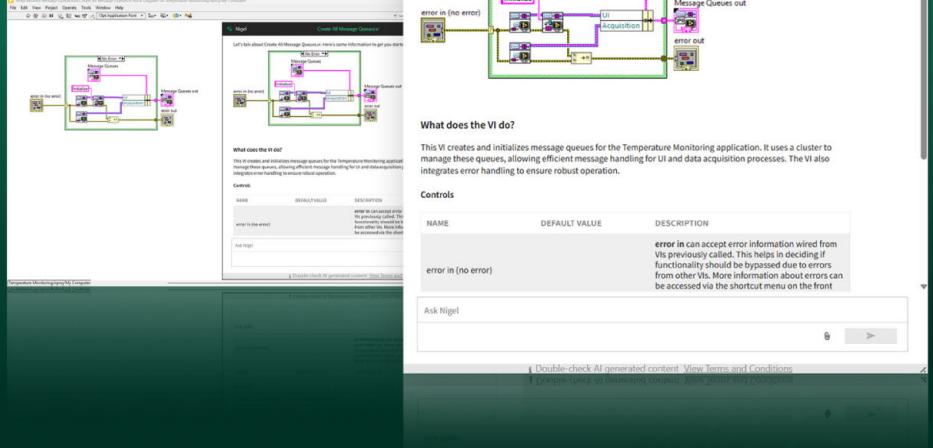


# NI Nigel™ AI

Your trusted companion in NI LabVIEW

Nigel AI delivers contextual guidance, automation, and insights in NI software to help eliminate time consuming development tasks—boosting your productivity and impact.



## What Makes Nigel Special

Unlike general-purpose AI tools, Nigel is built for test and measurement, equipped with our extensive domain expertise and trusted data to deliver smarter, more relevant answers.

### Expert in Test

Nigel has been taught test system design, methodologies, and data analysis so you can get instant information on best practices, measurement setup, and more.

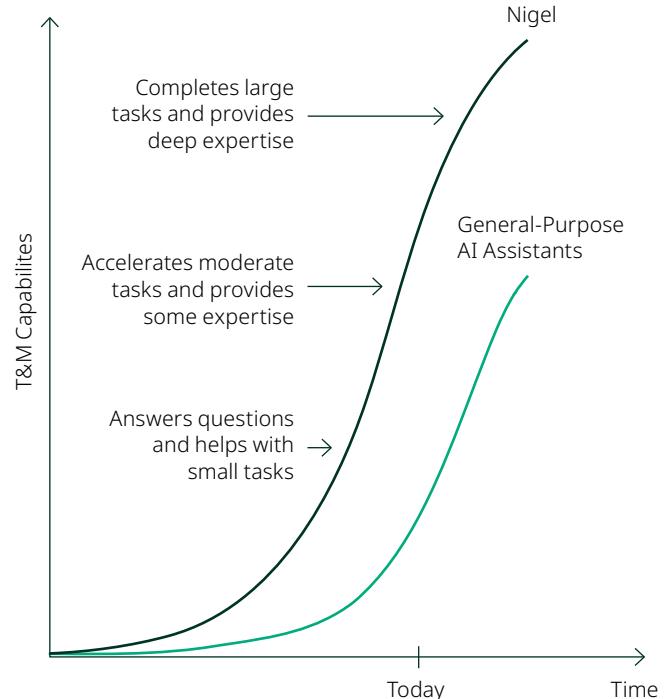
### Expert in Hardware

Nigel has direct access to NI hardware specifications and knowledge of your system to assist with test system design and development. This is combined with domain expertise to get recommendations well-suited for your application.

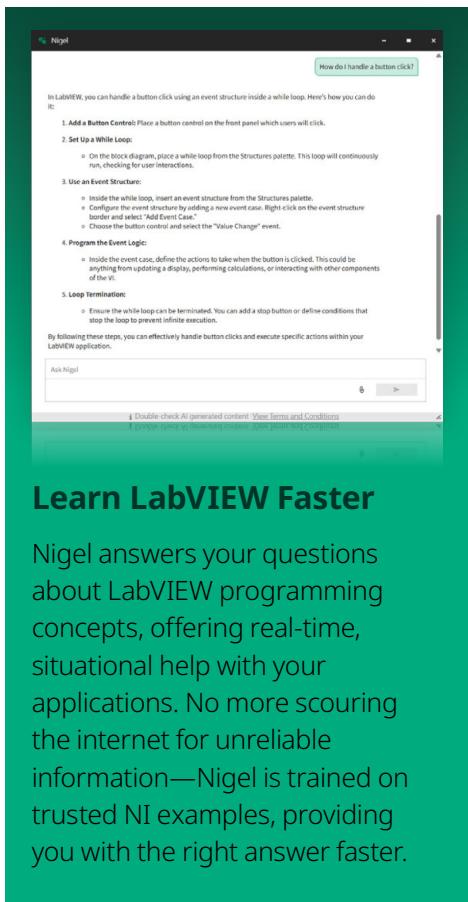
### Expert in Software

Nigel is integrated into LabVIEW, providing help on the spot based on what you're working on without the need to switch between software applications.

### Nigel Delivers More Value to Test Engineers



# How Nigel Can Help You



**How do I handle a button click?**

In LabVIEW, you can handle a button click using an event structure inside a while loop. Here's how you can do it:

1. Add a Button Control: Place a button control on the front panel which users will click.
2. Set Up a While Loop:
  - On the block diagram, place a while loop from the Structures palette. This loop will continuously check for user interactions.
3. Use an Event Structure:
  - Inside the while loop, insert an event structure from the Structures palette.
  - Configure the event case by adding a new event case. Right-click on the event structure border and select "Add Event Case".
  - Choose the button control and select the "Value Change" event.
4. Program the Event Logic:
  - Inside the event case, define the actions to take when the button is clicked. This could be anything from updating a display, performing calculations, or interacting with other components of the application.
5. Loop Termination:
  - Ensure the while loop can be terminated. You can add a stop button or define conditions that stop the loop to prevent infinite execution.

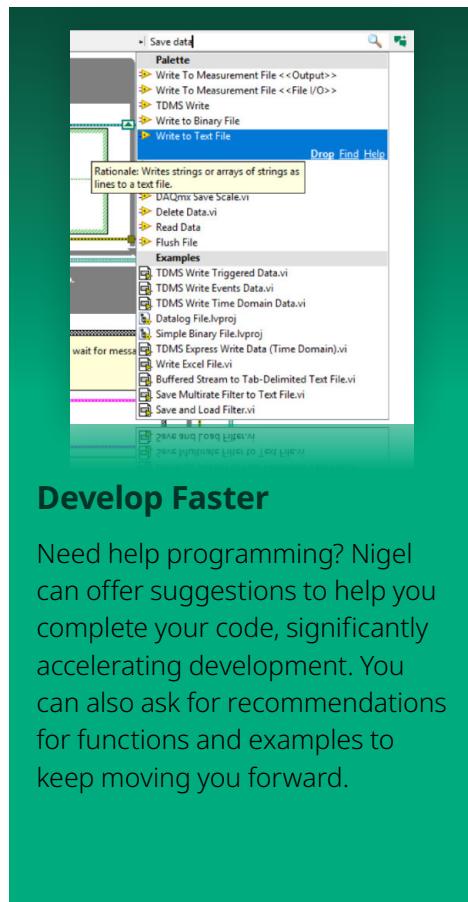
By following these steps, you can effectively handle button clicks and execute specific actions within your LabVIEW application.

Ask Nigel

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## Learn LabVIEW Faster

Nigel answers your questions about LabVIEW programming concepts, offering real-time, situational help with your applications. No more scouring the internet for unreliable information—Nigel is trained on trusted NI examples, providing you with the right answer faster.



**Save data**

**Palette**

- Write To Measurement File < Output >
- Write To Measurement File < File I/O >
- TDMS Write
- Write To Binary File
- Write to Text File

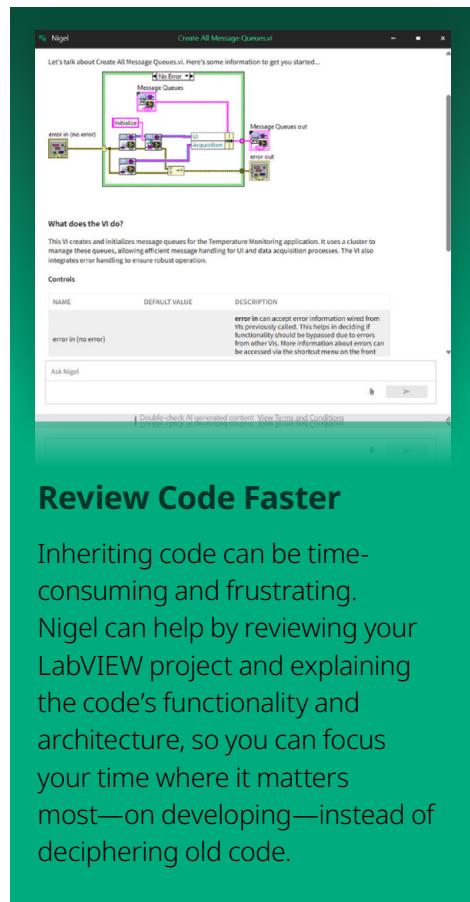
**Rationale:** Writes strings or arrays of strings as lines to a text file.

**Examples**

- DAQmx Save Scale.vi
- Delete Data.vi
- Read Data
- Flush File
- Wait for message
- Ask Nigel

**Develop Faster**

Need help programming? Nigel can offer suggestions to help you complete your code, significantly accelerating development. You can also ask for recommendations for functions and examples to keep moving you forward.



**Create All Message Queues.vi**

Let's talk about Create All Message Queues.vi. Here's some information to get you started...

**Block Diagram:**

```
graph LR
    Start(( )) --> In[error in (no error)]
    In --> Wait[Wait for message]
    Wait --> Out[Message Queues out]
    Out --> End(( ))
```

**What does the VI do?**

This VI creates and initializes message queues for the Temperature Monitoring application. It uses a cluster to manage these queues, allowing efficient message handling for UI and data acquisition processes. The VI also integrates error handling to ensure robust operation.

**Controls:**

NAME	DEFAULT VALUE	DESCRIPTION
error in [no error]		error in can accept error information wired from VIs previously called. This helps in deciding if function blocks can be executed or if they should be bypassed from other VIs. More information about errors can be accessed via the shortcut menu on the front panel.

**Review Code Faster**

Inheriting code can be time-consuming and frustrating. Nigel can help by reviewing your LabVIEW project and explaining the code's functionality and architecture, so you can focus your time where it matters most—on developing—instead of deciphering old code.

## Frequently Asked Questions

### Q: Is Nigel secure?

**A:** Yes, Nigel is built on Emerson's secure and robust cloud operations platform. It uses best-in-class OpenAI models, hosted on Microsoft Azure with enterprise-grade privacy and security guarantees.

### Q: Does Nigel store my data?

**A:** No, Nigel only stores your prompt data locally. Emerson does not have access to your conversations with Nigel unless you explicitly share that information with us.

### Q: Can I turn Nigel off?

**A:** Yes, Nigel is an opt-in feature that can be disabled at any time by the user.

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