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Lab3 Report

1. Reflection

This project demonstrated to me how abstract classes and interfaces can be used in larger projects. They act as molds for future classes to take from and implement. I also learned how different classes can interact with each other and lead to larger-scale systems. Factories created blocks, which took resources, which drew from constant variables. Every class seemed to be connected and showed how classes can play large roles in big projects.

2. How did this design incorporate future growth?

There are still the break block functions that were defined, but not used by me. So this could be an avenue for continued development on this project. There are also other functionalities that could be implemented, such as new factories or blocks that can be created. You could have a city factory for example that would take in a certain number of house blocks to create a city.

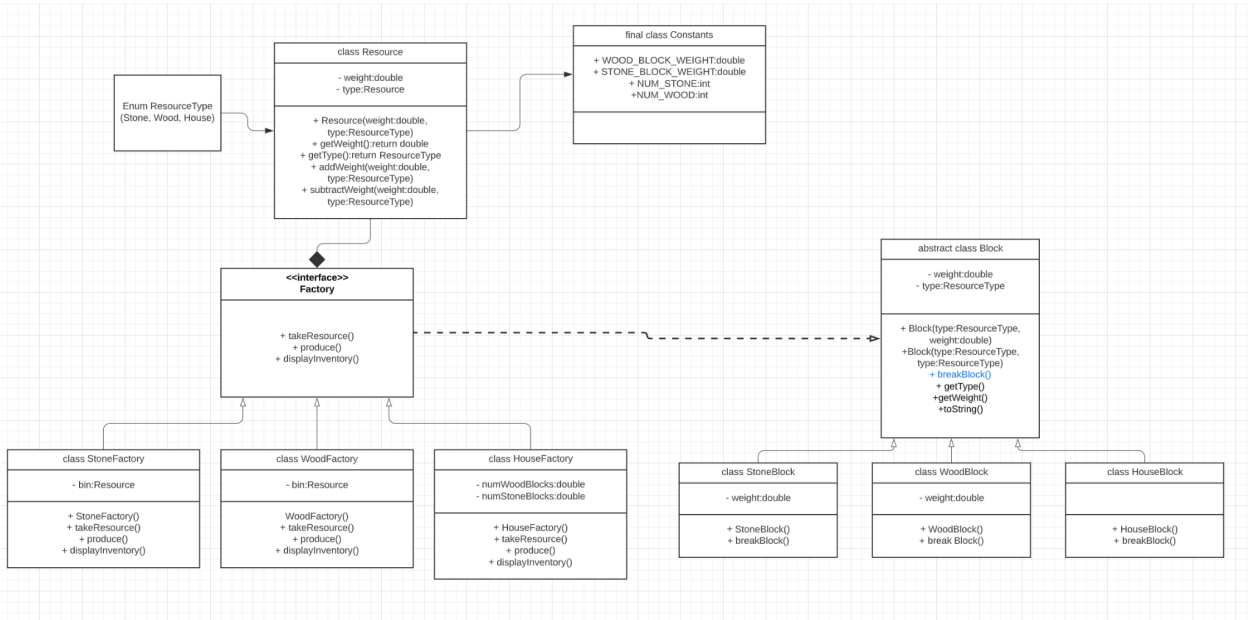
3. Did you change up the driver at all? If so, how?

I did not change the driver

4. Extensions (*What extensions are you requesting?)*

I am requesting an extension in my produce function in WoodBlockFactory and StoneBlockFactory. In the method, I included logic that checks whether there are enough resources to create the block. If not, then I create a new resource with random weight and have the factory take it in before calling produce() again. This recursion is my requested extension.

5. UML Diagram



6. Grading Statement

I think I deserve the 100 for this assignment. I have completed all that was asked from the basic assignment, plus the extension I included so I feel this is a project that deserves 100.