# **Progressive Method**

#### ▼ General

- 1. Pre-Run Strategy
- 2. On-Run Strategy Pool
- 3. Realtime Strategy Building
- 4. Post-Run Learning

### ▼ Pre-Run Strategy

- ▼ Attributes which will generate an enemy.
  - Patience
  - Offense
  - Defense
  - Memory
  - Innovation
  - Courage
  - Caution
  - Accuracy
  - Control
  - Stamina

There will be base attributes, compound attributes, pools like stamina, fatigue, focus, accumulative attributes like experience/level, randomized attribute like luck, mistake chances

- ▼ Movement BrainPart (Base)
  - From the attributes we create the moving style
  - Randomize + Variations are also generated
- ▼ Follow BrainPart (Goal)

Progressive Method 1

- From the attributes and movement brain we generate follow brain
- Randomize + Variations are also generated
- Follow patterns are generated

#### ▼ Fight BrainPart (Goal)

- There will be goal attributes which will combine with the enemy brain attributes
- Like is the goal survival or sacrifice or kill without least damage kill with damage etc
- Fight patterns are generated
- ▼ Escape BrainPart (Goal)
  - From the attributes and movement brain we generate escape brain
  - Randomize + Variations are also generated
  - Escape patterns are generated
- How are patterns generated?
  - We use datasets + past-learned information
- ▼ Integration for On-Run Strategy Pool
  - We combine all the brainParts
- ▼ Realtime Strategy Building
  - How will new strategies appear?
  - How will old strategies affect?
  - How is this learning?
- ▼ Post-Run Learning
  - How?
  - Increase data
- ▼ How to get enemy Al Brain
  - 1. We generate an enemy thinking style with attributes.

Progressive Method 2

- 2. We create base BrainParts.
- 3. We create goal BrainParts.
- 4. Integration of Brain
- 5. Creation of Strategy Pool
- 6. Strategies Alterations
- 7. Strategies Learning
- 8. Post-Run Learning

#### **▼** Illusion of Al

- Graphic Logic
- Tree Diagram
- Best Algorithms
- Finite State Machine

## ▼ Role of AI Game Developer

- Illusion of AI
- Behavior trees using a combination of custom coded behavior trees and the Node Canvas asset.

Progressive Method 3