# **Report of Project 4**

### [Group Members]

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### [Experimental Objectives]

- 1. Understanding the programming process and achieve required functions;
- 2. Implementing various functions of graphical user interface (GUI);

# [Experimental Apparatus]

- 1. USB-4704;
- 2. DAQNavi Driver for USB-4704;
- 3. ELVIS II+;
- 4. Qt creator.

# [Experimental Procedures and Requirements]

- Part 1. Select a language for programming using DAQ Navi SDK and write the user interface for display and user interaction. The program needs to realize the following functions:
  - ➤ Integrate project I, ii and iii functional modules to form a unified interface for user interaction;
  - > It can simulate input and display, simulate output and square wave output independently.

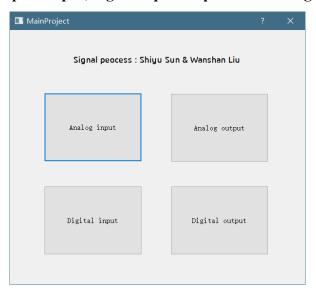
After the program coding, test and debug the program, record the problems encountered and how to deal with them; After passing the test, publish the executable file and display the function on another PC.

#### [Results and discussion]

Part 1. Select a language for programming using DAQ Navi SDK and write the graphical user interface (GUI) for display and user interaction.

#### 2.1 The logic of program development

The program is composed with one part. We can choose to enter any part including analog input/output, digital input/output as following GUI.



When you click any part, you will enter the part which had realized before.

[Analysis and discussion]

#### Part 1. Problems and solutions

Problems: The call path changes after the program is published.

Solutions: The program gets the application path instead of the absolute path.

互评: 10 分 陈子龙, 李润桓小组。

该小组的各个实验报告内容完整,结构清晰。每份报告都详细介绍了程序开发逻辑,并且每个程序的功能都相对比较完整。除此之外,在实验报告中,他们还画了非常清晰的软件使用导图,为用户使用软件提供了很好的参考。在实验报告中,他们会对实验过程中出现的问题进行讨论,并且提出了比较好的解决办法。在最后,分析各个项目的结果,并分析存在的问题和不足以及可能的解决办法。