

Features List

Working

- Game Cycling
 - Cycles from Start to Select to Game to Game Over back to Select
 - Start Screen
 - Instructions
 - Point Values
 - Player Scores
 - High Score
 - Select Screen
 - 1/2 Player Select (2 player option does nothing, disabled)
 - Ability to add Credits
 - Game Screen
 - plays until player dies 3 times
 - Game Over Screen
 - Updates High Score if it's a new high score
- Game able to complete 4 levels
 - each level gets harder
 - Aliens 1 row closer
 - Alien rate faster than previous rate
- Score
 - points added as player kills aliens or UFOs
 - High score updated at end of game
 - New high score replaces old one if it is higher
 - Individual scores for each player displayed at top of screen
- Player
 - Display player sprite
 - movement
 - keyboard
 - Left/Right move ship
 - Space fires missile
 - Number of Lives
 - Initialized at 3
 - Decays as player dies
 - Game over if last life lost
 - Launches 1 missile at a time
 - refires when missile has collision
 - Collision
 - Missile Hits Shield
 - Missile Hits Alien
 - Missile Hits Top
 - Missile Hits UFO
 - Missile Hits Bomb
 - Sound effect on missile launch
- Alien Grid
 - Initialized in a 5x11 Grid
 - Top row squids
 - Middle 2 rows crabs
 - Bottom 2 rows octopi
 - Grid moves horizontally right or left to screen edge

- Grid moves down and reverses direction when it hits screen edge
- Animated movement
 - Alien Sprites cycles between 2 images
 - Animation happens in unison
- Speed increases as number of aliens decreases
- Aliens drop bombs randomly
 - bomb relaunch only when bomb hits shield, missile, ship or ground
 - 3 different types of bombs
 - zigzag
 - cross
 - straight line
- Deleted aliens affect the grid movement
 - when outside columns are destroyed grid has greater range of horizontal movement
- Alien Collision with player's missile can happen from either side or vertically
 - Killed aliens have respective points added to player's score
 - Marching sound effect happens when aliens are moving
 - increases as grid moves faster
- UFO
 - Launches at random intervals
 - Move horizontally at top of screen
 - either left direction or right direction
 - Unique sound plays while UFO is on screen
 - loops while on screen
 - Explosion sprite when UFO is killed
 - Player score updated with appropriate points
- Missile/Bombs
 - Missiles launched one at a time from player
 - animated effects as missile/ bomb is moving, when appropriate
 - Missiles and bombs can hit and kill each other
 - 3 different bomb modes
- Shields
 - 4 shields on the screen
 - Can impede player's missile from traveling towards aliens
 - Can protect player from bombs
 - Erosion
 - Erodes from missiles and from bombs
 - A hole can be drilled through shield by either bombs or missiles
 - Multiple hits erode holes in shield
 - Can be 100% dissolved by combination of missiles and bombs
 - Graphical effects
 - erosion "appears" to have dissolve effect
 - pseudo random dissolve effect
- Sound
 - Audio of Aliens marching
 - Lock step with alien movement
 - Cycles through 4 sound effects
 - goes faster as the aliens go faster
 - Types of sounds
 - Missile firing
 - Collisions
 - Death sound effects
 - UFO

- Can be overlapping

Not Working / Variations

- 2 Player doesn't work
- UFOs don't drop bombs
- Aliens can drop multiple bombs at once
 - but only 1 of each type at a time