The Sandbox Unity Developer Test

Exercise:

You will need to develop a simple game prototype inspired by the classic Asteroids, but with some addons.

How it Works

For references on the gameplay you could look at some articles (here or here)

But in our version we want to add the follwing mechanics:

- Pickable power-ups
  - At least one shot variation power-up
  - A temporary invulnerable shield

Remember not to forget about implementing the UFO's enemies and hyperspace travel.

Requirements

The only requirement is that you implement the game in a **Data Oriented** way using Unity DOTS packages, apart from that you are totally free to take your own tech and implementation decisions (but note that we will evaluate those too).

The game should run on the Editor (not need for Mobile support or special input devices), with keyboard or mouse controls.

Of course we are not expecting a full and completely polished game, just a good enough protoype showing the main components and features, our interest is on how you design and implement the different systems and data models.

Bonus Points (not required)

- Implement a fancy vector line renderer following the spirit of the original game.
- Add some juice (sfx, vfx, micro-interactions, whatever you want).
- Add as many power-ups and new game mechanics as you want.
- You could go crazy and implement a full 3D version if you want.

Tools/Tech to use

- Use `git` for version control.
- Unity 2020.2.x.
- Unity DOTS package.
- You could use any Assets you want, we suggest the cool Kenney Space Shooter ones.
- **Any other tech you think it's needed**: You should justify its use in the docs.

Delivery

- You should send the whole project sources (also including `.git` folder so we can check your commits).
- Documentation (feel free to include diagrams, sketches or whatever document to further explain your implementation and design decisions).
- A **Readme.txt** file explaining anything you think is relevant about your project.

All this should be inside a zip file named `tsb_unity_test_{your name here}.zip` or you could share a repository from any hosted services (Github, Bitbucket, etc).

What will we evaluate?

- Code tidiness/source code organization.
- Functional aspects of the exercise.
- Design and architecture of the solution.
- Proficiency with the requested tech/tools.

Contact info

For any doubts you could contact us over email:

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