can ask the questions via email
- Some emails will not get answered



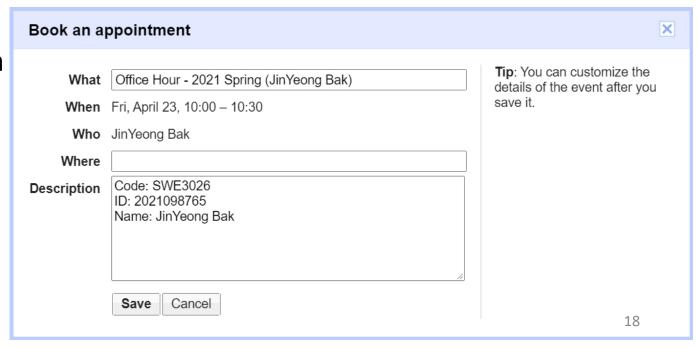
Thank you

Email

- Mail address
 - Use the school email account (@g.skku.edu)
 - Send to ossp_g@g.skku.edu
- Subject
 - Summarize what you want to ask
- Content
 - Introduce yourself with Student ID number & Name
 - Be polite
 - Be specific
 - Provide as much detail as possible

Office Hours

- Students can ask the questions in person
- Need to reserve the time
- Method
 - Go to office hour page https://oh.nosyu.kr
 - Click an available time slot
 - Write yourself in the description
 - Class Code
 - Student ID number
 - Name
 - Save the appointment
- Reservations may be canceled



Assignment #1

- A simple report
 - Honor pledge of this course
 - (Optional) Suggestions/comments to the instructor
- Due date
 - September 11, 2024
 - Submit the report to icampus page
- Reference
 - https://www.rochester.edu/college/honesty/instructors/pledge.html
 - https://sites.udel.edu/studentconduct/honor-pledges/

(Optional) Salt for Privacy

Grading sheet

- We will open a grading sheet that has all scores of students.
- To protect your identity, we anonymize your student ID by SHA3-256.
- For enhanced security, we will add your own salt value. (Refer to the reference)

Process

- Input: Student ID + your own salt value
 Example) ID: 2024123456, salt: 9876, Input: 202412345609876
- Output: encoded character sequence
 Example) Output: f164b1547ecb2d483ca2415120890d0628ca4ace20416db5370e58dfae81a0e4

Submission

- Due date: September 11, 2024
- Submit (& Remember) your individual salt number (up to 5 digits) to icampus page
- No submission, No salt (& No penalty on the final grade)

Reference

- https://en.wikipedia.org/wiki/Salt_(cryptography)
- https://emn178.github.io/online-tools/sha3 256.html