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More Ecologically Valid Subjective Experiments

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Different Measurement Points

User Experience

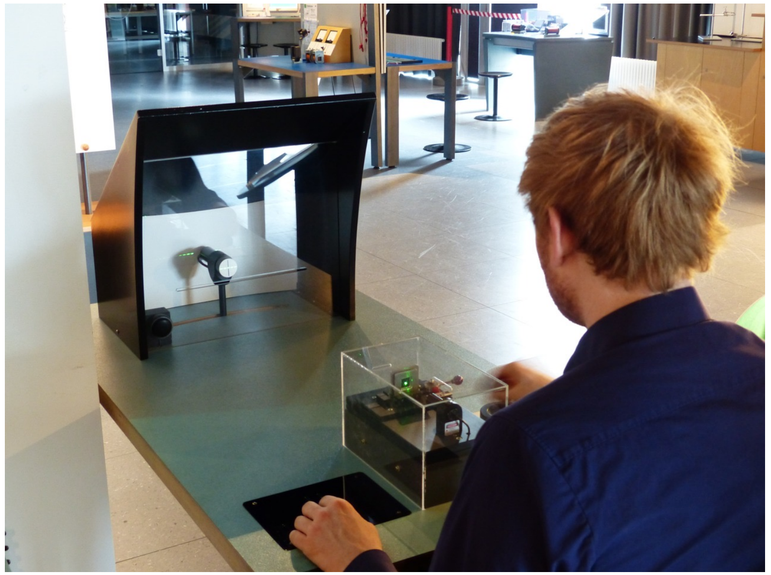
Quality of Experience

Quality of Pixels
Quality of Display?

HVS Human Visual System

Examples

- HVS: How much gaussian blur must be added that you are not able to recognized a face
  - Specific lab environment



Examples

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- QoP: Which compression setting is the best?
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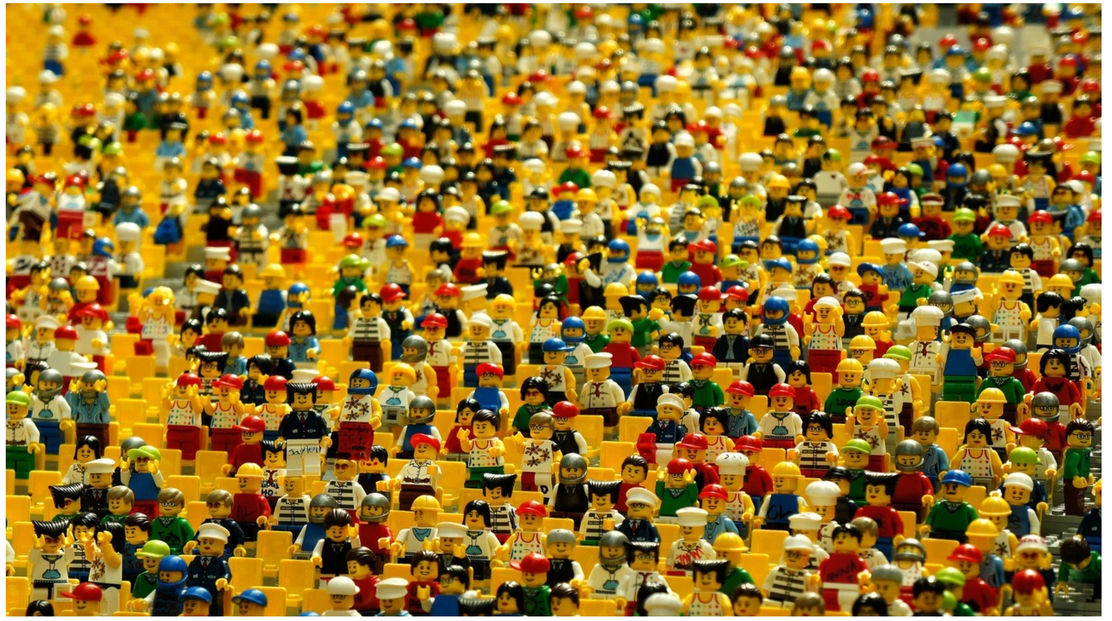

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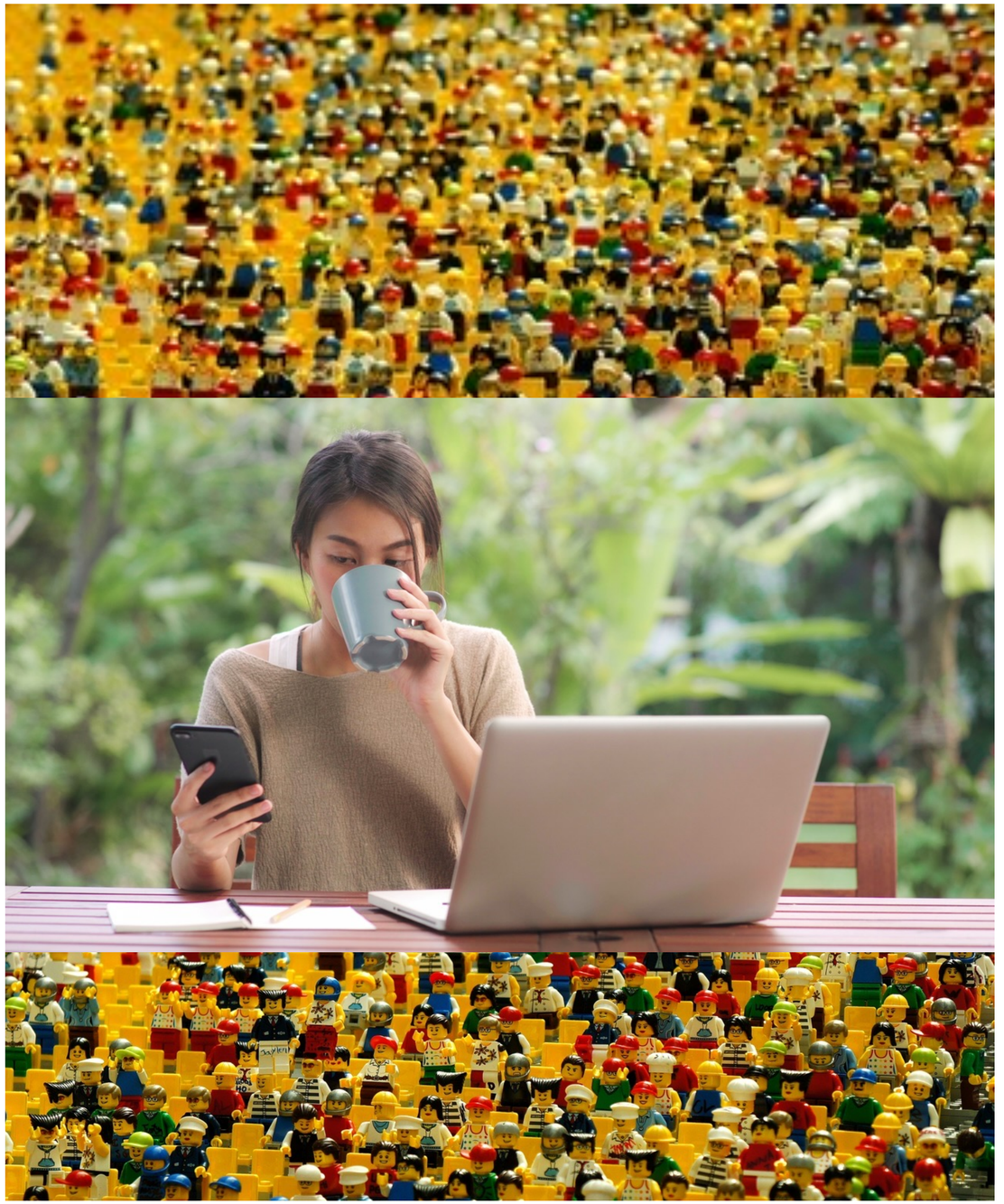
  - Watching what a user is doing



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- QoP: Which compression setting is the best?
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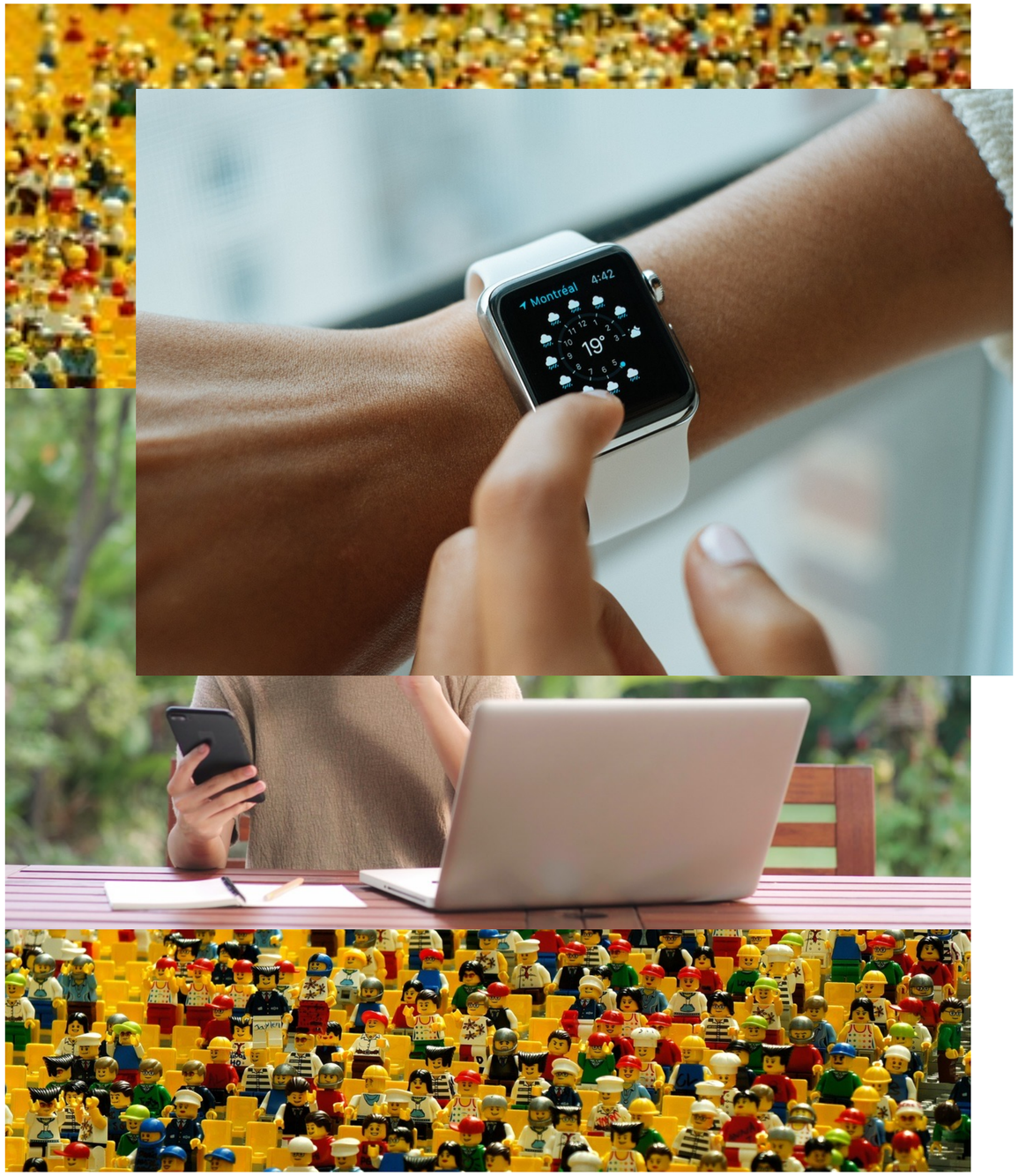
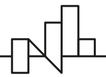
  - Watching what a user is doing
- UX: How to make a better product?
  - Watching what a user is doing



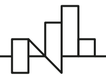
Experiments You Could Repeat

- ACR Without the Scale
- Your YouTube Our Lab

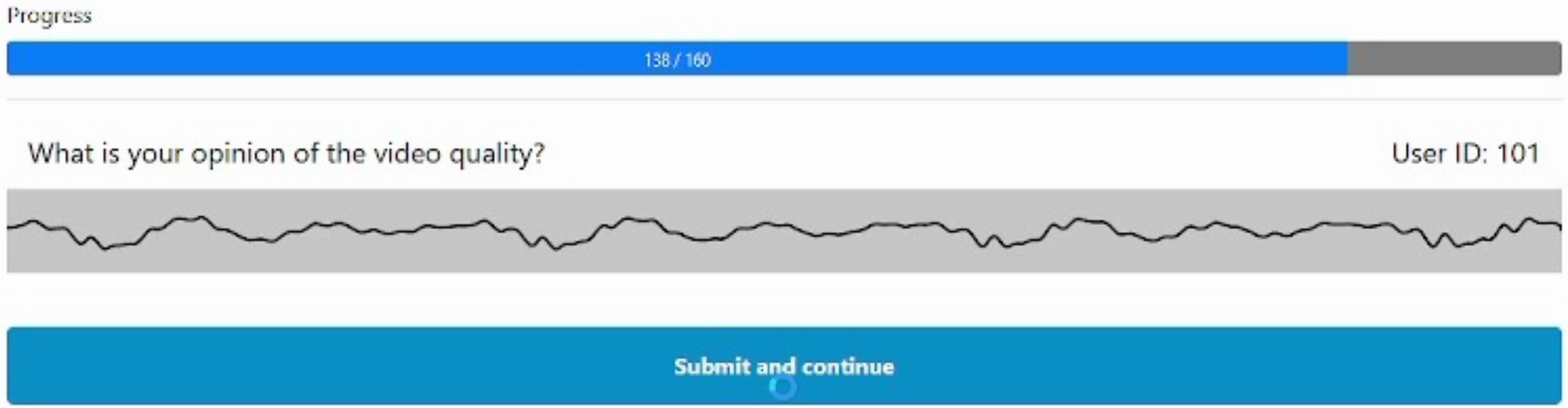


ACR Without the Scale

- Problem to solve:
  - We get very limited information from a tester
  - The process of selecting an answer is unknown
- Solution:
  - Thinking aloud
    - A preselected world is changed to a speech description
    - It is ok to start description seeing the video
    - We see the evolution of the scoring system
    - We see all quality dimensions
  - The rest of the experiment is the same
- Problems:
  - Data analysis is more challenging
  - We do not know if testers really say something



ACR Without the Scale The Interface

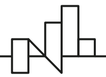


https://github.com/Qub3k/avrateNG

(which is a modified version of https://github.com/Telecommunication-Telemedia-Assessment/avrateNG)

Your YouTube Our Lab

- Problem to solve:
  - 10 second videos without the audio are not what a user watches
  - Normally we select the content based on our preferences
  - We are not forced to see the whole content
- Solution:
  - A rare popup with a quality question
    - A user selects the content
    - Watching makes them forget about the task
    - Real experience
  - We use a standard quality scale
- Problems:
  - People do not just watch YouTube
  - People are so much into the experience that quality is forgotten
  - It is difficult to follow what is the objective quality



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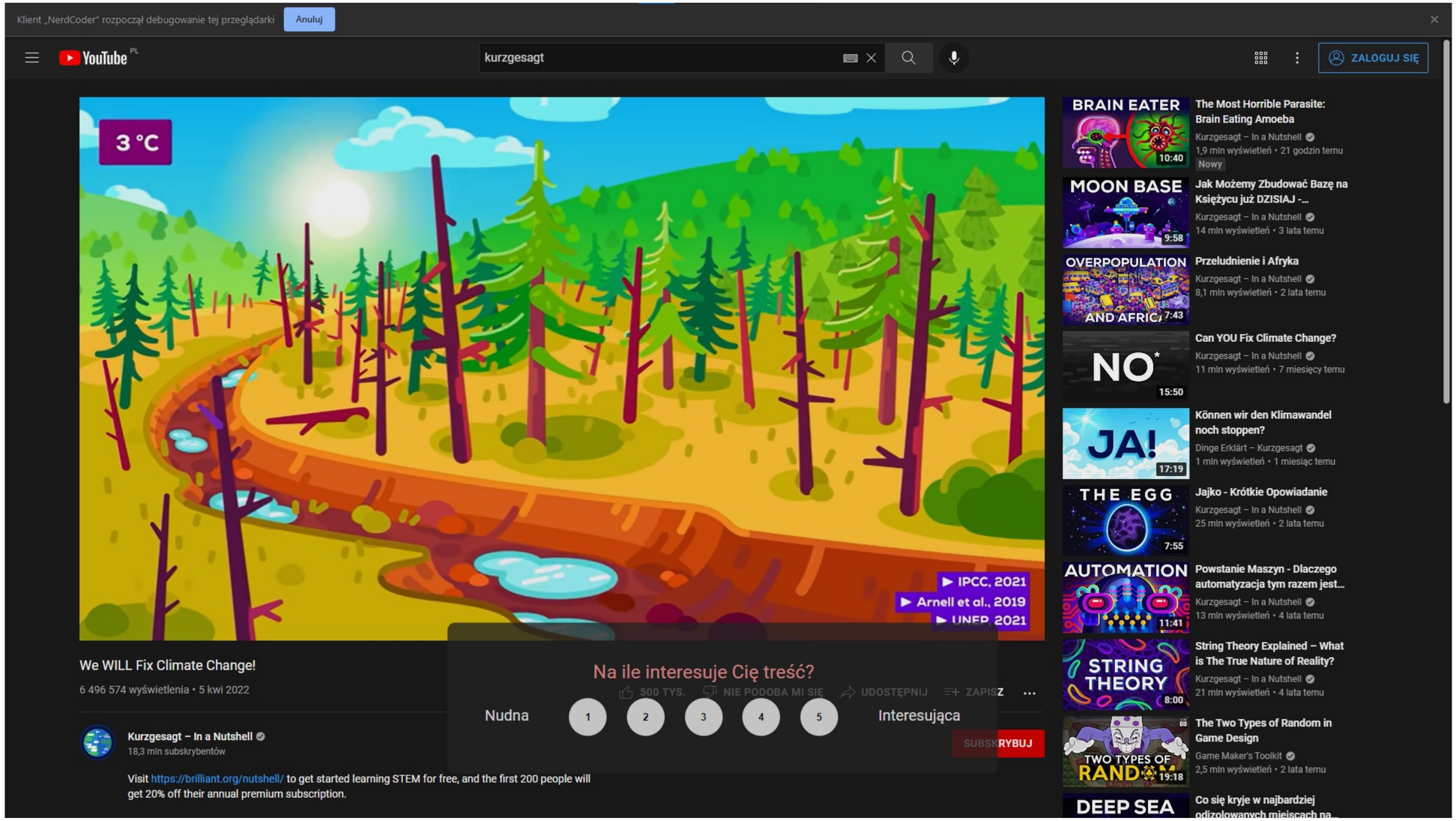
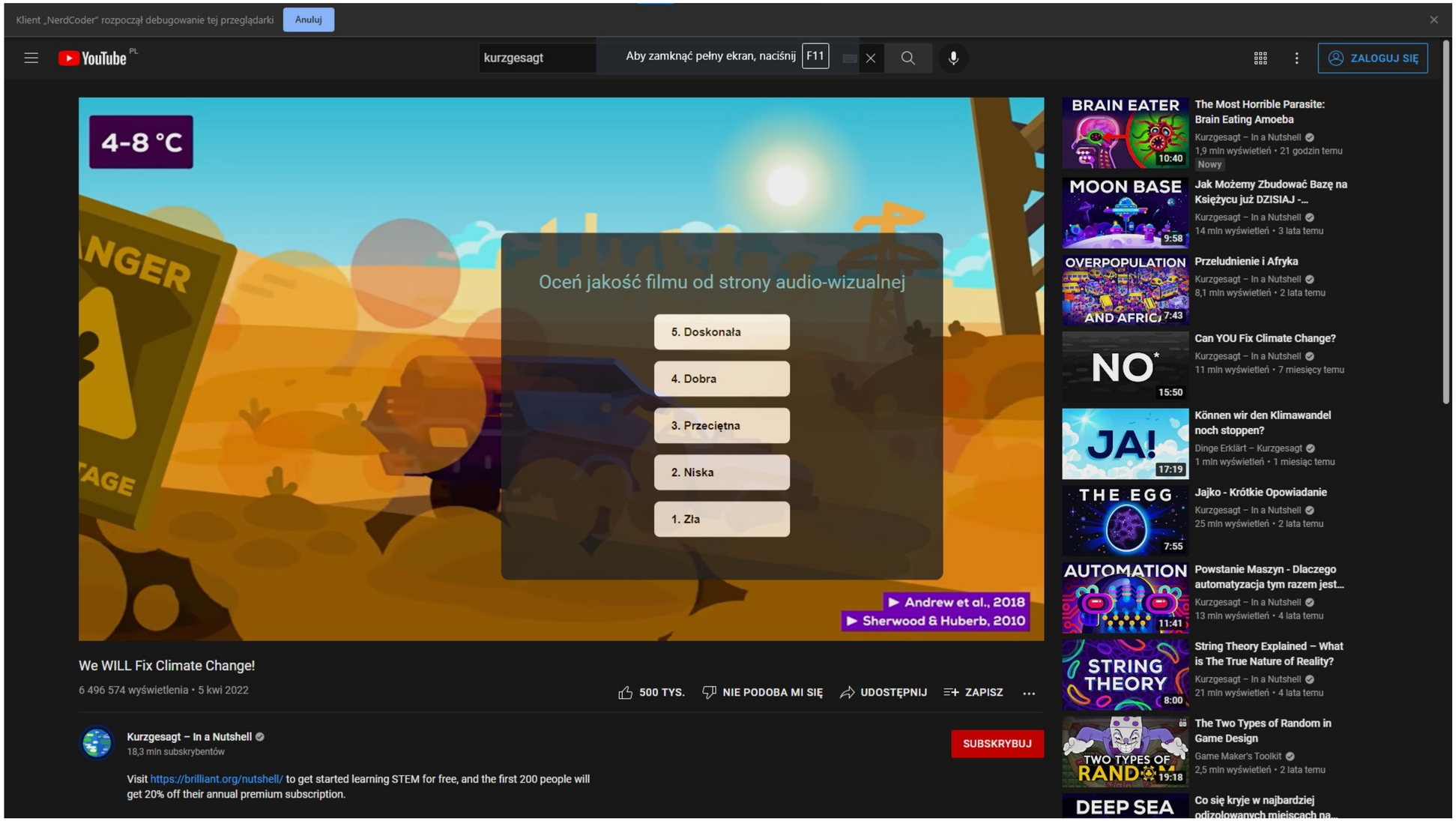


Your YouTube Our Lab The Interface



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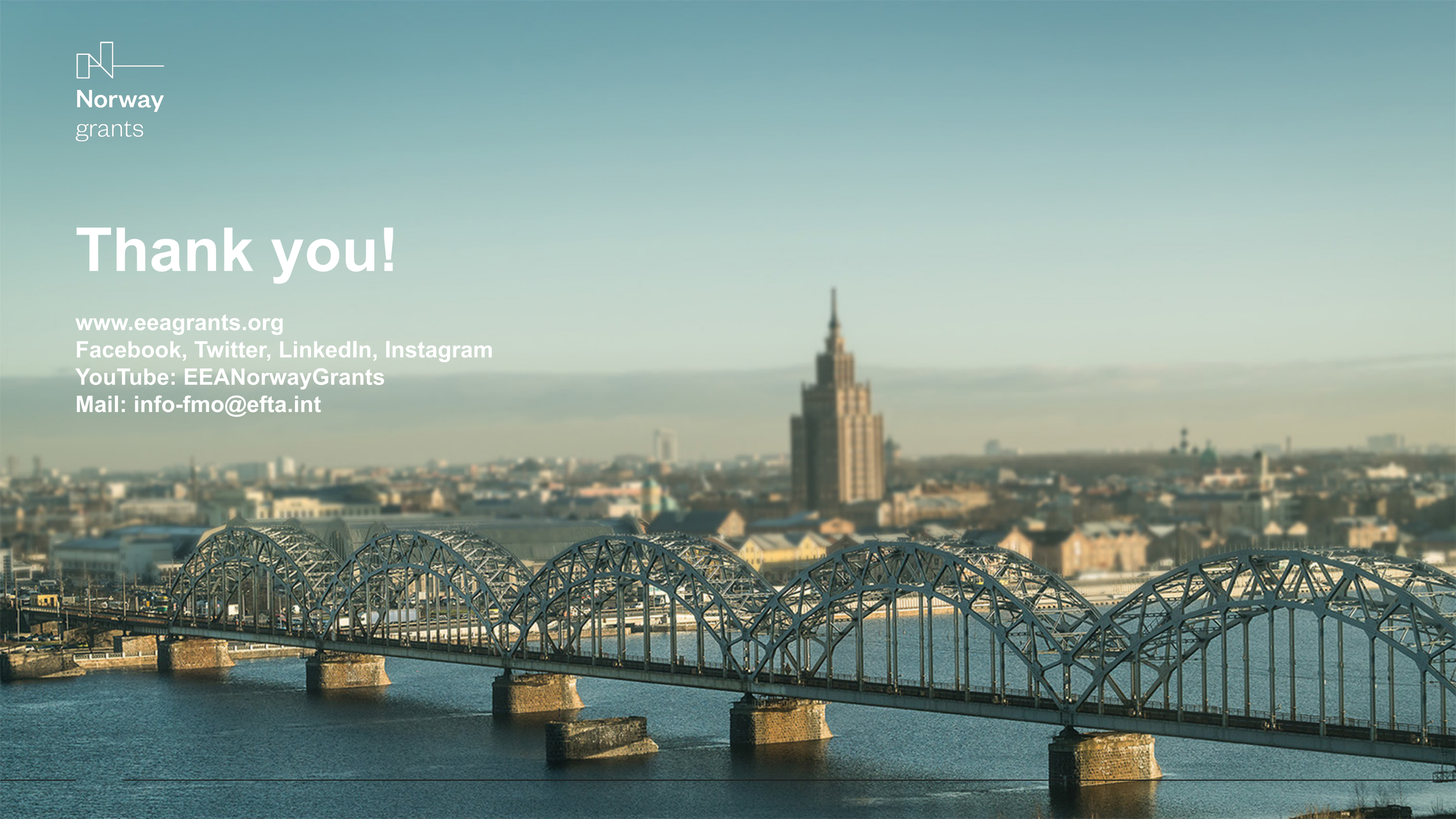
Thank you!

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