

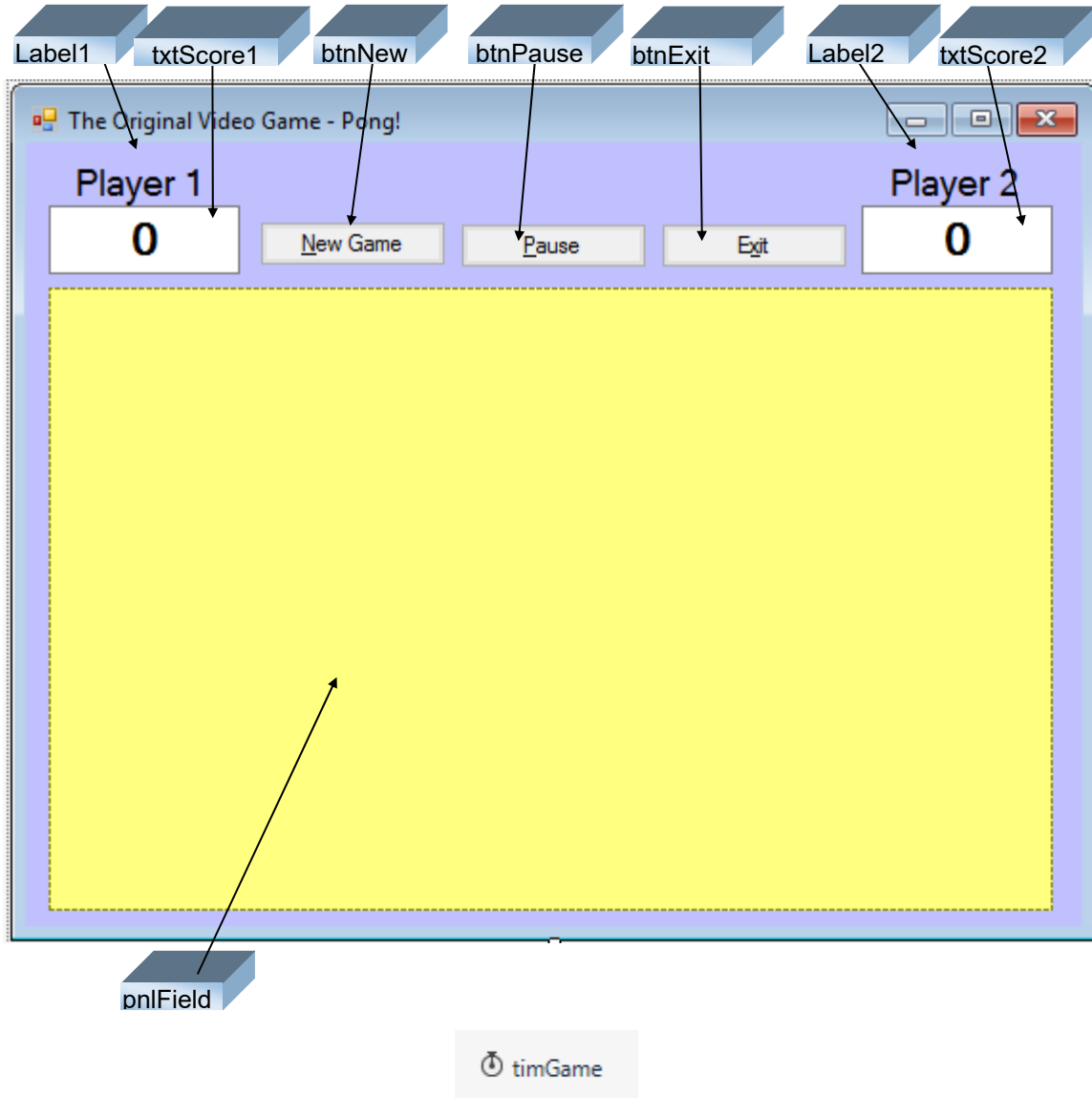
Bonus Project 12 - Pong!

In the early 1970's, while Bill Gates and Paul Allen were still in high school, a man named Nolan Bushnell began the video game revolution. He invented a very simple game - a computer version of Ping Pong. There were two paddles, one on each side of the screen. Players then bounced the ball back and forth. If you missed the ball, the other player got a point.

This first game was called Pong. And, Nolan Bushnell was the founder of Atari - the biggest video game maker for many years. (Nolan Bushnell also founded Chucky Cheese's Pizza Parlors, but that's another story!) In this bonus project, I give you my version of Pong written with Visual C#. I don't expect you to build this project, but you can if you want. Just load the project (named **Pong**) and run it. Skim through the code - you should be able to understand a lot of it. The idea of giving you this project is to let you see what can be done with Visual C#.

In this version of Pong, a ball moves from one end of a panel to the other, bouncing off side walls. Players try to deflect the ball at each end using a controllable paddle. In my simple game, the left paddle is controlled with the A and Z keys on the keyboard, while the right paddle is controlled with the K and M keys (detected using KeyPress events). My solution freely borrows code and techniques from several reference sources. The project relies heavily on lots of coding techniques you haven't seen. You will learn about these as you progress in your Visual C# studies.

Start Visual C#. Open the project named **Pong** in the project folder (**\BeginVCS\BVCS Projects**). Look at the form. Here's what my finished form looks like (with control names identified):



The graphics (paddles and ball) are loaded from files stored with the application. Try to identify controls you have seen before. Go to the properties window and look at the assigned properties. Run the project and play the game with someone. In particular, notice the cool sounds (if you have a sound card in your computer). This is something that should be a part of any Visual C# project – these sounds are also loaded from files. Have fun with Pong! Can you believe people used to spend hours mesmerized by this game? It seems very tame compared to today's video games, but it holds a warm spot in many people's gaming hearts. Here's a game I was playing:

