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**Aquaponics system**

***Changes:*** Water now is turtles instead of patches. I am still working on its behavior (it is not done yet in this model).

***Agent behavior:*** In the current model, Agents are : fish and water. Fish can swim within the tank. Water turtles can flow within the tank, the lower part will move towards the tunnel, they should cross the tunnel and move randomly in the grow-bed. Then water turtles in the upper part of the grow-bed should cross the tunnel and return back to the fish tank.

***System behavior:*** Agent behavior isn’t connected yet. They don’t have any effect on each other yet.

***Rationale for agent rules:*** Why did you give the agents these rules?

***Model output:*** The current model provides a good vision of the entire environment.

***Questions***: I am not sure if this model will answer the question of how frequently we should feed the fish. The problem is there are a lot of factors that play major roles in this system. For example: Tank size, there are standard fish tank size. I don’t know how to reflect these sizes using water turtles. In my opinion, simplifying the system won’t give a real estimate for the frequency fish needed to be fed.

Another question: what extension would work with this model? I’ll discuss this with the TA.

***Next steps:*** Either to continue on working on this model and simplify the rules and behavior which will not reflect the real system. In that case, I’ll work on the water behavior and add plants in the grow bed. Or choose a different model. again this will be discussed with the TA.