

**Creating a  
sense of  
urgency**

**without  
external  
(hard)  
deadlines**

by Laurin Heßlich



# 1. Why I ask



Laurin Heßlich

- 24 years
- Computer Science Diploma
- @ELBFLORENCE since 2021
- Career Steps:
  - Head of Autonomous System 2022/2023
  - Consultant Autonomous System 2023/2024
  - Advisory Board Member 2024/2026
- Current Tasks:
  - Guidance of current top level management
  - Internship at **VECTOR** >



## 2. The situations



- It is possible to flash software on the car right before a discipline starts
- It is not trivial to decide what is a necessary bug fix and what is a new feature
- Module members do not have enough knowledge to decide what needs to get merged and what not
- You do not want to drive untested code
  - normally no existing unit tests
  - often only tested in the simulation → Better than nothing
  - simulation  $\neq$  real world tests
- Nobody knows how much time is needed for real world testing
- The hardware (the race car) is often unreliable
  - Example last year: 15 test days planned → ~5 done

# 3. What do we do



- Early communication of general time plan
- Let module members make their own sub time plan → transfer ownership
- Name the next deadlines in every sub team meeting
- We have the following code deadlines in a season:
  - first prototype ~march
  - first run on car ~april
  - development stop ~may
  - hard deadline ~june
- Idea:
  - Test all new code on the old car
  - On the new car only performance testing
- Reality:
  - Normally last minute code pushes (also on the events)
  - Reason: New knowledge through event data and extensive analysis

## 4. And you?



Questions of interest:

1. Do you have similar problems with these type of deadlines?
2. Do you have measures in place for avoiding these?
3. Can you imagine different measures against the problems?
4. Should there be an allowed type of last minute fixes?

Feedback:



Thank you for your interest and contributions!

## 5. Feedback



**ARWo Feedback Link:**



**Presenter contact:**

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Slides at

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