



# Motivating Safe Street Crossings – An EPS@ISEP 2024 Project

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## Outlook

1. Introduction
2. Project Supportive Modules
3. Project Development
4. Team Video

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## Introduction What is EPS?

- 1-semester capstone project / internship programme
- Prepare future engineers to think and act globally
- Engineering, product design and business undergraduates
- 19 European engineering schools:
  - 10 Golden Rules
    - EPS is **project centered**
    - Working language is **English**
    - Project groups composed **multinational**, group size 3-6 students, min. 3 nationalities **multi disciplinarily** desired



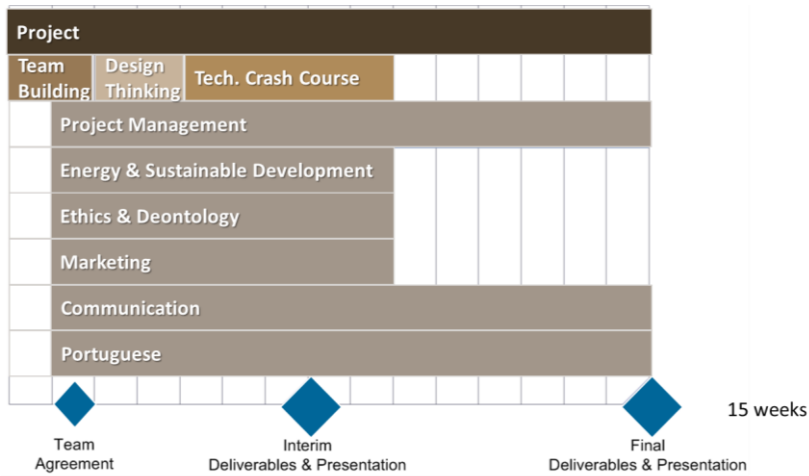
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## Introduction EPS@ISEP



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EPS@ISEP | BEST PRACTICES IN ENGINEERING EDUCATION

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## Introduction Team Formation

- Arriving to Porto – begin EPS
  - Belbin test
  - group formation
    - Colin Högvist, Industrial Management, Finland
    - Florian Haack, Mechanical Engineering, Germany
    - Jurjen de Vries, Mechatronics, Netherlands
    - Magdalena Durnwalder, Media Technology, Austria
    - Mats Geirnaert, Civil Engineering, Belgium
    - Selma Cordier, Mechanical Engineering, Spain
- List of different projects
  - Smart, Ergonomic Multipurpose Public Equipment



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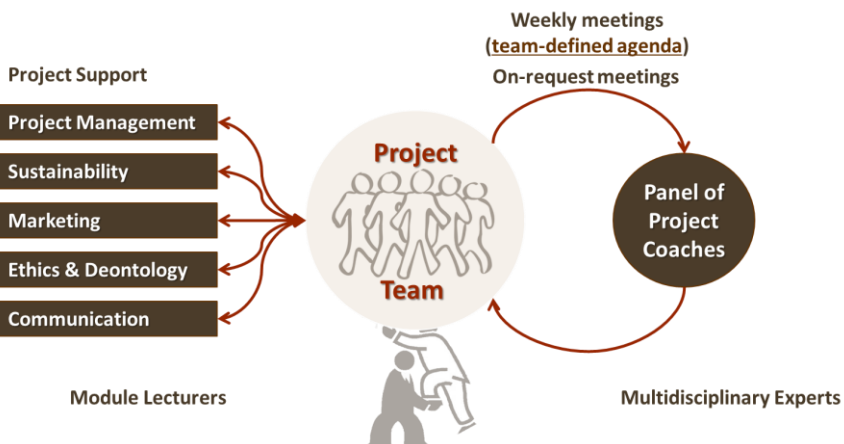
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## Project Supportive Modules EPS@ISEP



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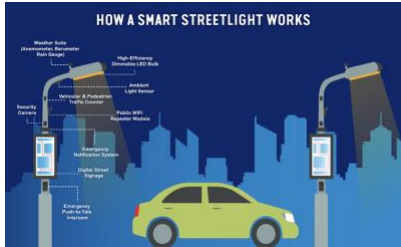
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## Project Supportive Modules Marketing

– “state of the art”



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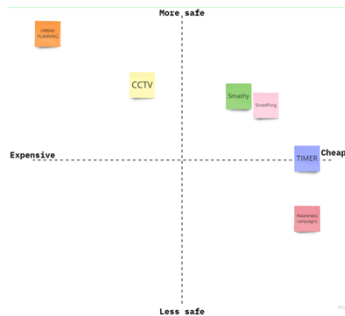


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## Project Supportive Modules Marketing

- Market segmentation, positioning, brand, design



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## Project Development First Ideas



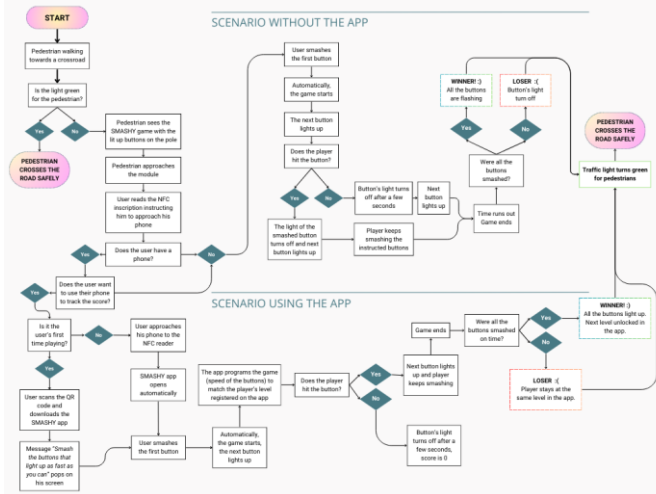
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# Project Development User Journey Flowchart



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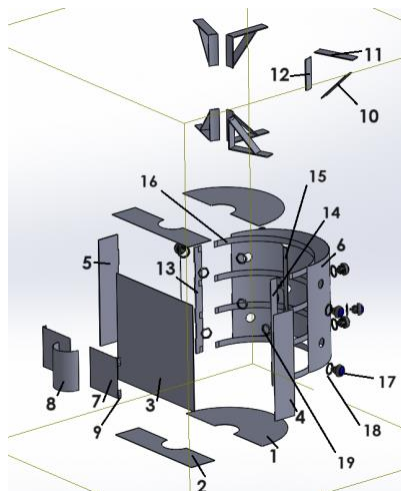
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# Project Development Structural Design



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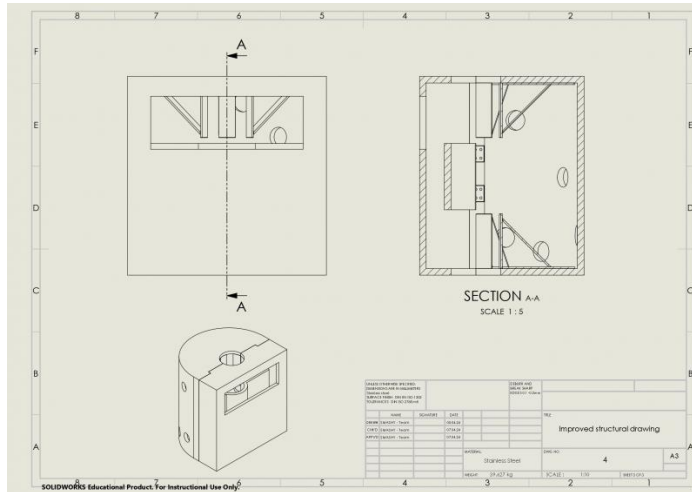
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## Project Development Technical Drawings



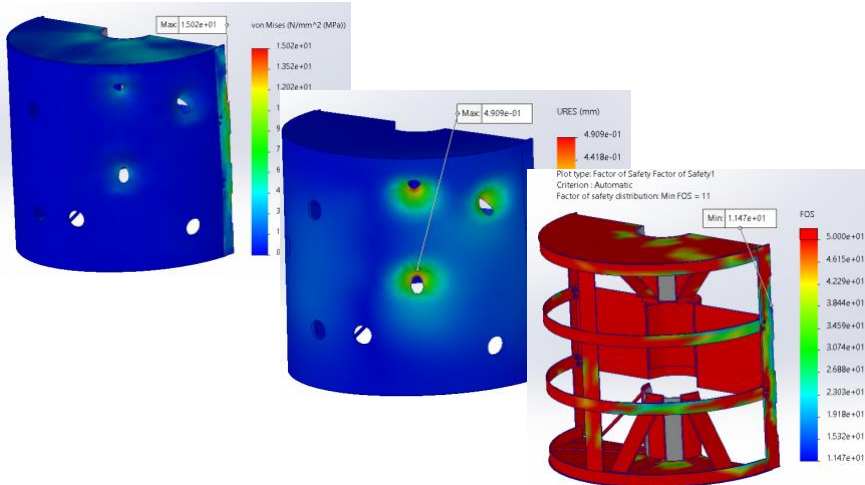
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## Project Development Stress Analysis



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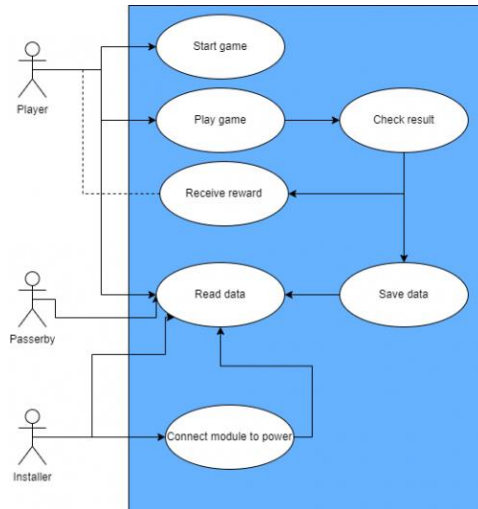
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# Project Development Use Cases



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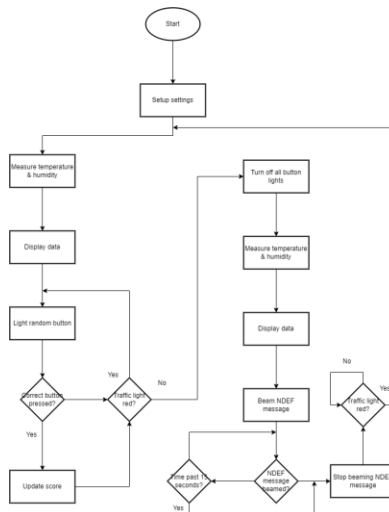
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# Project Development Program Flowchart



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## Project Development Packaging Proposal



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## Project Development Prototype Construction



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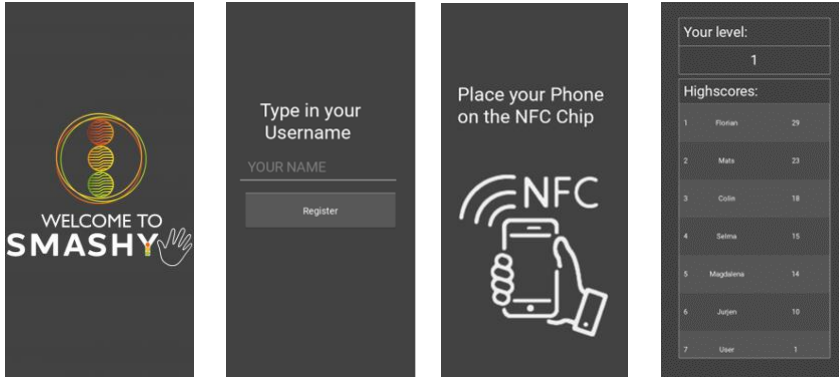
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## Project Development User App



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## Conclusions

- EPS program provided an innovative educational experience for the team members
  - learning approach, drawing knowledge from different fields in a series of subjects, from the different attributes and cultures of each member of the group
- Tangible result is the “Smashy” product
  - more important was the Team learning experience
- Main difficulties faced by the team
  - differences in culture, study fields and personalities can lead to frictions within the team
  - maintaining the motivation and unity of the team was not always an easy task

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## Team Video



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