

# SDP Flow Chart

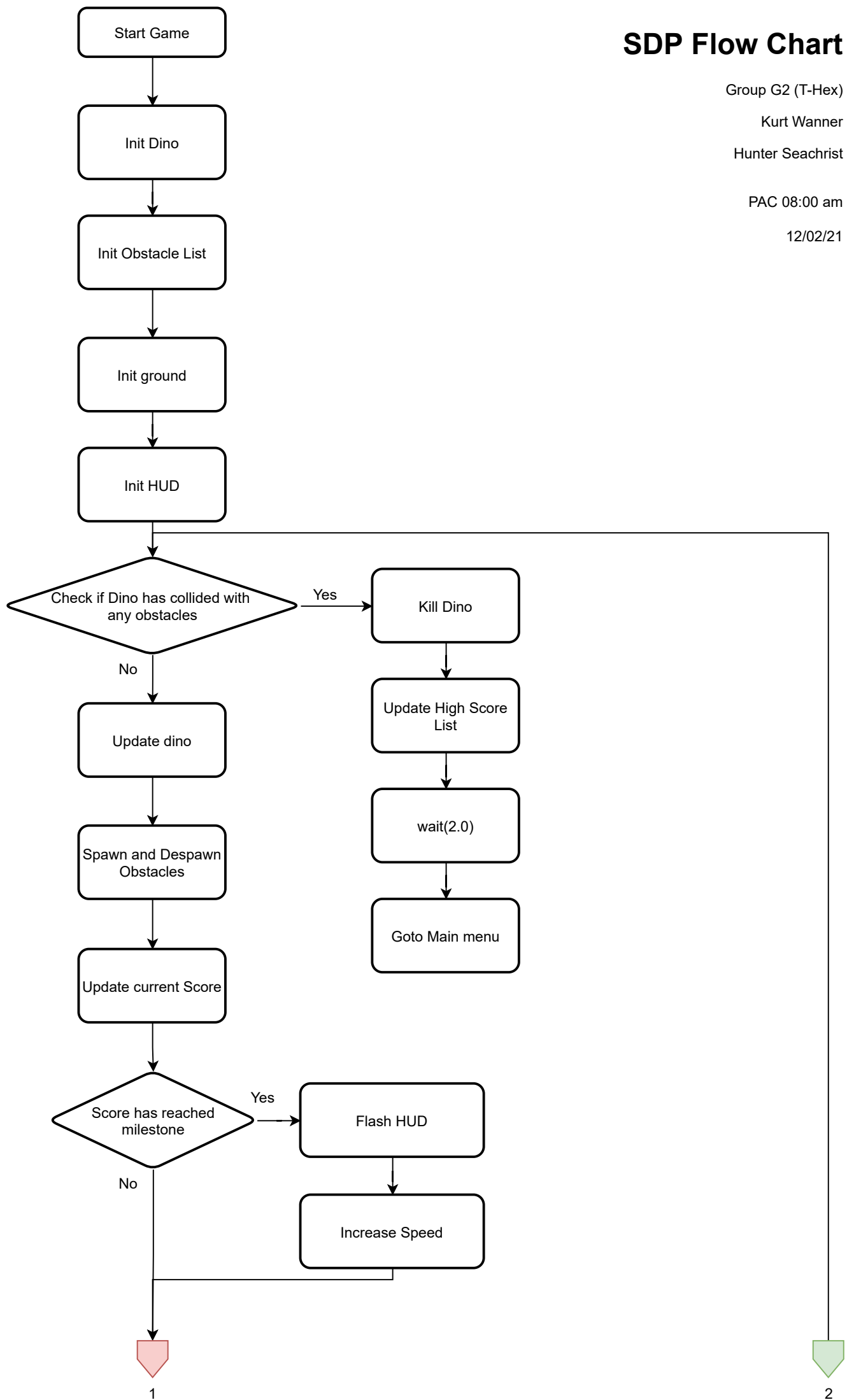
Group G2 (T-Hex)

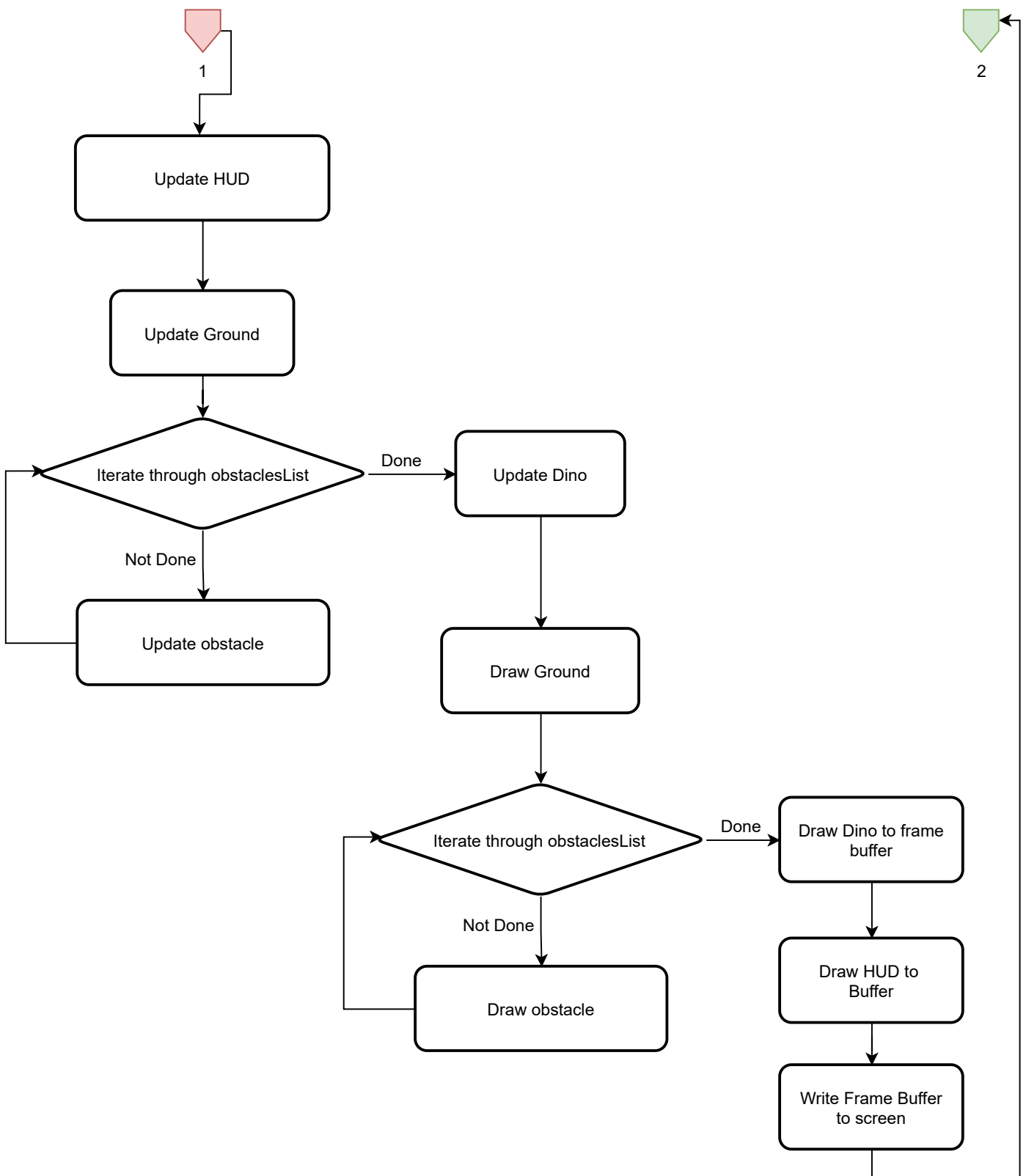
Kurt Wanner

Hunter Seachrist

PAC 08:00 am

12/02/21





## Functions

- \* Dino Constructor - Initializes Dino Object (velocity, acceleration, position, graphics, etc.)
- \* Obstacle Constructors - Initializes individual obstacles to be non-existent in the game field)
- \* Ground Constructor - Initializes the ground graphics
- \* HUD Constructor - Initializes the Heads Up Display. This includes the "Score" and "Hi Score" graphics
- \* initObstacleList() - Runs the Obstacle Constructor for all obstacles in the obstacleList
- \* Dino::Update() - Checks for User input and changes dino state based on that. Also updates Dino position, velocity, and acceleration.
- \* spawnObstacles() - Spawns obstacles at a finite set of time intervals based on RNG. Also despawns obstacles off screen
- \* updateScore() - Updates the current score
- \* scoreReachedMilestone() - Checks if the score has reached a multiple of 100

# Functions (continued)

- \* HUD::flash() - flashes heads up display
- \* increaseSpeed() - increases the speed at which obstacles come
- \* Obstacle::Update() - updates the obstacles position based on the current speed
- \* HUD::Update() - updates the heads up display based on
- \* Ground::Update() - updates the ground scroll position based on the current speed
- \* Ground::Draw() - Draw ground to frame buffer
- \* Obstacle::Draw() - Draws obstacle to frame buffer
- \* Dino::Draw() - draws dino to frame buffer
- \* writeFrameToLCD() - Draw frame buffer to screen
- \* Dino::Kill() - Stop dino movement, set dino sprite to the dead dino
- \* updateHighScore() - updates the high score list.

## Function Assignments

Kurt will handle all functions related to the Dino and Obstacle Objects in terms of physics and collisions. He will also handle the speed increases.

Hunter will handle drawing code and HUD updates.