Created By: deavmi UML diagram of the TIR (TLang New Class Intermediate Representation) in memory type system Revision: Created On: «interface» **IRenderable** + render(): string Instruction -----' # addInfo: string context: Context TODO: Double check if we even $^{f C}$ TODO: Deprecte this use the `varName` and -----**|-----------**(there is a PR for that) + getContext(): Context `getVarName()` fields/methods + setContext(newContext: Context): voi ForLoopInstruction | Pointer Dereference Assignment Instruction | | StackArrayIndexAssignmentInstruction | BranchInstruction ArrayIndexAssignmentInstruction | VariableAssignmentInstr - preRunInstruction: Instruction TODO: Implement this and make $^{f L}$ ReturnInstruction TODO: Issue #140 - is this - pointerEvalInstr: Value - arrayName: string TODO: Should probably be WhileLoopInstruction DiscardInstruction IfStatementInstruction - branchInstruction: BranchInstruction - branchConditionInstr: Value BinOpInstr and UnaryOpInstr use needed here? (referring to - assigmnetExprInstr: Value - index: Value - arrayPtrEval: ArrayIndexInstruction - type: Type |StorageDeclaration| - varName: string - hasPostIterate: bool bodyInstructions: Instruction[*] - returnExprInstr: Value the `relax` field) - derefCount: ulong - assignment: Value - assignment: Value - data: Value - exprinstr: Value branchInstructions: BranchInstruction[*] + branchInstruction: BranchInstruction + getInstrType(): Type + getReturnExpInstr(): Valu · hasPostIterationInstruction(): bool + hasConditionInstr(): bool + setInstrType(newType: Type): vo + getBranchInstructions(): BranchInstruction[*]| + getBranchInstruction(): BranchInstruction | + getPointerEvalInstr(): Value + getArrayPtrEval(): ArrayIndexInstruction + getArrayName(): string + getData(): Value + getExpressionInstruction(): Value + hasReturnExpr(): bool + getConditionInstr(): Value + getPreRunInstruction(): Instruction + getAssExprInstr(): Value + getAssignmentInstr(): Value + getIndexInstr(): Value + getVarName(): string + hasPreRunInstruction(): bool + getBodyInstructions(): Instruction[* + getDerefCount(): ulong + getAssignedValue(): Value + getBranchInstruction(): BranchInstructio TODO: Decide if **CastedValueInstruction** TODO: **FetchValueVar** ArrayIndexInstruction StackArrayIndexInstruction OperatorInstruction STorageDeclaration - uncastedValue: Value LiteralValue LiteralValueFloat Make all TODO: is TODO: Add getter for should have the - relax: bool indexTo: Value indexTo: Value varName: string - Callinstr arryName # operator: SymbolType private -----`data` field type field? - data: string - index: Value - data: string - length: byte - index: Value and add + getEmbeddedInstruction(): Value needed? + getOperator(): SymbolType + getLiteralValue(): strin + getCastToType(): Type getters + getVarName(): string | + getIndexInstr(): Value + getLiteralValue(): string + getIndexInstr(): Value + setOperator(operator: SymbolType): void + isRelaxed(): bool + getIndexedToInstr(): Value | + getIndexedToInstr(): Value + setRelax(relax: bool): void **FuncCallInstr VariableDeclaration** BinOpInstr UnaryOpInstr TODO: Fighure out if we can - statementLevel: bool TODO: Do - varName: string - lhs: Value move stuff from FuncCallInstr - evaluationInstructions: Value[*] TODO: - length: byte - rhs: Value we need - exp: Value - fucntionName: string Also add up into here. Will probably varType: TypevarAssInstr: Value length + getOperand(): Value + getLHSInstr(): Value make sense when we get + setEvalInstr(argPos: ulong, instr: Value): void + getRHSInstr(): Value started on OOP + getEvaluationInstructions(): Value[*] + getVarName(): string + isStatementLevel(): bool + getAssignmentInstr(): Value + makeStatementLevel(): void TODO: Update this once named parameter support TODO: Add gettters is brought in