

Animation	
Superclass: none Subclass: none	
Responsibilities: <ul style="list-style-type: none"><li>• synchronize updating and rendering of the objects as well as writing info to the file</li></ul>	Collaborator: <ul style="list-style-type: none"><li>• AnimationObjects</li><li>• AnimationPanel</li><li>• CSVWriter</li></ul>

Vector2	
Superclass: none Subclass: none	
Responsibilities: <ul style="list-style-type: none"><li>• determine directions and positions</li><li>• provide geometrical operations</li></ul>	Collaborator: <ul style="list-style-type: none"><li>• Boid</li><li>• Prey</li><li>• Predator</li><li>• Obstacle</li><li>• DPolygon</li></ul>

AnimationPanel	
Superclass: none Subclass: none	
Responsibilities: <ul style="list-style-type: none"><li>• render the objects</li></ul>	Collaborator: <ul style="list-style-type: none"><li>• Animation</li><li>• Rectangle</li></ul>

AnimationObjects	
Superclass: none Subclass: none	
Responsibilities: <ul style="list-style-type: none"><li>• store and share access to the objects</li></ul>	Collaborator: <ul style="list-style-type: none"><li>• Prey</li><li>• Predator</li><li>• Obstacle</li><li>• Animation</li></ul>

CSVWriter	
Superclass: none Subclass: none	
Responsibilities: <ul style="list-style-type: none"><li>• write data to the csv file</li></ul>	Collaborator: <ul style="list-style-type: none"><li>• Animation</li></ul>

Rectangle	
Superclass: none Subclass: none	
Responsibilities: <ul style="list-style-type: none"><li>• specifying the dimensions of the object</li></ul>	Collaborator: <ul style="list-style-type: none"><li>• Vector2</li><li>• Obstacle</li><li>• AnimationPanel</li></ul>

Boid	
Superclass: DPolygon Subclass:Prey, Predator	
Responsibilities: <ul style="list-style-type: none"><li>• keep objects on screen,</li><li>• find the closest obstacle,</li><li>• avoid obstacles,</li></ul>	Collaborator: <ul style="list-style-type: none"><li>• Animation</li><li>• Obstacle</li><li>• Vector2</li><li>• DPolygon</li></ul>

Predator	
Superclass: Boid Subclass: none	
Responsibilities: <ul style="list-style-type: none"><li>• chase preys</li><li>• separate predators</li><li>• get average velocity</li></ul>	Collaborator: <ul style="list-style-type: none"><li>• Animation</li><li>• Vector2</li><li>• Prey</li><li>• AnimationObjects</li></ul>

Prey	
Superclass: Boid Subclass: none	
Responsibilities: <ul style="list-style-type: none"><li>• separate preys</li><li>• align to other preys</li><li>• add cohesion</li><li>• escape from predators</li><li>• get average velocity</li></ul>	Collaborator: <ul style="list-style-type: none"><li>• Predator</li><li>• Animation</li><li>• Vector2</li><li>• AnimationObjects</li></ul>

DPolygon	
Superclass: none Subclass: Boid, Obstacle	
Responsibilities: <ul style="list-style-type: none"><li>• store the shape and the color of the object</li><li>• manipulate the color of the object</li></ul>	Collaborator: <ul style="list-style-type: none"><li>• Boid</li><li>• Obstacle</li><li>• Vector2</li></ul>

Obstacle	
Superclass: none Subclass: none	
Responsibilities: <ul style="list-style-type: none"><li>• be an obstacle</li></ul>	Collaborator: <ul style="list-style-type: none"><li>• Boid</li><li>• DPolygon</li><li>• Vector2</li><li>• Rectangle</li></ul>

FOV	
Superclass: boid Subclass: none	
Responsibilities: <ul style="list-style-type: none"><li>• detect obstacles and other boids</li><li>• find the path away obstacles and other boids</li></ul>	Collaborator: <ul style="list-style-type: none"><li>• Boid</li><li>• Vector2</li><li>• Rectangle</li></ul>