## State behaviour research

**Behaviours:**

* **Idle**
  + Stays at the same position
* **Wander**
  + Moves in a random direction without colliding
* **Follow**
  + Follows a ship that is the same kind as the following ship
  + Follows a ship which is a possible target and will attack it when it gets close
* **Offensive**
  + Attacks the other ship (the player) when it gets close enough
  + Moves towards the other ship so it can shoot on it
* **Defensive**
  + Tries to dodge objects or projectiles heading towards the ship
  + Rather stays save then go and shoot the other ship down
* **Fleeing**
  + When the ship took severe damage it tries to fly away as fast as possible
* **Death**
  + Ship exploded and will no longer be a part of the game

**Using the behaviours in the project:**

The behaviors can be used in an enumeration which can then be handled with a switch.

This switch should be updated every frame so it can target the function which handles the specific state of the enumeration. To avoid writing code twice you can use a super class to keep the switch enumeration and the functions. In the specific class it can then be extended or overwritten so it does a more specific action but does not need to call these functions for these are called in the super class.

