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# Activity Monitor Handler Operating Systems

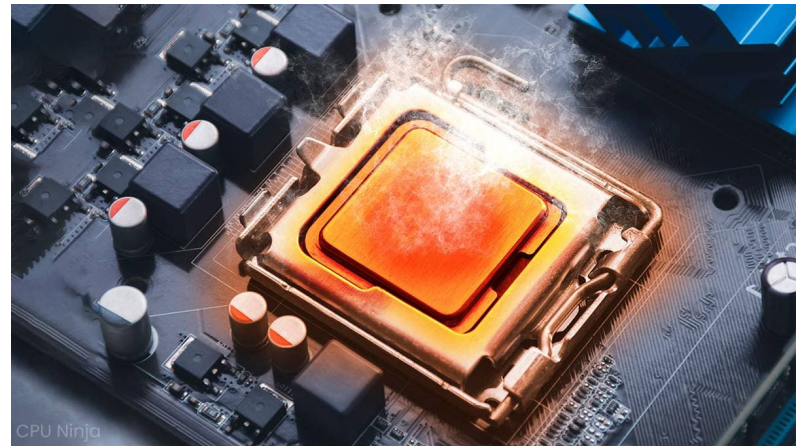
Severin Memmishofer, Yash Trivedi 12.06.2023

# Agenda.

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- 1 Problem — Project idea
  - 2 Solution — Overview of the Implementation
  - 3 Evaluation & Demo — Main Results
  - 4 Lessons learned
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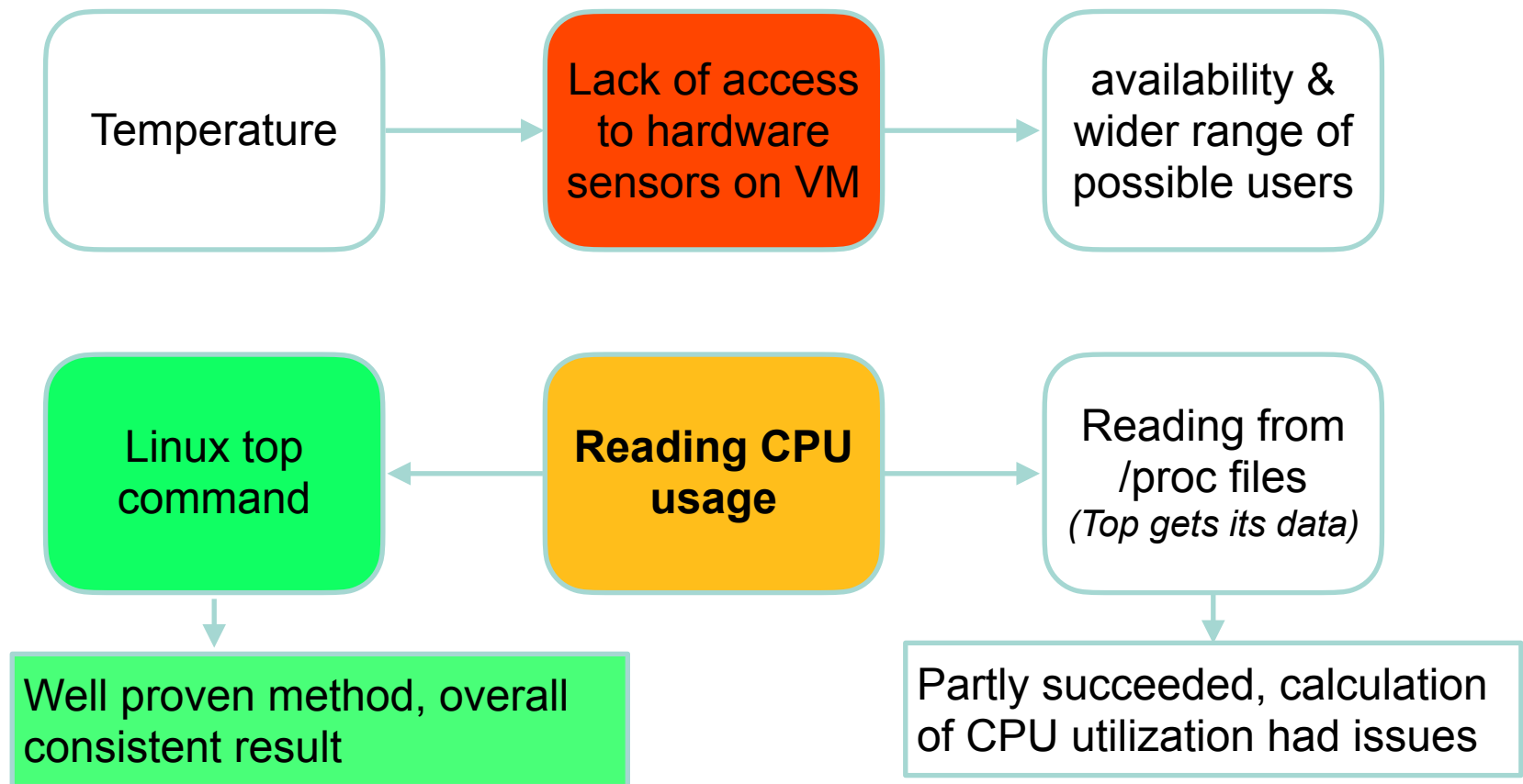
# Problem — Project idea

- Built-in activity monitor useful, but only passive
- What if a process uses excessive amount of CPU?
  - Overheating
  - System less responsive
  - ...
- Idea: Have program which automatically notifies the user, if a process exceeds threshold, and give the user options:
  - Kill process
  - Suspend process
  - Ignore warning



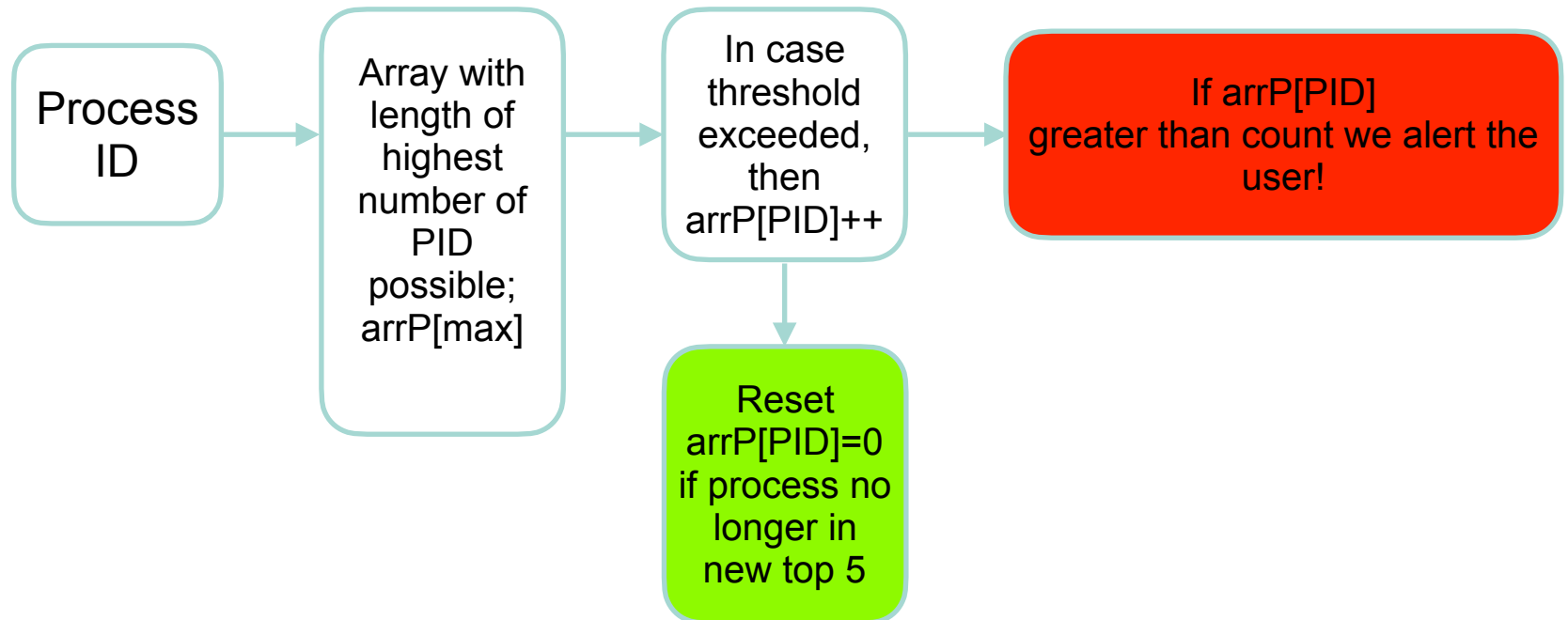
# Solution — Overview of the Implementation

Different approaches for defining the threshold:



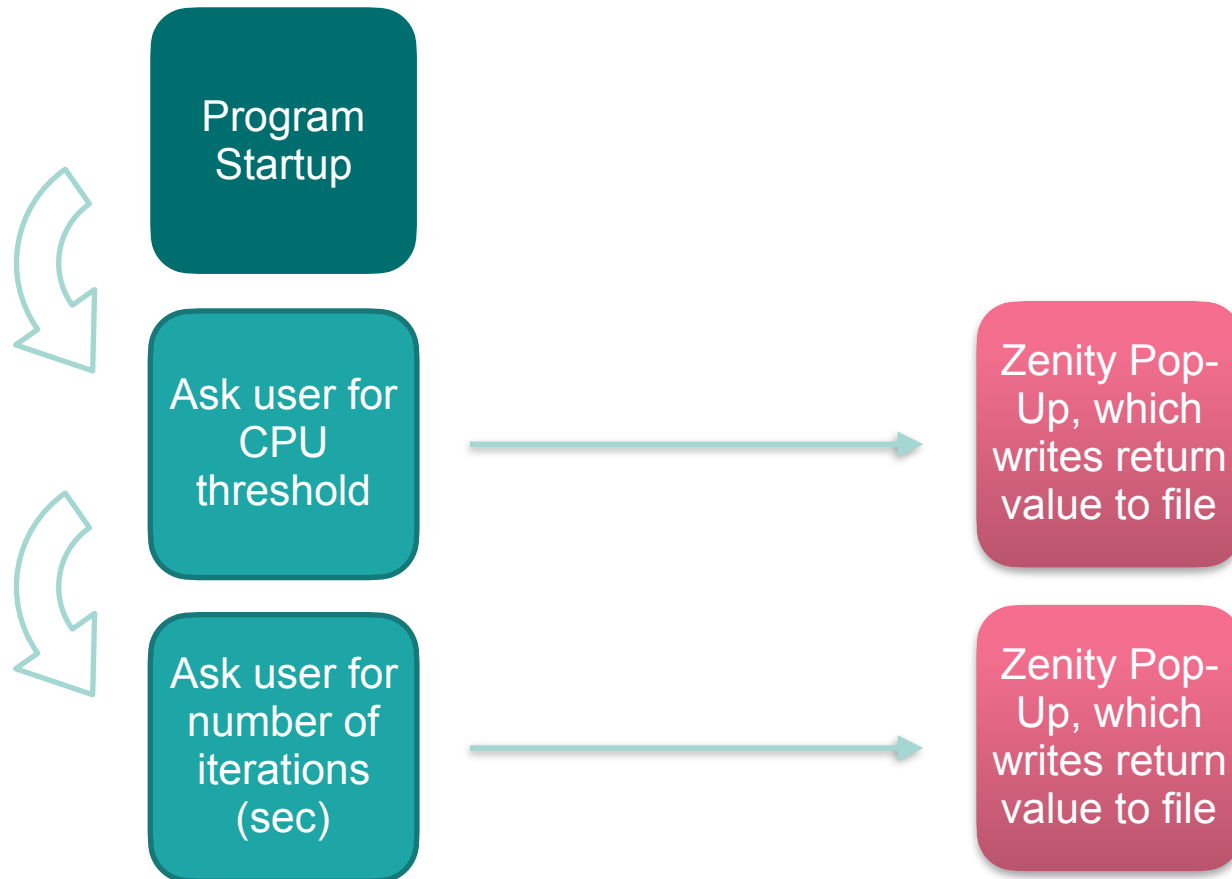
## Backend — Obtaining and Processing the data

Read and write in a txt-outputfile from top (top 5 processes)



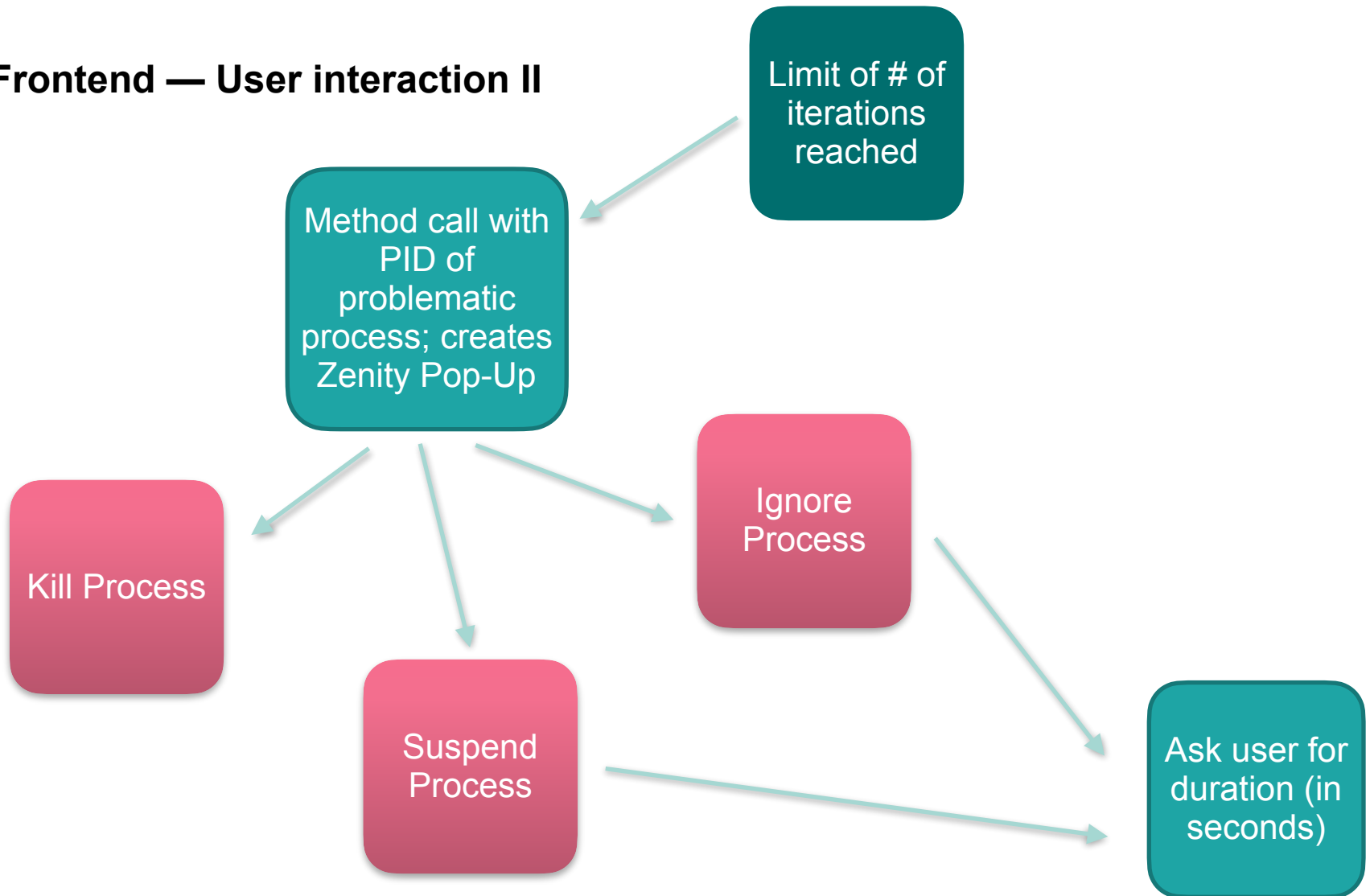
# Solution — Overview of the Implementation

## Frontend — User interaction

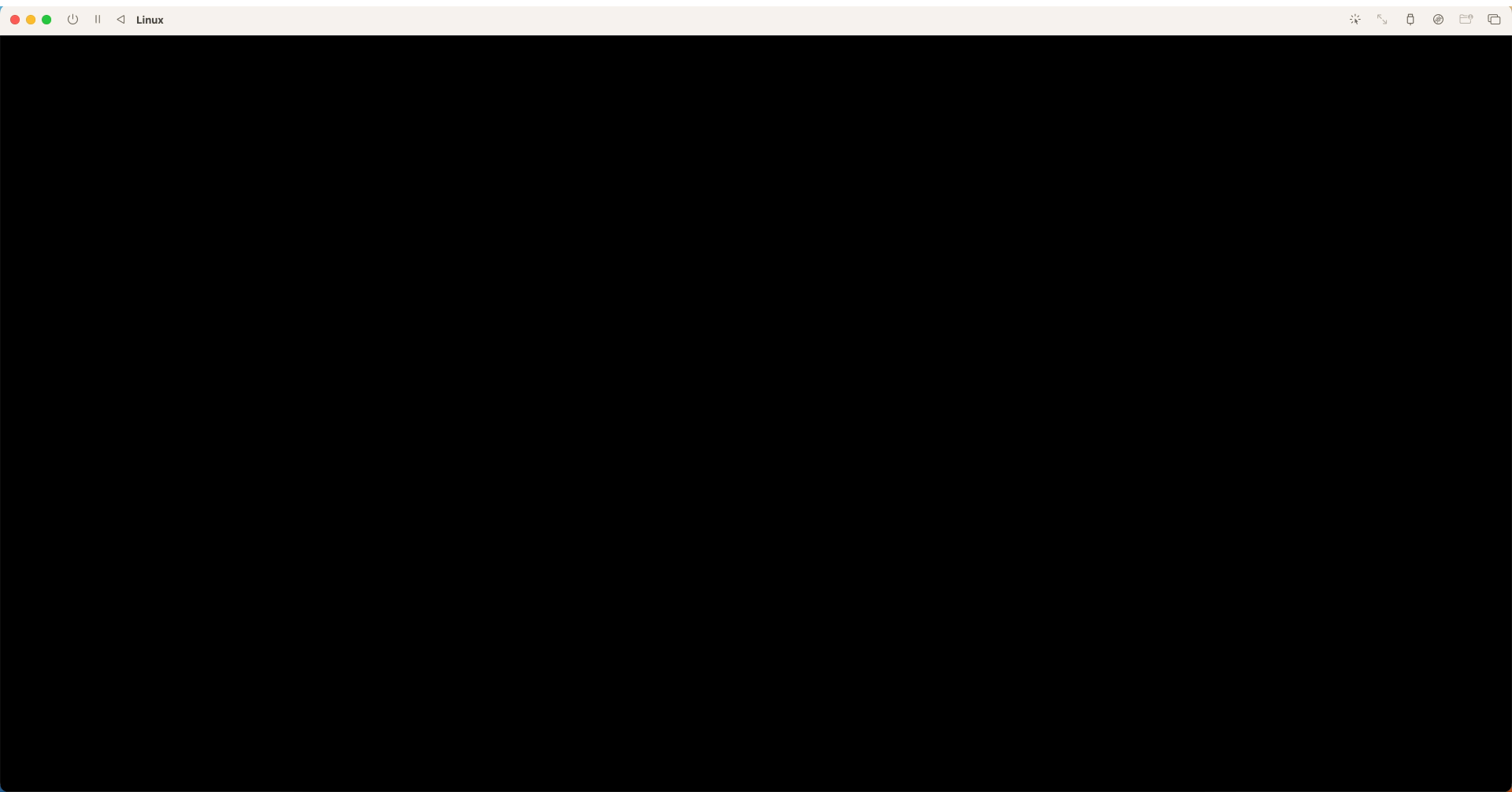


# Solution — Overview of the Implementation

## Frontend — User interaction II



# Evaluation & Demo — Main Results





# Lessons learned

- Interaction between C program and bash scripts
- Interaction between users, processes, OS
- More experience regarding OS-interactions
- How Linux Notification pop-ups work
- How to slice a bigger projects in smaller parts, and solve the smaller parts to solve the big project
- Gained confidence in Linux OS and C



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# **Thank you for your attention!**

## Questions ?