

Project C

Topics

Topics will be presented one week before the project starts.

Instructions

The objective of this group project is to collaborate within small teams, explore a chosen topic, develop innovative solutions, simulate and execute these solutions, generate project documentation, and present the final outcomes. Team members are responsible for organizing and assigning roles and tasks among themselves.

- Students will work on a project **in the labs** during the 9th to 13th weeks of the semester, with the practical demonstration scheduled for the last week.
- Using BUT e-learning, students should submit a link to the GitHub repository containing the C project, required images, documents, and a descriptive README file. The submission deadline is the day before the demonstration."
- The AVR code must be written in C and/or Assembly and must be implementable on an Arduino Uno board using the toolchains provided during the semester, specifically PlatformIO. The use of Arduino frameworks/libraries or any other development tools is not permitted!
- Create your own libraries for new components.
- Physical implementation on AVR is required, not just computer simulation.

Recommended README.md file structure

Team members

- Member 1 (responsible for ...)
- Member 2 (responsible for ...)
- Member 3 (responsible for ...)

Theoretical description and explanation

Enter a description of the problem and how to solve it.

Hardware description of demo application

Insert descriptive text and schematic(s) of your implementation.

Software description

Put flowcharts of your algorithm(s) and direct links to source files in **src** or **lib** folders.

Instructions

Write an instruction manual for your application, including photos or a link to a video.

References

1. Write your text here.
2. ...