

Certified LabVIEW Developer (CLD) Success Package: User Guide

Objective

The CLD success exercises are a step by step approach to develop an application that leads to a full CLD solution. Each exercise has a detailed application specification that is similar to the CLD specification. The specifications consist of general and technical requirements for the exercise application.

The CLD Success Package is not a tutorial or training guide.

If there are areas of unfamiliarity it is left to the candidate to review training materials in order to resolve questions. The certification forum is the preferred method for posting questions and participating in the certification community.

How to Use the CLD Success Package

1. **Review** the specification and become familiar with the application operation and details of the exercise.
2. **Develop** a solution. Be sure to read and use the *CLD Preparation Guide* when developing the exercises. Track the time from start to completion.
3. **Evaluate** the functionality of the solution to the specification including, but not limited to, the following:
 - Steps occur in order.
 - Indicators turn on and off at correct times, and messages are displayed at the correct time and have the correct format.
 - Switches and dials operate correctly and start sequences or actions as required.
 - Verify all controls are enabled and disabled correctly.
 - Verify all results files are correctly formatted and contain all data results.
 - Timing periods must be correct, pause and resume must not lose time.
 - Application is responsive within 100 ms.
4. **Determine** any sources of the following:
 - Causes of long development times
 - Knowledge gaps
 - Time spent on research

Align areas where review is needed with the topics from the *CLD Preparation Guide*.

5. **Analyze** how small changes in the specification and additions to the data structures would impact the solution method. Each exercise has proficiency elements in common with the CLD exam. A best practice is to consider how simple changes to the functional requirements and/or operational steps affect a solution.

What to Do When Finished

Upon completing the CLD Success Package exercises, proceed to the CLD sample exams to practice full-scale application development.

Development Timing

Each of the CLD exercises should take about 30 to 45 minutes. If an exercise takes more than one hour to complete, the candidate should evaluate areas of confusion, unfamiliarity, or coding efficiency.

General Topics Covered

Refer to the CLD preparation guide for the listing of the proficiencies tested in the CLD exam.

Format of CLD Success Package

Specifications

The outline of the specification starts with the objective of the application, followed by the general operation and specific descriptions of the application functionality. Some exercises contain follow up questions and/or an additional challenge exercise.

The LabVIEW Project

The exercises are organized in a project format. There are virtual folders that store controls, the front panel exercise VI's, and a solution set of VI's.

- The front panel exercise VI contains the front panel controls and indicators to be used in the solution.
- The solution is only one method that meets the requirements of the specification. The solution folder will contain a main VI and any associated subVI's.
- The controls' folder contains the type definitions used for the exercise, and any additional type definitions used for the solution. The solution type definitions should not be used in your solution. Part of the exercise is to make original type definitions for a unique solution.



Notes: Any data files will be included in the root of the project.

All of the files for the project are in a flat file organization on disk.