

Technical document

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<u>Description</u>: This file describes all the functionality for the Android application use in project SAMROBOT.

I. The Principal functionality

We decide to create 6 windows for the SAMROBOT application:

- > A window which describe how to connect via Bluetooth
- ➤ A window to pilot the Robot (autonomy and manual mode)
- A window showing the device connected
- > 3 windows showing the different information following:
 - o the information of the school, ESIGELEC
 - o the information of the team who develop the project
 - o the information about the robot functionalities

II. Interface human machine



Figure 1: principal menu of the application



Figure 2: data information

III. The upgrade functionality

Due to the deadline of the project, we decide to report some functionality who can be useful and more user-friendly in the SAMROBOT application.

So, we thought about different upgrade of the application:

- 1. Add drop menu for select the different type of information
- 2. Add an image and a notification when the robot detects an obstacle
- 3. Add an image to detect when the status of the connection
- 4. Develop a functionality to swipe between the different screen, without using button
- 5. Add a grey button when the device is not connected, and the button will be available when the device is connected to the robot
- 6. Add a joystick to pilot the robot

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