

Színusz függvény ábrázolása 2D-ben

```
#include <raylib.h>
#include <math.h>

int main() {
    // Initialization
    const int screenWidth = 800;
    const int screenHeight = 450;
    InitWindow(screenWidth, screenHeight, "Sinus Function Plot - raylib");

    SetTargetFPS(60); // Set FPS

    while (!WindowShouldClose()) { // Main game loop
        // Update

        // Draw
        BeginDrawing();

            ClearBackground(RAYWHITE); // Clear the background

            // Draw the axes
            Vector2 origin = { (float)screenWidth/2, (float)screenHeight/2
};
            DrawLine(origin.x, 0, origin.x, screenHeight, BLACK); // Y-axis
            DrawLine(0, origin.y, screenWidth, origin.y, BLACK); // X-axis

            // Draw the sine function
            for(int i = -screenWidth/2; i < screenWidth/2; i++) {
                // Calculating points
                float x1 = (float)i;
                float y1 = sinf(x1 * DEG2RAD) * 100; // Scale the sine wave
                float x2 = x1 + 1;
                float y2 = sinf(x2 * DEG2RAD) * 100; // Scale the sine wave

                // Transform points to screen space
                x1 += origin.x;
                y1 = origin.y - y1; // Invert y1 to match screen coordinates
                x2 += origin.x;
                y2 = origin.y - y2; // Invert y2 to match screen coordinates

                // Draw line segment
                DrawLine(x1, y1, x2, y2, BLUE);
            }

            DrawText("Sinus Function Plot", 10, 10, 20, BLACK); // Title
            DrawText("X-Axis", screenWidth - 50, origin.y + 10, 10, BLACK);
```

```
// X-axis label
        DrawText("Y-Axis", origin.x + 10, 10, 10, BLACK); // Y-axis
label

        EndDrawing();
    }

    CloseWindow();

    return 0;
}
```

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Permanent link: https://edu.iit.uni-miskolc.hu/muszaki_informatika:raylib_vis_functions?rev=1706461864

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