Follow the **_SE456 Final Project 2018.pdf_** for details.

Fill this form out with Adobe Reader (DO NOT USE anything else)
Save As _Final Submission YOURNAME.pdf_ place in perforce folder
11:59 pm CST (midnight) Due Date: 19 March 2018

Final Project: Space Invaders

Student Information

Integrity Policy: All university integrity and class syllabus policies have been followed. I have neither given, nor received, nor have I tolerated others' use of unauthorized aid.

I understand and followed these policies: Yes   No

Name:

Date:

Submission details

Code Path:
(Perforce Path)

Changelist Num:
(one to grade)

Verified Build: Yes   No
(Do not check unless you did verify)

YouTube Link:
(Please verify sound and quality)

Design Doc Path:
(Perforce Path to PDF)

Design Details

Design Patterns completed and _use_ in your code:

Singleton	Factory	Observer
Flyweight	Proxy	Command
Iterator	State	Composite
Strategy	Visitor	Object Pools
Null Object	Adaptor	Template

Design Document PDF

Completed and submitted

Video Submitted

Demos each feature

Loud and Clear Sound (Can hear your voice easily)

Large Screen capture for Game Screen not the full desktop

Toggle Bounding Boxes on/off

Game Evaluation

Game Cycling

Select Screens --> Game Screens --> Game Over Screen --> Select Screens

Screens Completed

Select Screen

Game Screen

Game-Over Screen

Game Play

Complete at least 2 levels without crashing

Each level progressively harder and faster

Toggling bounding boxes on and off (Need to Demo)

2 Player mode

Player takes turns playing one at a time

Each player's game assets are unique to the player

Number of Aliens, Shield Damage, Score, etc.

Each player plays until they die, then next player plays if they still have lives left.

Once both players die, then go to Game Over screen

Score

High Score being updated

Different points for Aliens, UFOs, etc

Player

Movement

Number of lives

Launch on missile at a time

Collision Verification

Missile vs Shield

Missile vs Alien

Missile hits top of screen

Missile hits UFO

Missile hits Alien Bomb

Alien Grid versus each wall

Player Icon - right / left limits

Alien Bomb vs Player

Alien Bomb vs Floor

Alien Bomb vs Shield

Alien Grid

5x11 grid (Squid, Crab, Octopus)

Animation Movement in synchronization with movement

Progressively faster as number of aliens goes down

Music tempo and marching is faster as number of Aliens goes down

Drops different types of bombs (at least 3 different types) from bottom Alien

Explosion Splat when Alien is struck by missile

Explosion Splat when Alien Bomb is hit by missile

Killed Aliens adds points to player's score

Different points for different types of Aliens

UFO

Launches at different random intervals

Moves horizontally from Left or Right side

Drops Bomb

Plays unique Sound when UFO is on screen

Explosion sprite animation when UFO is killed

Killed UFO add points to Player's score

Missile / Bombs

Missile and Bombs can hit and kill each other

Splat animation when Missile and Bombs hit each other

Bombs Dropping (at least 3 different modes)

Zig Zag

Rolling

Straight

One Bomb at a time from each alien column (may have more)

Shields

4 Shields on the Screen

Impedes Missiles or Bombs from traveling through shield

Multiple hits can create holes in shields (need to demo this)

Graphical noise base Dissolve effects (optional)

Sounds

Audio of Aliens marching, synchronized with animation and movement

Cycles 4 sounds for the alien march sounds

Missile firing sound

Collision (missile hitting object)

Death sound effect

UFO

Sounds overlapping

Additional Material

Anything I should Know:

Verified Build

- Follow the Piazza procedure on submission
    - There is a thread on how to verify your submission
    - Verify your submission compiles and works at the changelist number.
- Verify that only MINIMUM files are submitted
    - No - *.pdb, *.suo, *.sdf, *.user, *.obj, *.exe, *.log, *.pdb
        - Anything that is generated by the compiler should not be included
    - No - /obj, /bin, /.vs, /Debug, /Release directories
    - Make sure what's checked in works!
- Typical files project files that are required
    - *.sln, *.csproj,
    - *.cs
    - App.config
    - AssemblyInfo.cs