EE-310 – « Systèmes Embarqués Microprogrammés »:
Final NDS Project Preparation Requirements and Submission Guidelines

- ## List of I/O peripherals of the NDS platform to include in the project

All the components in the following list, from 1 to 6, are mandatory to implement in the final NDS project to attend the oral exam and successfully pass the course. However, if you decide not to use one of them, you can replace that one by using one of the optional I/O peripherals (numbers 7-9 in the list).

1. **ARM Processors**
   Both ARM processors in the NDS must be used in your final project:
   - ARM9 processor - Describe for what you use it (e.g., which peripherals it controls).
   - ARM7 processor - Describe for what you use it (e.g., which peripherals it controls).
2. **Timers/Interrupts**
   - At least one timer/interrupt must be used and correctly configured.
3. **Graphics engines**
   - Both the main engine and sub engine must be used during the complete project.
   - More than one background on the two engines must be used to consider this part completely done. Different types of background configurations should be used.
4. **Keypad**
   - At least one key or the touchpad keys on the NDS must be used in the project. Interrupts must be used to consider this part completely done.
5. **Touchscreen**
   - The touchscreen must be used in the project.
6. **Sound**
   - Music must be used (at least one piece of music).
   - Sound effects must be included (at least two different effects).
7. **Secondary Storage (Optional)**
   - The use of secondary storage is optional in the project. If included, at least one value needs to be stored and retrieved by the NDS during the operation of the project.
8. **Wifi (Optional)**
   - The use of WiFi storage is optional in the project. If included, at least two NDS should be exchanging UDP messages.
9. **Sprites (Optional)**
   - The use of sprites is optional in the project. If included, at least one sprite needs to be used in the project and correctly use the dynamic memory allocation part.

Your code for the project should be well-structured and well-commented. We also recommend that you provide instructions on using your project (e.g., a brief description of how to start and play it).

- ## Submission Deadline and Instructions

The submission deadline for the project is **23h59 on Thursday, January 16th, 2025.** The submission link is on the course Moodle page. Please upload the compressed folder with your complete project and presentation. One member of the group can submit the project on behalf of both members of the group.

- ## Project Presentation Template

A template for the project presentation is available on the course Moodle at the following link:

https://moodle.epfl.ch/pluginfile.php/2802480/mod_resource/content/5/TemplateProjectNDSpresentation.pptx