IéTI Project : Biophotonic

Driving a piezo-electric component

Picture 1: Piezosystem monted on a microscope objective

Picture 2: Electronic component driving the piezosystem

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How does it work ?
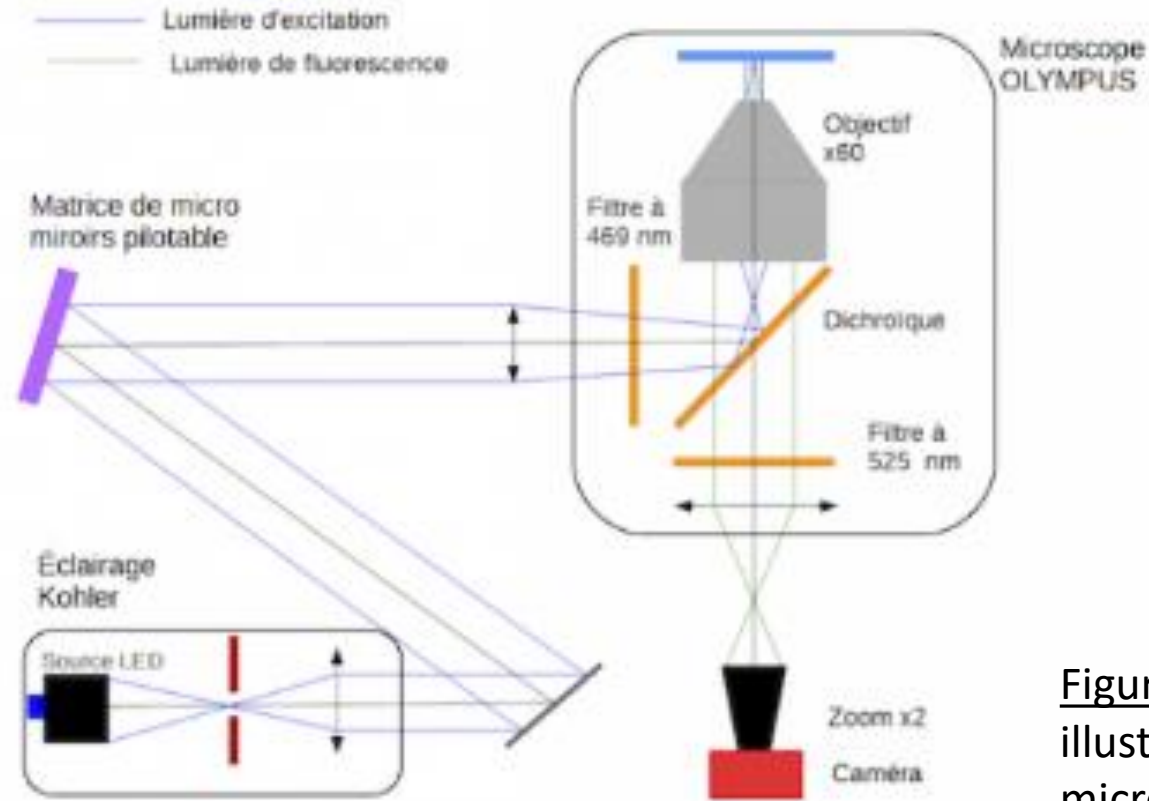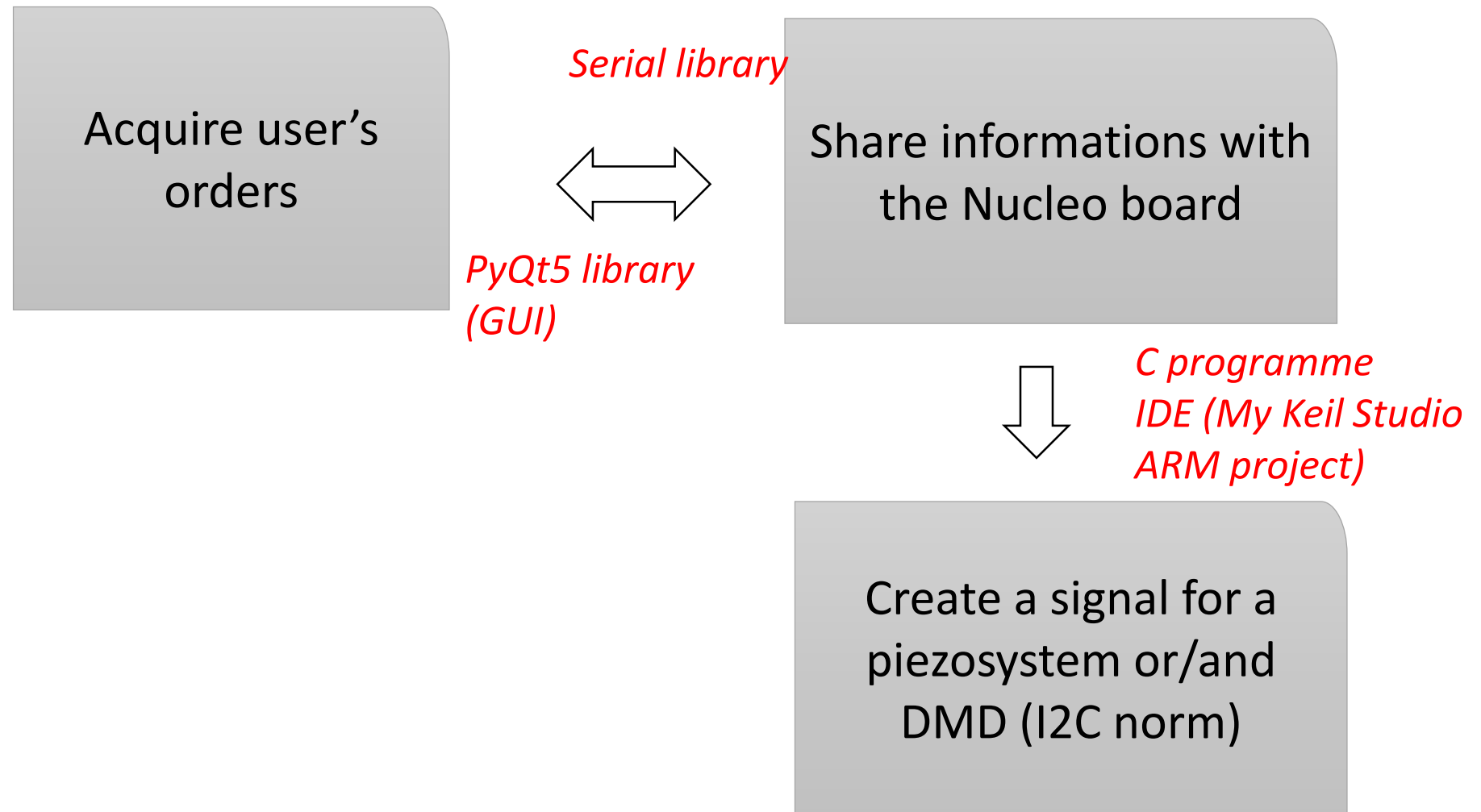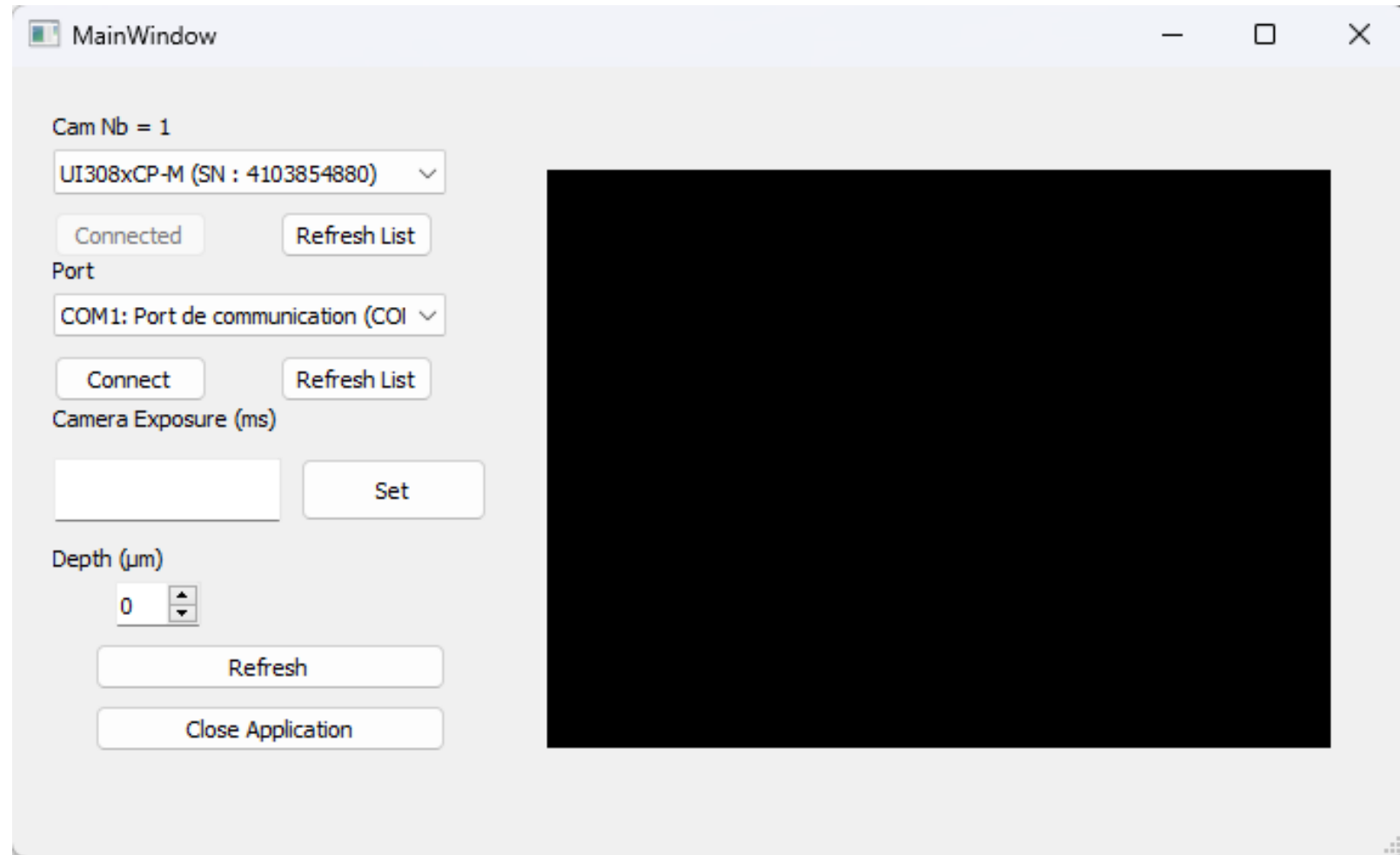

Figure 1: Schéma du montage

Figure 1: Functional illustration of the microscope (from the LEnsE

Main Objectives and Structure of the project

Acquire user's orders

Serial library

Share informations with the Nucleo board

PyQt5 library (GUI)

C programme IDE (My Keil Studio ARM project)

Create a signal for a piezosystem or/and DMD (I2C norm)

Graphical Interface

Team Organisation

- Ymeng Sun – Chen Lin
- Communication between computer and Nucleo board

- Tenzin Montlouis
- Design of the graphical interface

- Juliette Rothnemer – Yvan Glory
- Documentation to read and to produce

Difficulties / Main improvements

- Graphical interface
- PySide / PyQt -> Qt Designer
- Connecting the serial part to the interface

- Accurency of the system
- Driving a DMD