



Semantics

- `branch(condition: AggregateExpression, th: AggregateExpression, el: AggregateExpression): AggregateExpression<T>`
- `constant(value: Any): AggregateExpression<T>`
- `loop(initial: Any, f: Function1): AggregateExpression<T>`
- `mux(condition: AggregateExpression, th: AggregateExpression, el: AggregateExpression): AggregateExpression<T>`
- `neighbor(aggregateExpression: AggregateExpression): AggregateExpression<Int, T>>`
- `selfID(): AggregateExpression<Int>`
- `sense(sensorID: String): AggregateExpression<T>`

produces



Slot

Condition
Then
Else
Neighbor

Key<T>(value: T)
Operand(index: Int)



AggregateExpression

- `compute(path: List, context: Context): StateFlow<ExportTree<T>>`

emits

uses



ExportTree

- `children: Map<Slot, ExportTree<Any>>`
- `root: Any`

- `followPath(path: List): ExportTree<Any>`



Context

- `neighborsStates: StateFlow<ExportTree<Any>>>`
- `selfID: Int`
- `sensorsStates: StateFlow<String, Any>>`

- `receiveExport(neighborID: Int, exported: ExportTree): Unit`
- `updateLocalSensor(sensorID: String, newValue: Any): Unit`