

A 3D block of dirt and grass from the game Minecraft. The block is composed of a top layer of green grass and a bottom layer of brown dirt. The block is shown from a perspective view, highlighting its cubic shape and the pixelated texture of the game.

INTRODUCTION

Minecraft is a sandbox survival/creative experience that allows players to build and allow their ideas to come to life. Minecraft is a game that I have played for quite a while, mostly on PS4/5 as I had never had the opportunity to play it both in childhood and on PC. I love Minecraft for its creativity and its ability to suck you in to its experience.

DISSECTION

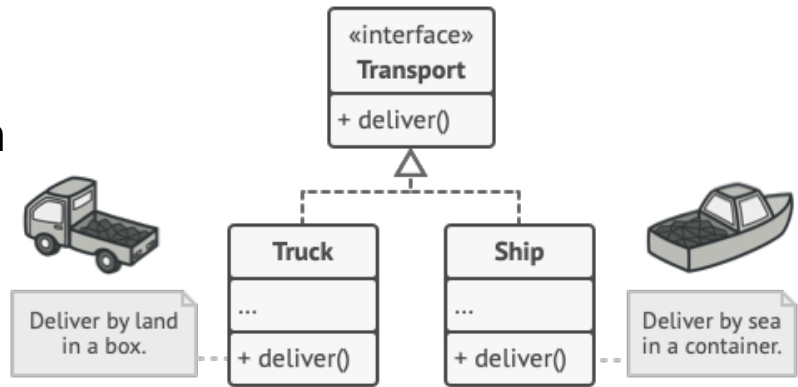
Factory & Prototype design patterns are heavily used when looking at the way the blocks are created. With



prototyping, enemies can all be instantiated before being broken up, across the board. This allows the game to create enemies with different values of attributes such as their damage or their speed. This works effectively because it allows the game to group all possible elements across all enemies and then simple changes within the elements of these can allow you to define different enemies, with completely different attributes.

Factory design can be used in the blocks, with all blocks implemented from a BLOCK interface. All blocks are

instantiated from an interface, at which point they will all have the same basic instructions.



Similar to the

Transport interface, the blocks are completely different in look and in times in use but they will share the exact same commands from `destroy()` or `build()` [when the player puts it down]. This is great because you never have to worry about

EXPLANATION

Enemies are created from the

