C!

Arrangements for the rest of the course
See: presemo.aalto.fi/c19

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29.3.2019

Agenda

- Feedback summary
- Arrangements for programming task
- Arrangements for programming test
- Testing the USB system
- Questions and discussion

Feedback

Schedule

- Deadline for programming task: Thu, April 18
- Exercises on April 1 – April 5 and April 15 – April 18
  - We wil skip the exam week
- Exam on Wed April 24 and Thu April 25 at 9:00
  - Plan to be early, latest 8:45
  - If dates not work, contact c-programming@netlab.hut.fi

- Round 10 deadline ➔ Mon April 1, at 16:00

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Programming task

- Randomly chosen topic

- Implement a full program from scratch

- Submit program to TIM
  - One .h – header ja one .c - source

- No automatic assessment
  - We will test the program in TIM system manually
  - Use own or school's machine for development

- Scoring: 0 – 10 point
  - Evaluation criteria given with assignment
  - At least 5 points required

How to start with the project?

1. Get editor and learn to compile program

2. Write
    ```
    int main(void)
    {
        // Here it starts
    }
    ```

3. Make a while loop inside main function

4. Read a line from user (e.g. fgets from stdin)

5. Process user input using sscanf

6. If-else or switch structure processing each user command

7. Have a dedicated function for each command

8. Proceed one function at a time, and test often

9. Move to next function only after previous works

10. You can submit to TIM as many time as you want, but pls use other machine for development

Programming test

- Wed, April 24 and Thu, April 25 at 9:00 – 12:00

- Three options

  – Own machine + USB in U2 (recommended)

  – Computer classes in U wing (limited number of seats)

  – Exam aquarium

- Registration mandatory

  – You must not attend more than once in one of above

- Like exam, but done by computer

  – Max. three hours, min. 30 minutes

  – You must not be late by more than 30 minutes

Programming test practicalities

- Done in browser, in TIM system
  - You can (and should) compile and execute in TIM (many times)
  - Also valgrind available
- Access to network is blocked
  - There will be access to C reference site
- Random pool of exams
  - No advantage by choosing later day
- No automatic checking
  - We will penalize for badly unconvenient solutions even if works
    - E.g. Repeated sequences of code instead of for loop
  - We may penalize for bad programming style

Method 1: Use your laptop and USB

- Recommended alternative (if works for you)
- **Important: test before exam!**
  - On some machines booting from USB has not worked
  - Some machines have not worked with the Linux system
    - E.g. The latest Macbooks
- Based on Arch Linux, additional software available
- Come to the exam site (Otakaari 1, U2) early enough
  - Aim to be there by 8:45, to have time to set up
- Bring power, you can bring external mouse
- We also have few laptops to borrow, ask in advance

Method 2: Computer class

- Thu, April 25 at 9:00, Otakaari 1, U257 and U351
- Register only if Method 1 or Method 3 is not good for you
  - Only 45 seats available
- Windows-based machines in separate exam mode
  - Network access limited
- Exam done using TIM in IE browser
  - No additional editors or tools available (unlike method 1)

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Method 3: Exam aquarium

- Separate registration, any time between April 23 and April 26

- Otakaari 1, Y339a or Harald Herlin, 2nd floor

- Something to consider:
  - You cannot bring anything to exam site, cannot use sketch paper
  - You cannot exit the exam room in the middle of exam
  - No technical support available

- Uses TIM like other alternatives, no other software available

Preparing for programming test

- Test your laptop with USB
  - Here or in exercises Wed 17 and Thu 18
  - ISO image available in MyCourses for you to try
- You can also test the image in virtual machine
  - E.g. to get familiar with Arch Linux UI and software installed
- Try practice exam at
  https://tim.aalto.fi/view/ELEC-A7100/kokeet/Harjoituskoe

More C (and C++)

- ELEC-A7151 Object oriented programming in C++
  - Periods I - II
- ELEC-C7241 Tietokoneverkot
  - Periods III – IV
- ELEC-C7310 Sovellusohjelmointi
  - Periods I – II
- CS-C3100 Computer Graphics
  - Periods I – II
- CS-E4580 Programming Parallel Computers
  - Period V

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Summary

- Exercises 1.4. – 5.4. and 15.4. – 18.4.
- Programming task deadline 18.4.
- Programming test 24.4. and 25.4.

Practice exam

- Exam code:

09EZKsTm