## MPHYG001 Assignment 2: Refactoring Boids

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## Introduction/Usage

For this assignment, the task was to take the Boids code<sup>1</sup>, packaging it up into a form that can be pip installed and run from the command line. This code may be found at the GitHub repository ddervs/bad-boids. The usage of the packaged function is shown below (the output of boids --help).

## Refactorings

## **UML** Diagram

Boids
boids: tuple(np.array)
config:dict
fly_tom_middle()
fly_away_nearby()
match_speed()
move_boids()
update_boids()
animate()
run_animation()

boids.new_flock()	
count:int	
xlimits:list(float)	
ylimits:list(float)	
vxlimits:list(float)	
vylimits:list(float)	

Figure 1: UML diagram of boids package.

 $<sup>^{1} \</sup>verb|http://development.rc.ucl.ac.uk/training/engineering/ch05construction/10boids.html|$