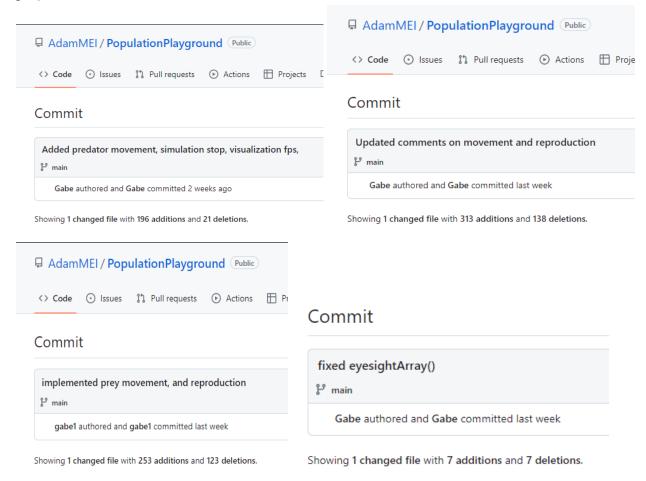
Professor Johnny Lin

June 4th, 2023

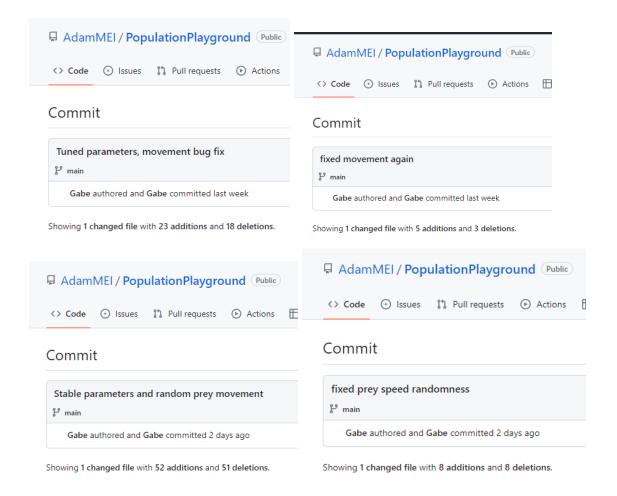
Gabriel Schepman and Adam Meilicke

Narrative Contribution Description

Our commit history graph describes each members' individual contributions very poorly. GitHub did not register most of Gabriel's commits as coming from him. He eventually found the issue, but none of his commits before then are not listed on the activity graph. Here are screenshots of Gabriel's commits that do not show up on the contributors graph:



Narrative Contribution Description



Adam first created the initialization, feeding, and visualization functions, as well as some simple tests. Gabriel created the movement and reproduction functions. The movement and reproduction functions proved much more complicated than the others, as they required agents to determine their distances to other agents, find the closest one, and perform other tasks. The milestone occurred while Gabriel was finishing the movement and reproduction. The work up to this point was balanced 50/50. Once he finished, both students helped to work out bugs in each others' code.

Adam created simple lag cross-correlation plots and plots of the populations over time. He also improved the efficiency of the movement and reproduction by about seven times, enabling further analysis to run much faster. Gabriel performed most of the analysis, creating functions to graph the average populations across sets of simulations as constants like reproduction time changed. While Adam worked more on the coding of the simulation, the additional analysis provided by Gabriel balanced this out. Their contributions each contributed to half of the overall project.