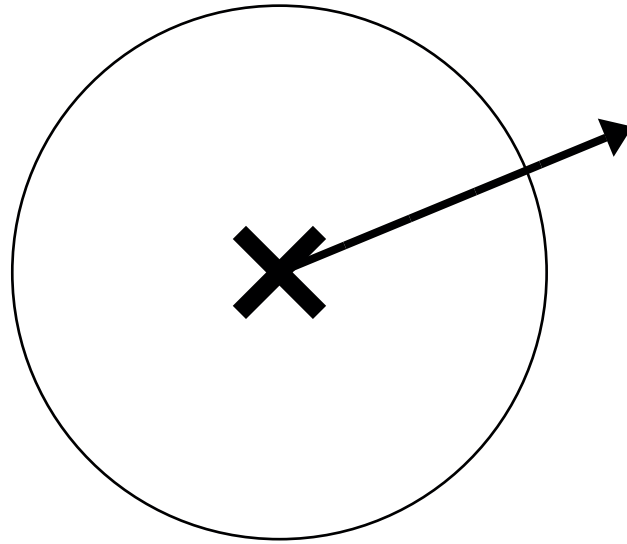


The Agent

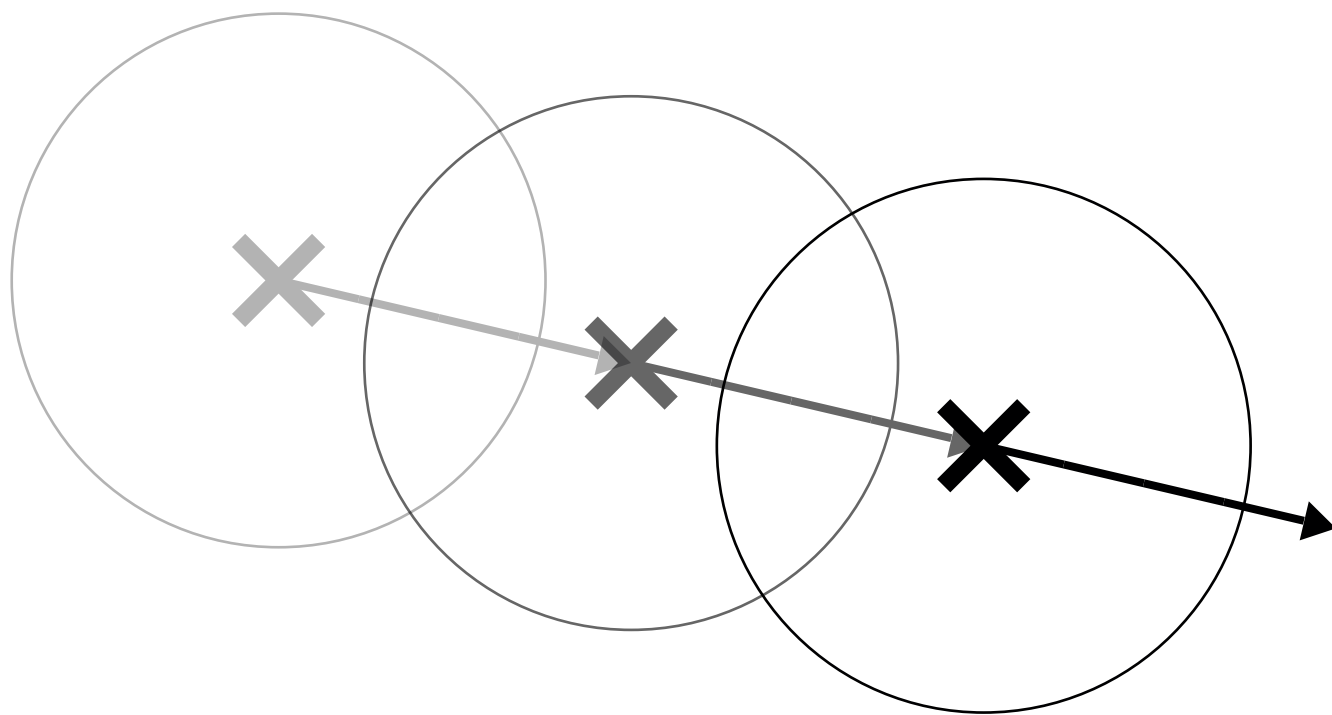
A Simple Agent



A Simple Agent

```
class Agent {  
    PVector position = new PVector();  
    PVector velocity = new PVector();  
    float radius = 1;  
}
```

Moving in a Direction



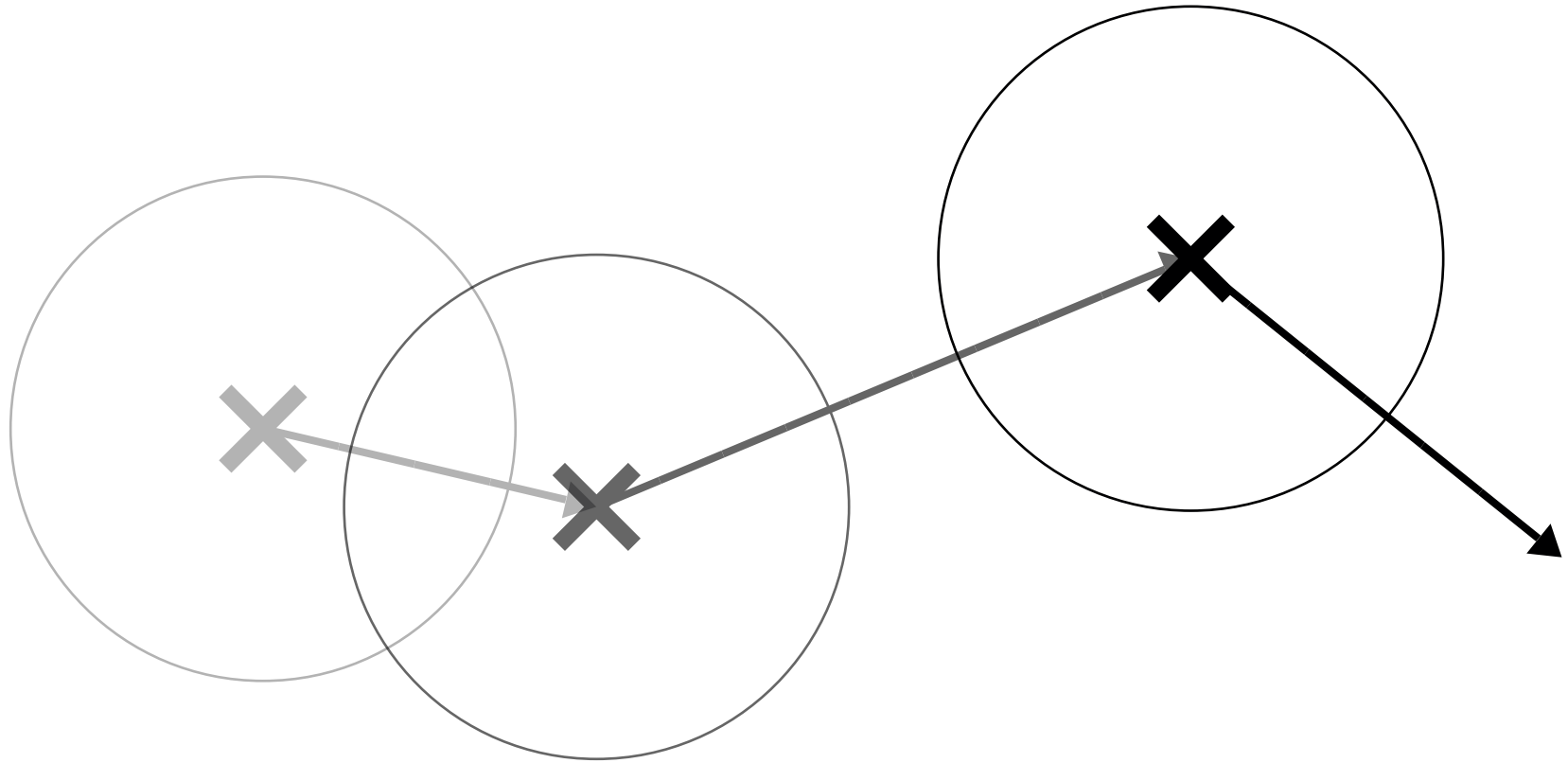
Moving in a Direction

```
Agent mAgent;
```

```
void draw() {  
    mAgent.loop();  
}
```

```
class Agent {  
    PVector position = new PVector();  
    PVector velocity = new PVector();  
    float radius = 0;  
  
    void loop() {  
        position.add(velocity);  
    }  
}
```

Moving in Different Directions



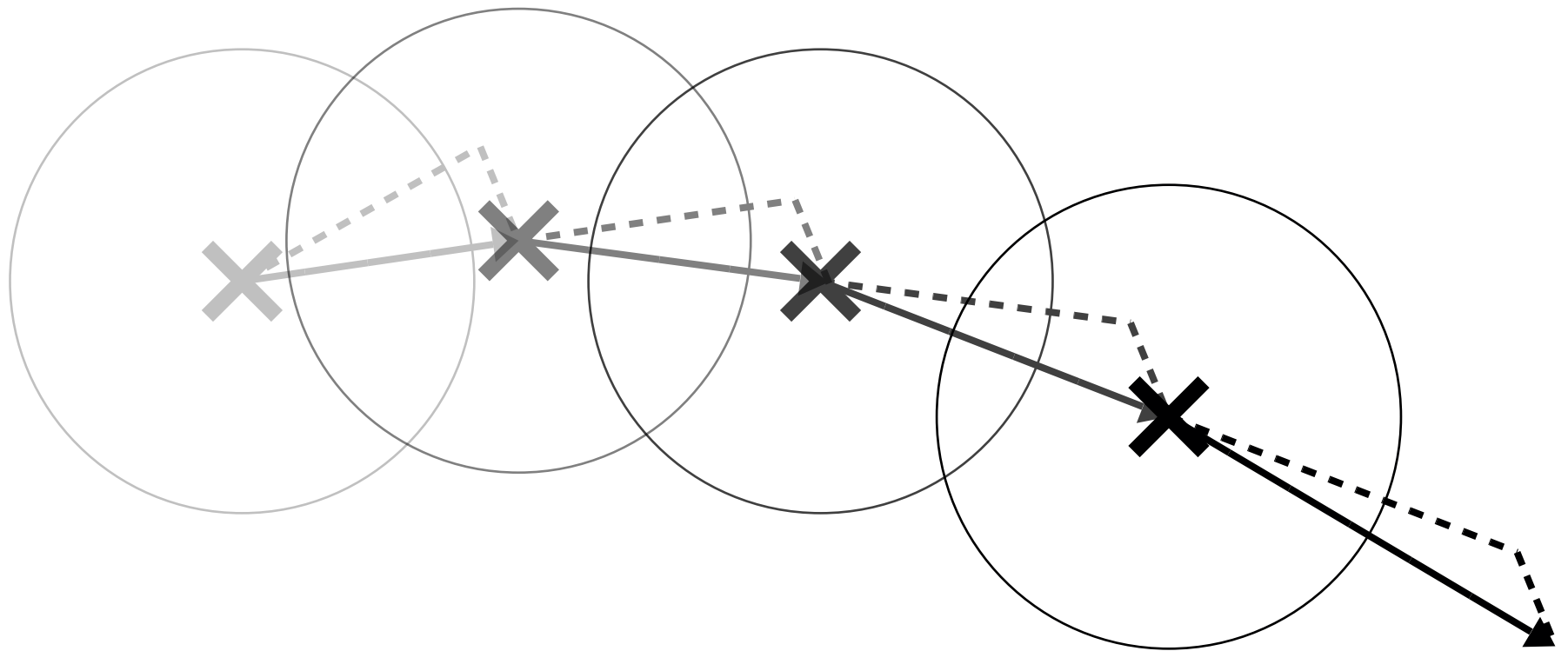
Moving in Different Directions

```
Agent mAgent;
```

```
void draw() {  
    mAgent.velocity.set(random(-5, 5), random(-5, 5));  
    mAgent.loop();  
}
```

```
class Agent {  
    PVector position = new PVector();  
    PVector velocity = new PVector();  
    float radius = 0;  
  
    void loop() {  
        position.add(velocity);  
    }  
}
```

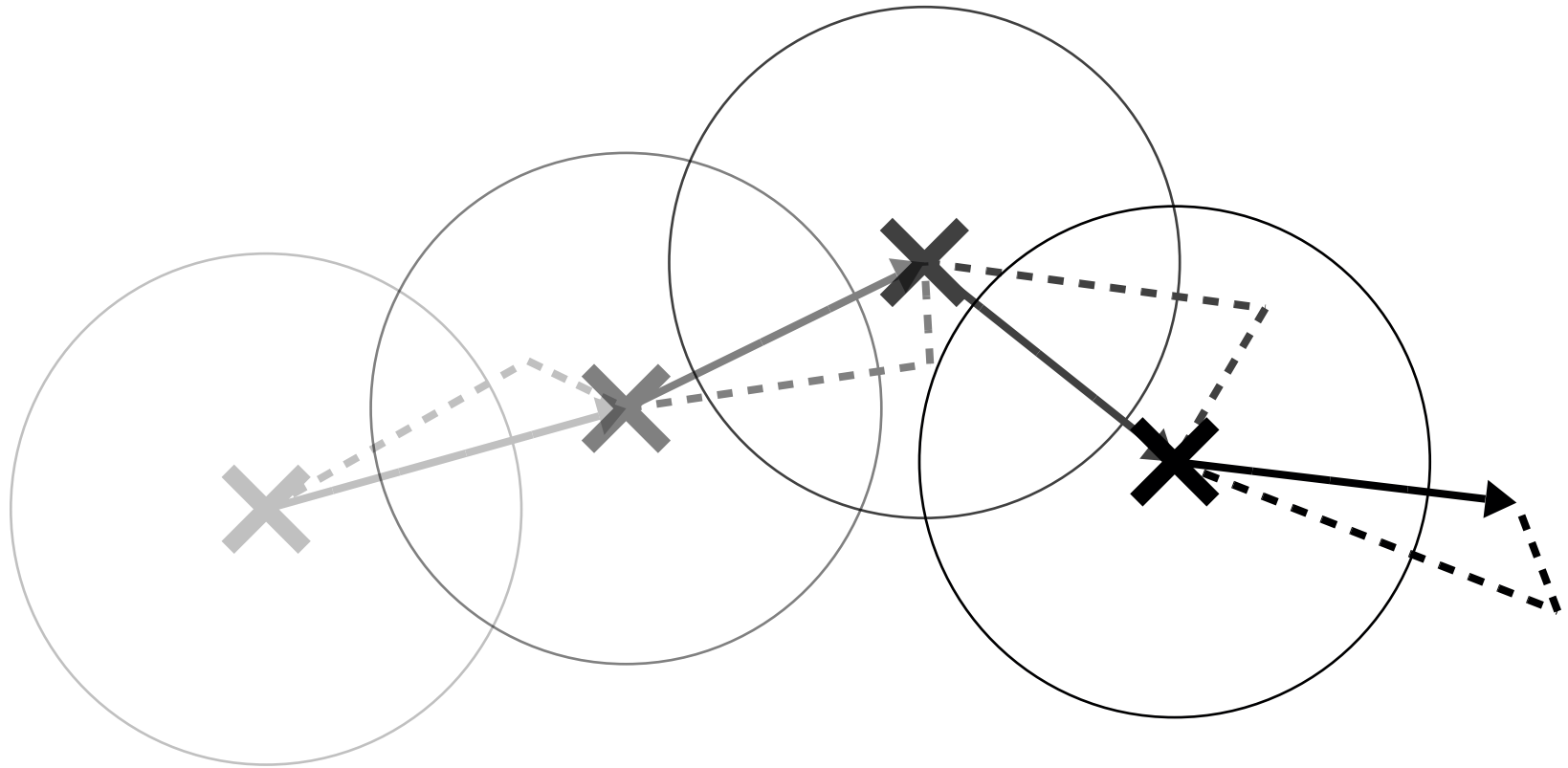
Turning Smoothly in a Direction



Turning Smoothly in a Direction

```
class Agent {  
    PVector position = new PVector();  
    PVector velocity = new PVector();  
    PVector acceleration = new PVector();  
    float radius = 0;  
  
    void loop() {  
        velocity.add(acceleration);  
        position.add(velocity);  
    }  
}
```

Moving Smoothly in Different Directions



Moving Smoothly in Different Directions

```
Agent mAgent;
```

```
void draw() {  
    mAgent.acceleration.set(random(-1.0f, 1.0f), random(-1.0f, 1.0f));  
    mAgent.loop();  
}
```

```
class Agent {  
    PVector position = new PVector();  
    PVector velocity = new PVector();  
    PVector acceleration = new PVector();  
    float radius = 0;  
  
    void loop() {  
        velocity.add(acceleration);  
        position.add(velocity);  
    }  
}
```