

## File structure

### main.c

- initialize SDL window
- initialize game
- main loop
  - processInputEvents
  - runGameCycle
- uninitialize SDL

### menu.c

- **showStartScreen()**
- **showLeaderboard()**
- **showSettings()**
- **showPauseScreen()**
- **menuHandleInput(event)**

### render.c

- **renderGame(game, snake)**  
interface to STL framework

### input.c

- **processInputEvents(gameData\_t)**

### game.c

- **gameInit()**
  - init snake
  - place food
  - define initial gameData struct
- **handleCollision()**
- **handlePortals()**
- **runGameCycle()**
  - snake move
  - check eaten
  - snake grow
  - place food
  - handleCollision
  - handlePortal

### snake.c

- **snakeInit()**
- **snakeGrow()**
- **snakeMove()**
- **snakeSetDir(ENUM dir)**
- **snakeSetHeadPos(x y)**
- **snakelsAlive()**

### food.c

- **placeFood(int count)**
- **checkEaten()**

### ai.c

- initialize ai
- moveAi
  - decision making
- check AI collision (game?)

### map.c

- generate map?
  - random map generation based on difficulty
- load map preset
  - load from file?
  - store in source file?