

Game Programming Resources

C and SDL2

Learn Video Game Programming in C

https://www.youtube.com/playlist?list=PLT6WFYYZE6uLMcPGS3qfpYm7T_gViYMMt

Notes

- To maintain the complexity of the main function, event handling and rendering is done in separate functions called 'processEvents()' and 'doRender()' respectively. this frees up the main application loop.
- To do keyboard event handling, the SDL_GetKeyboardState() function is used instead of the event.key.keysym.sym enumeration. The SDL_GetKeyboardState() works similarly to the SDL_GetMouseState() function, but instead of returning information about the keyboard as output parameters (there are way to many keyboard states to do that), this function returns a pointer to an array of key states.
- Create one object that encapsulates all of the game data (called GameState). The root level hierarchical structure. This includes resources for the game.

```
typedef struct {  
    // Players  
    Man man;  
  
    // Images  
    SDL_Texture* star;  
} GameState;
```

- Use a separate function to do all of the initialization of game state data and resource loading. called 'loadGame()'.
- An interesting technique that the author uses is to use a single generic surface to create textures, instead of creating a new surface for each texture:

```
SDL_Surface* surface;  
  
// Load first image  
surface = IMG_Load("/images/image1");  
image1 = SDL_CreateTextureFromSurface(renderer, surface);  
SDL_FreeSurface(surface);  
  
// Load second image  
surface = IMG_Load("/images/image2");  
image2 = SDL_CreateTextureFromSurface(renderer, surface);  
SDL_FreeSurface(surface);
```

Learning C Game Programming - Simple Gun Shooting

<https://www.youtube.com/watch?v=FCRmloX6PTA>

Learning C Game Programming - Simple Particles

<https://www.youtube.com/watch?v=xYHkJQKBf8g>

Tic-Tac-Toe Game in C with SDL — Procedural vs Functional

<https://www.youtube.com/watch?v=gCVMkKgs3uQ>

Tile-Based Game Programming

SDL2 Isometric Game Tutorial

https://www.youtube.com/watch?v=8xf_ouTpd1c

Creating Isometric Worlds: A Primer for Game Developers

<https://gamedevelopment.tutsplus.com/tutorials/creating-isometric-worlds-a-primer-for-game-developers--gamedev-6511>

An Updated Primer for Creating Isometric Worlds, Part 1

<https://gamedevelopment.tutsplus.com/tutorials/creating-isometric-worlds-primer-for-game-developers-updated--cms-28392>

Create Your Own Isometric Tile-Based Game: Part 1

<http://bigspritegames.com/isometric-tile-based-game-part-1/>