

CS426 Game project proposal

Team name: Divided-Games in association with Team Alaska and Convolved Games(I think thats what James said)

Team members:

James Dressel

Jonathan Haslow-Hall

Andrew Geyster

Game name: UFO Attack

Proposed work

1. Provide an overview of your game (give a short description about the game, i.e., game plot, objective, etc.):

You play an alien that abducts people and attacks the planet. There will be levels with increasing difficulty. The starting levels are rural, such as a farm. Then after the player levels up some they go on to attack harder targets. The player get points from the abductions that can be used to customise the space ship.

The game is 2d and on certain levels is a side scroller.

2. What are the characters and their resources (e.g., health points, number of characters, weapons, etc.) in the game? What are the behaviors of the characters and how do they interact with each other and their resources?

The Alien: The character the user player. Can abduct people and attack NPC's with his weapons. Can either attack in his UFO that has a shield and armor, or on foot.

3. What types of conflicts do you have in the game?

The player attacks and gets attacked by the military. The player tried to abduct people and they try to run away or fight back.

4. Provide sketches/drawings to show how your game will be played. (Attach to this page)
They are at the end of the document

5. What is the main language you will use to implement the game?

C++

6. What tools/libraries you will use?

SDL

<http://www.libsdl.org/>

Used for

- GUI's
- Threads
- Timing

GLEW

<http://glew.sourceforge.net/>

Used to access newer OpenGL functions

GLM

<http://glm.g-truc.net/0.9.5/index.html>

Used for matrix math

SOIL

<http://www.lonesock.net/soil.html>

Used to load texture files

7. What types of user interface will you provide/use?

Main Menu Screen:

- Used to navigate to Store, Levels, and Settings

Store Screen:

- Used to purchase upgrades

Level Screen:

- Used to select levels

Settings Screen:

- Used to change game settings

Game Screen:

- Used to play game.
- Most controls will be keyboard. Click to shoot.

Free Play Screen:

- Endlessly scrolling terrain and enemy generation.

8. What are the milestones you plan to have? Please give a short description and an expected finish time each for milestone.

February 9th: Level loading and storing system

March 1st: Game runnable and Engine Finished

April 1st: All levels added.

April 15th: All ship add-ons implemented.

May 1st: All of Game Finished and polished

9. What are the difficulties/challenges do you foresee? How do you plan to address them?

We are doing the entire project from scratch in C++ without using a prebuilt engine. So it will take us some time to do things that an engine could do very quickly. Also C++ is a very hard language when it comes to debugging errors, so that might make it take longer for us.

Art is pretty hard, will use lots of reference work.

10. How would you divide the tasks among your team members (if more than one)?

Git will be used to assign tasks to each member. In general Andrew is doing levels, J is doing the main engine. James is doing sound and some AI.

11. Why do you think your game is interesting/exciting?

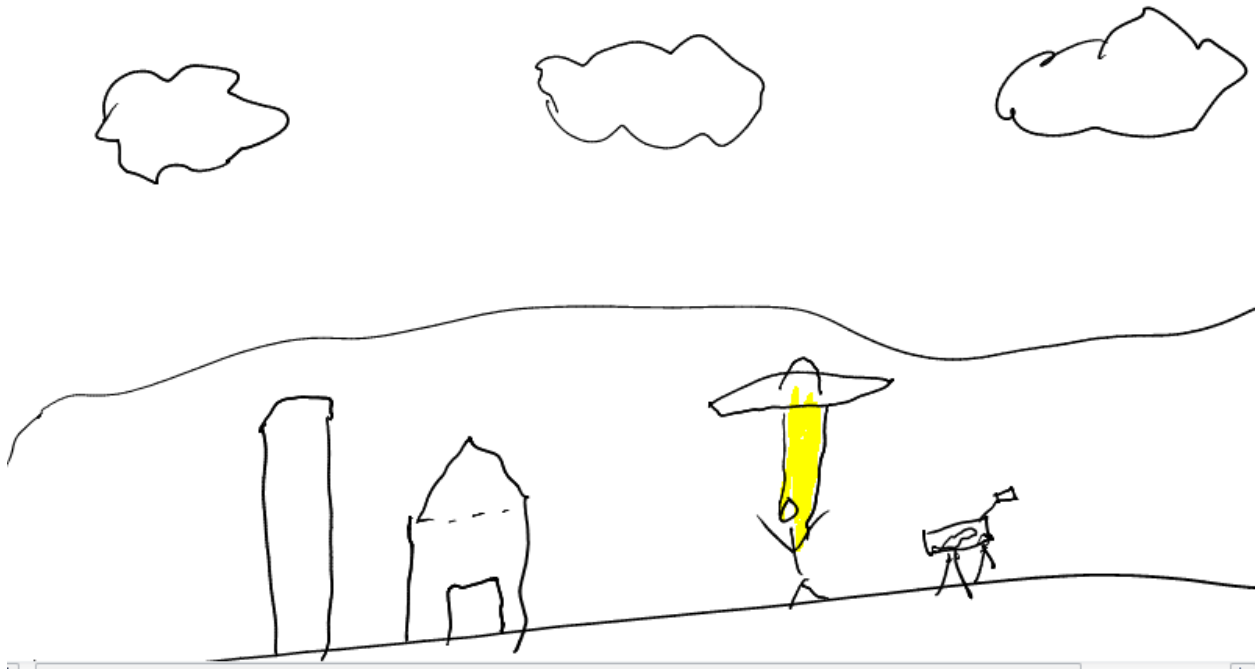
Alien abductions, lasers, and tanks.
Would like to do a cool interactive main menu.

12. Do you model your game after an existing game? If so, what is it?

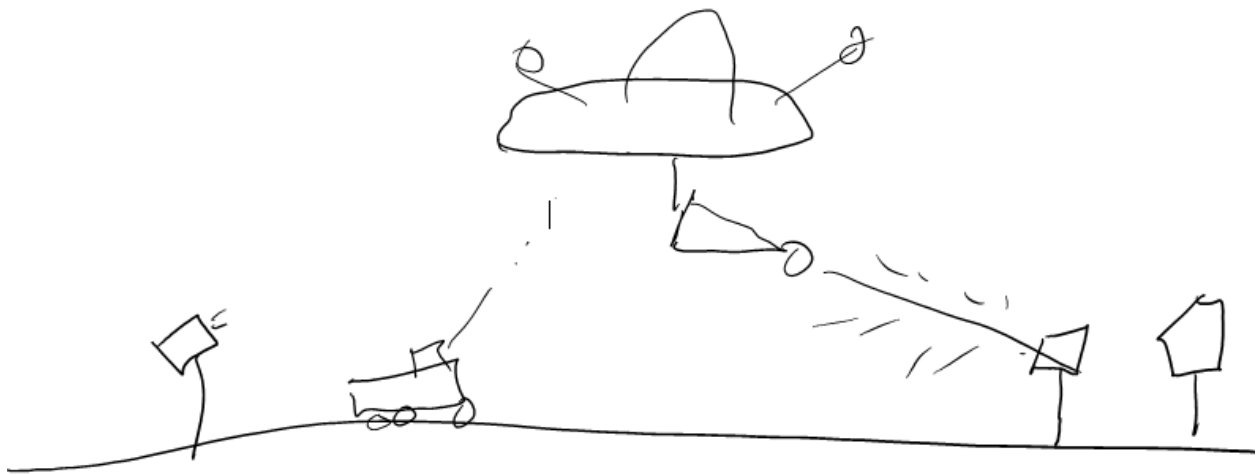
Na.

Pictures

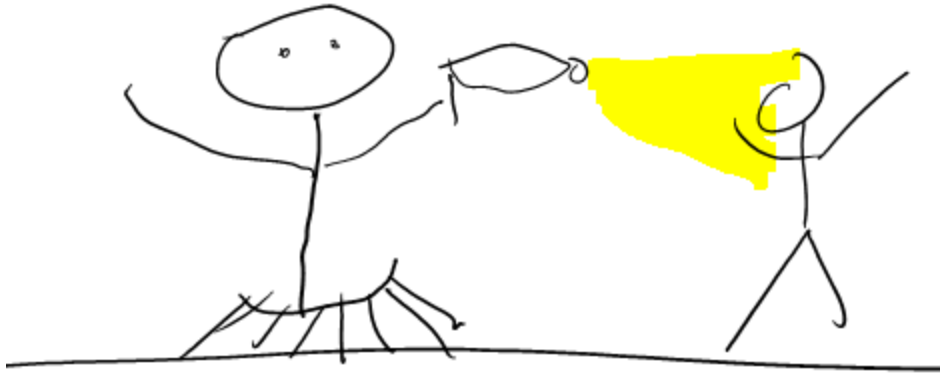
Early farm level



Later military level



Abducting on foot



Design Doc

UFO Attack

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Gameplay

When in a level, the player's objective is to take over the place. The player does this by destroying most of the military on the level (>90%). The player will face many kinds of enemies. Some of these will require the player to beam out of his ship to destroy and others will require the use of the ship to destroy. People and military can also be abducted during gameplay for use later to buy upgrades.

Levels: The levels will be Towns and cities filled with both civilians and military. The civilians will be running in fear while the military fights off the player.

Screens

Intro / Loading Screen

Display any splash screen information that we wish to display.

Ends in a loading screen to load any Main Menu assets that need to be loaded.

Transitions:

- Main Menu (Automatic after finished)

Main Menu

Transitions:

- Level Select Screen (Button)

- Store Screen (Button)
- Settings Screen (Button)
- Credits Screen (Button)
- Quit Game (Button)

****Level Select Screen****

Used to select the level to play.

Either a map of the world where the player selects locations or just a list of levels.

Transitions:

- Main Menu (Button)
- Game Screen (Button)

****Game Screen****

Used to play levels.

- Main Menu (Through pause menu)
- Credits Screen (Beat last level)

****Store Screen****

The player will use abducted people to purchase upgrades.

Appearance: A shop with an alien shopkeeper.

Transitions:

- Main Menu (Button)

****Settings Screen****

Transitions:

- Main Menu (Button)

****Credits Screen****

Transitions:

- Main Menu (When finished)

Object information

****UFO****

If UFO is below min distance from ground, push it away from ground.

Has armor and a shield. Shield can regenerate, armor cant.

Player can beam to ground.

Upgrades:

The player will be able to purchase these in game.

- Armor
- Weapons

Primary Weapons:

Player will be able to use these during missions.

- Laser: (Starting weapon)
- Machine Gun
- Missiles
- Bombs

Gadgets:

- Abduction Ray: (Starting gadget)

****Player****

Has score and upgrade points (people abducted).

Has a ray gun when on ground.

****Levels****

Use harder enemies to increase difficulty.

Both military and civilians in a level can be abducted to buy upgrades.

****Enemies****

Soldier rifle

Discription: Soldier with a weak rifle.

Difficulty: Easy

Soldier rpg

Discription: Soldier with a rpg.

Difficulty: Medium

Heavy armor soldier

Discription: Soldier with metal armor and a rifle.

Difficulty: Hard

Sniper

Discription: Soldier with a sniper rifle that one hits the player if on foot.

Difficulty: Hard

Jeep

Discription: Small vehicle with a mounted turret.

Difficulty: Easy

Tank

Discription: Large vehicle with a cannon.

Difficulty: Hard

Ground Turret

Discription: Small ground turret.

Difficulty: Easy

AA Turrets

Description: Strong turret against UFO. Must beam to ground and disable on foot.

Difficulty: Hard/Easy

****Jets****

Description: Strong air vehicle against UFO, cannot hurt alien on foot.

Difficulty: Medium/Easy

****Scenery****

- Trees
- Grass
- Rocks
- Buildings
- Cars