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CAP 3027 Ant Farm

This is my Java Swing Ant Farm simulation that I coded from scratch. It makes several types of ants that you can spawn in an environment of dirt. They will proceed to dig, eat, and sometimes interact with each other in their environment. You don’t have to do anything special to compile or run the code for my ant farm. It just runs. What it does is spawn a map of dirt squares and in the top left you can spawn two different kinds of ants (normal ants and fire ants) by clicking it. There is also a food bar. When selected until you select a non empty white space, whenever the mouse button is pressed, it will spawn food that is under the influences of gravity. This food feeds the ants and keeps them running and they will somewhat faultily seek it out when they are hungry. The dirt is click and draggable as well. The user can pick up individual squares by clicking on them, and these squares will drop with gravity when in the upper portion of the ant farm. The Ant AI dig downward in a wide fashion until they get reasonably low into their environment, at which point they sometimes change to digging more narrow upward tunnels. Normal ants are killable by the Fire Ants. When a fire ant is near a normal ant, it will kill it and that dead ant will no longer move or eat. I spent a huge chunk of time programming a mound ant that was intended to go into its hole, grab a piece of dirt and release it on the surface, but its pathfinding left it getting stuck too often so I took it out, but the code for it is still there as long as a mound ant is spawned. I figured the project would seem more professional without this faulty feature though.