

Defend or Die! :-D 2019

Next major hit in mobile tower defenses!



Platform: PC, Android or iOS

Devices: Desktop, Cell phones, Tablets

Screen dimensions: 800 x 484 ~ 1920x1080
(but should work on larger screens as well)

Input support: Mouse + Touch

Language: C#

Engine: [Unity3D](#)

IDE: [MonoDevelop](#) or [Visual Studio](#) or up-to-you (note that you all should be eligible to [MSDN AA licenses](#))

Description: Create a tower defense game for a PC & Android & Web.

Baseline requirements:

- [R1] 1 enemy,
- [R2] 1 gun tower
- [R3] 3 different levels (difficulty should gradually build up the difficulty)
- [R4] You auto-get some money for every enemy killed to build new towers.

- [R5] You can see how much money you have.
- [R6] You can build new towers at prespecified places.
- [R7] Must be playable on PC, Android.
- [R8] Must be stable.
- [R9] Gun is firing bullets.
- [R10] UI adapts for different screen sizes.

Advanced (extras) requirements:

- [E1] +2 different enemies,
- [E2] +1 rocket tower
- [E3] Background music,
- [E4] some sound effects.
- [E5] You can get more money for towers from coins that will appear out of killed units. And player will need to actively collect them for extra money.
- [E6] Rockets are flying.
- [E7] Enemies are burning.
- [E8] Use of a particle system for effects (rocket flying, enemies burning)

Screens: Loading screen, Menu screen, Choose level screen, Game screen

- Deliverables:
- 1x PC build (.exe and data files)
 - 1x Android build (.apk)
 - 1x Source code (preferably via some public SCM like [Github](https://github.com))
 - Ideally, builds are part of the repo ;)
 - 1x Asset list
 - What assets have you used (links + licenses).
 - 1x Short gameplay video (required only if you implement extras)
 - 1x Report
 - What have you learned during this assignment?
 - What has worked well and what's not during the development?
 - What was the biggest obstacle you have encountered?
 - How satisfied are you with the result?
 - What tool chain have you used?
 - How automatized your tool chain is?
 - How extendable your solution is?
 - How easy is to add another level, another enemy, another tower.
 - How much time it took you to create the game?
 - Use a time tracker! Really! (E.g. <https://toggl.com/>)
 - Are you confident you will be able to start working on another AS3 game for PC + Android now?

Tools that might help (you can use your own of course):

[Audacity](https://www.audacityteam.org/) (free tool for sound editing / conversion)

Free assets to use (**examples!**):

Great free-art crossroad:

<https://v-play.net/game-resources/16-sites-featuring-free-game-graphics>

Graphics in Public Domain (== do whatever you want):

<https://itch.io/game-assets/assets-cc0>

TD Graphics:

<http://opengameart.org/content/tower-defense-300-tilessprites>

<http://kenney.nl/assets/tower-defense-top-down>

Coins:

<http://opengameart.org/content/animated-coins>

Music:

<https://www.freesound.org/people/tyops/sounds/350481/>

Sounds:

Tank fire:

<https://www.freesound.org/people/Cyberkineticfilms/sounds/127845/>

RPG:

<https://www.freesound.org/people/klangfabrik/sounds/249298/>

Rocket:

<https://www.freesound.org/people/ProjectsU012/sounds/334268/>

Building placement:

https://www.freesound.org/people/strange_dragon/sounds/271141/