Godot Classroom Challenge 1: Pong

Welcome to your very first step into making games with Godot! In this challenge, we'll be creating a classic game: Pong. Whether you're completely new to Godot or game development, don't worry! I'll guide you through everything, from downloading Godot to testing out your finished game.

We'll take it step-by-step together, and by the end, you'll have a working Pong game you can be proud of. Along the way, you'll learn important skills like organizing your project folders, creating scenes, adding scripts to nodes, combining multiple scenes, and connecting signals. All of these are essential parts of making games in Godot. There are lots of ways to build this game, but the approach we'll use is designed to introduce you to Godot's core features gradually, so you can feel comfortable and confident.

How to start:

- If you haven't already, download all of the files in the "Challenge Files" folder.
- Open up the Godot "Classroom Challenge 1: Pong" Slides.
- Begin following the instructions from the beginning, be careful not to miss any steps!
- If you have any issues, concerns, or strange errors then hop into the #challenge-1-pong forum channel and make a post. We have lots of helpful community members who will all be doing the challenge alongside you and encountering all the same problems.

Once you've managed to complete the project, you can have a look at extending the game and seeing if you can add some more features! Come up with your own extras or look at the table on the next page for some ideas!

Happy Coding! Good Luck!



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Extras to Add

Beginner:

- Use the two sounds in the folder to add sounds effects. Look into the AudioStreamPlayer node and the .play() function.
- Add additional obstacles in the playing field for the ball to bounce off of.
- Display controls on the screen at the start of the game. Either on some sort of main menu, or as a pop-up using a label.

Intermediate:

- Add a basic opponent paddle that tracks the ball's Y position and moves to match it. Basically, a simple automatic opponent.
- Add power-ups that you can knock the ball into to change the game (increase ball speed, add another ball, freeze opponent, etc.)
- Add a visual trail behind the ball, lookup the Trail2D in the Asset Library or try and code your own with a Line2D.

Experienced:

- Add JUICE, things like screen shake, paddle wobble, particle effects, chromatic abberation, sounds effects, animations and colour changes. These all really take the game to the next level.
- Let the Paddles move more freely around the arena, change up what the objective of the game is. This will require some design and thought as the normal rules of Pong will break!
- If you are truly brave, add some networking to the project. Local or even online multiplayer.

