

# Controls and Containers

*Adding controls such as buttons and containers to store these controls*

## Adding Controls and Containers

```
1  #pragma once
2
3  #include <wx/wx.h>
4
5  class Frame : public wxFrame
6  {
7  public:
8      Frame();
9
10 private:
11     DECLARE_EVENT_TABLE()
12
13     wxPanel* panelOne;
14     wxPanel* panelTwo;
15
16     wxButton* exitButton;
17     void onExit(wxCommandEvent&);
18     wxButton* okayButton;
19     wxButton* emptyButtonOne;
20     wxButton* emptyButtonTwo;
21 };
```

*Frame.h*

## Creating and Initializing Objects and Containers in wxWidgets

- 1) Set your desired variables within your frame's class (as pointers)
- 2) Initialize these variables within your frame's source file ([Frame.cpp](#))
  - a) wxPanel's constructor arguments
    - i) this ~ **Parent window, or rather the frame this panel is within**
    - ii) wxID\_ANY ~ **Inactionable, any ID may be set**
    - iii) Point on the screen and size
      - (1) For any program with only such variable, such as a panel or a button will take up the whole screen automatically.
  - b) wxButton's constructor arguments
    - i) panelOne / panelTwo ~ **Where we're placing our button**
    - ii) wxID\_ANY ~ **Button's ID, buttons with no action have no ID**
    - iii) "emptyButtonOne" ~ **What the button's text will be**

## Event Tables

### **Creating and Adding Events to an Event Table**

- 1) Declare an event table within your frame's class
  - a) Within [Frame.h](#), DECLARE\_EVENT\_TABLE() does this
- 2) Initialize your event table within your frame's source file
  - a) Within Frame.cpp, lines 3 and 5 start and end this event table.
  - b) **(Line 3)** Explaining arguments
    - i) Frame ~ **Class (frame) connected to this event table**
    - ii) wxFrame ~ **Class classification**
- 3) Add a unique ID to an object, and connect this ID to a function
  - a) Within the variable **exitButton**, wxID\_EXIT (a present wxWidgets ID) is placed, as it's function will be to exit the program
  - b) We create a function for the button **onExit**, with a simple close command
  - c) Within line 4 (**EVT\_BUTTON( ... )**), we connect our desired function with the ID we want associated to it.