

Game Proposal: <Lost Country - Aiming>

CPSC 427 - Video Game Programming

Team:

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Story:

The president of the country has escaped, so the government is under no one's control. Two groups of people are fighting against each other to control the country: the Bomber and the Defuser, which players can choose to join one of the teams. The Bomber will carry a bomb in the beginning and has a time limit to plant the bomb, and the Defuser can either slain the Bomber or defuse the planted bomb to claim victory. The map will be surrounded by fog so that the players will have restricted visions, and they can find tools (such as light) to reveal the fog within a certain range. Both the Bomber and the Defuser can build walls to protect themselves from getting shot and perform strategic planning.

The bomb will be planted by the Bomber in certain places and need to be defused by the Defuser within a certain time. The round will end if the bomb explodes, the bomb is defused, one of the players is slain by another, or the time limit reaches zero. If the bomb explodes, the Bomber will win. If the Defuser successfully defuses the bomb or Bomber exceeds the time limit to plant a bomb, the Defuser wins.

Technical Elements:

- Top down view - The players can view their surroundings/the entire map, and can move up/down/left/right or diagonally.
- Bot enemies - AI enemy for single player. Automatically plays for the objective.
- Shooter - the objective is to kill the other player/bot. Players can have different guns with different ammo and damage.
- Wall building - players can build walls to block movement for all players and bots, the walls can be destroyed. Some walls are pre-built.
- Effects - gun fire effects, gun sounds, wall building and breaking animation.
- Maps - There are different maps with different pre-built walls. The outer walls cannot be destroyed. The inner pre-built wall can be destroyed using guns and tools.
- Bomb - The bomb can be planted in certain areas on the map. Once the bomb is planted, it will be ticking and need to be defused within a certain time.
- 2d physics - bullets can collide with walls, the player and the enemies.
- Fog of War - The fog of war will take place on our map that is not within the vision range of the players. While players are able to see the topography of an area on the map, they cannot see each other.
- Light - can be collected in the map and be used to reveal area in war of fog within certain range
- Sprites - sprites for players, bots, weapons and walls.

Advanced Technical:

List the more advanced and additional technical elements you intend to include in the game prioritized on likelihood of inclusion. Describe the impact on the gameplay in the event of skipping each of the features and propose an alternative.

- Interactive objects in game that can either damage players/bots or interact with players/bots. Bonfire, holes on ground, teleport location. Without them the game would still be playable.
- Weapons with different functionalities. A hook gun that pulls enemies to close range, or a gas cannon that pushes enemies back. It can make the game more interesting in combination with the interactive objects in the map.

Devices:

Will support keyboard and mouse input

W, A, S, D for movement

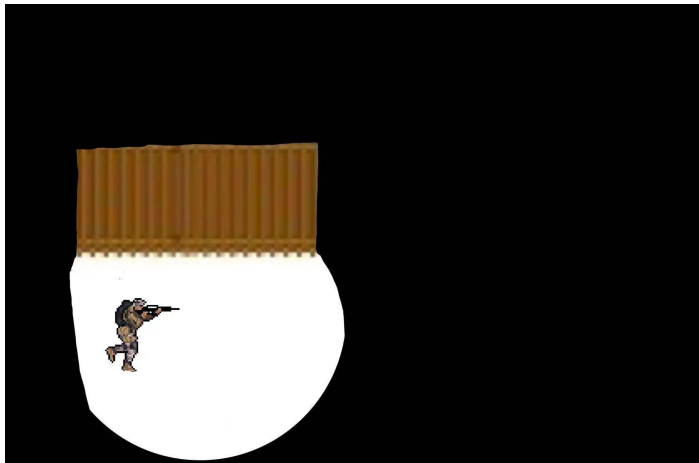
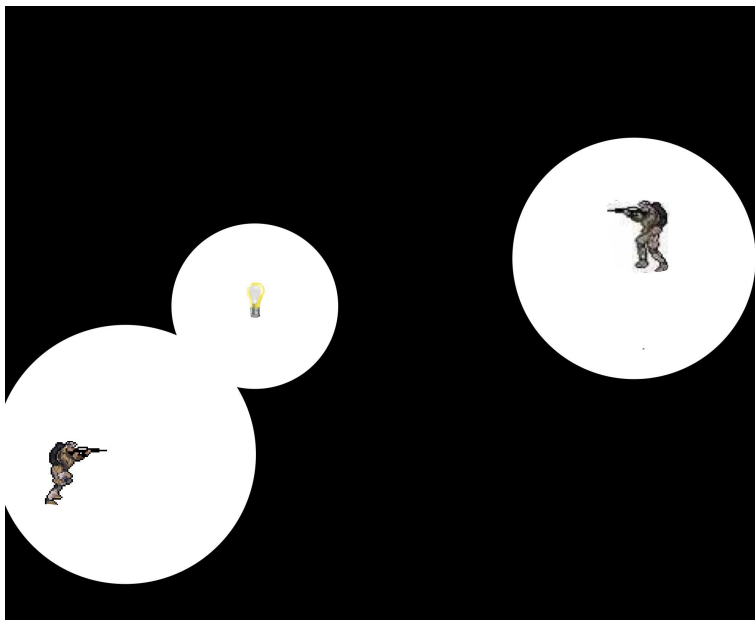
Move mouse to control facing direction

Left click to fire weapons

Right click to build walls

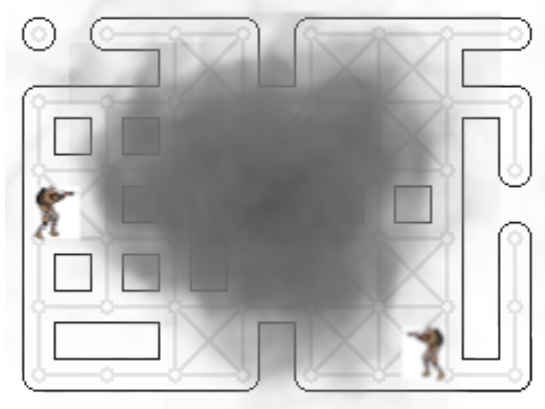
Concepts:

Produce basic, yet descriptive, sketches of the major game states (screens). These should be consistent with the game design elements, and help you assess the amount of work to be done.

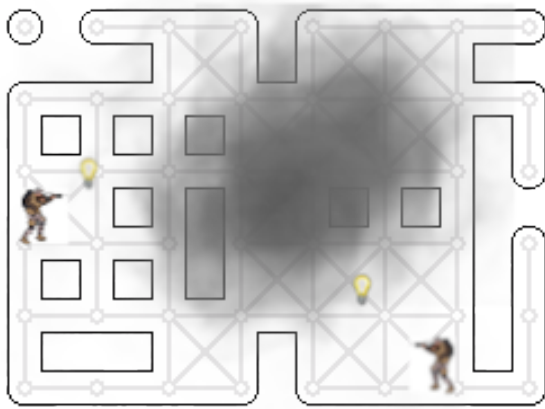
The player view when surrounding by the war of fog:**The overview view when surrounding by the war of fog:**

Below are different layouts inside the fog of war:

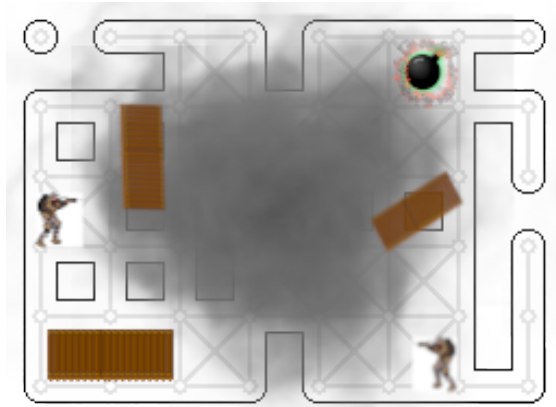
At the beginning of the game



Player use light to increase visibility



User build walls and planning/defusing the bomb



Tools:

1. GIMP to create the vector art
2. OpenGL

Development Plan:

Provide a list of tasks that your team will work on for each of the weekly deadlines. Account for some testing time and potential delays, as well as describing alternative options (plan B). Include all the major features you plan on implementing (no code).

Skeletal Game

Week Sep 27:

Have a runnable project setup with a controllable character

The character should react to keyboard WASD input

The character should aim in the direction of the cursor

Week Oct 4:

Add wall objects

The character should collide with wall objects and not walk through them

Load a sprite for the character

Create a geometry for wall objects

Minimal Playability

Week Oct 11:

Add bots to the game

Add fire option, create bullets flying towards cursor upon clicking left mouse key

Characters and objects create collision events upon being hit by a bullet

Week Oct 18:

Add hp system

The hp system should have the logic to handle bullet collision events

Bots aim and fire at the player

add functionality to plant a bomb and to defuse a bomb.

Week Oct 25:

Add path finding to bots

add sprites and walking animations the game

add frog of war

Playability

Week Nov 1:

Add shader to the main characters make them white upon being hit

add option to switch weapons

add the logic for weapons to behave differently(rate of fire, number of bullets, explosive)

Week Nov 8:

sound effect and particle effects, animations

Dialogues to tell the background story

Week Nov 15:

implement the roguelike logic or level design

Final Game

Week Nov 22: bug fixes

Week Nov 29:

bug fixes

start menu UI

Game tutorial

*Filled out the Milestone Submission Form? **Yes!***

Submission: Please format your pitches as PDF documents and 'handin cs-427 proposal' to submit it alongside the MilestoneSubmissionForm.pdf.