# P.PORTO

# **TESTES E PERFORMANCE WEB**

TECNOLOGIAS E SISTEMAS DE INFORMAÇÃO PARA A WEB

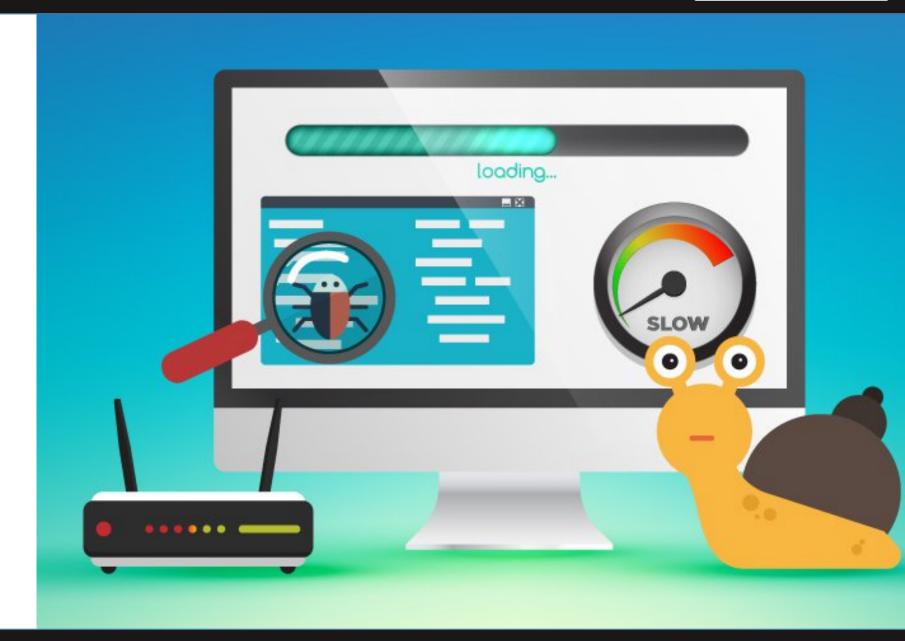
# POLITÉCNICO DO PORTO

ESCOLA SUPERIOR DE MEDIA ARTES E DESIGN



M04 – ASSETS OPTIMIZATION -WORKSHEET

TSIW 2023/2024





### **QUESTIONS**

- 1. Create a single HTML page with the following requirements:
  - 1. Use several distinct images;
  - 2. Display these images with different sizes;
  - 3. Display these images in different positions including off-screen positions;
  - 4. Don't look to image sizes and resolutions.
- 2. Use http-server npm package to allow you to serve the page;
- 3. Use Google Lighthouse to assess performance and record the results;
- 4. Then, using the learned lesson on the theoretical class to fix the image optimization problems that were reported in Google Lighthouse.
- 5. Reassess the page and record the results.



### **SUBMISSION**

- 1. Record both Google Lighthouse performance assessment (before and after optimizations techniques implementation) on a PDF file;
- 2. Upload initial version of the page and final version (with optimization techniques implemented).
- 3. Zip all files;
- 4. Rename the file with the following pattern: name\_surname\_studentNumber (e.g. João\_Ferreira\_4000000).