**Analysis**

Description of semantic rules

Augmented grammar

**Design/Implementation**

Solution description:

SemanticRecord: a parent class for 3 different types of semantic records: SemanticVariable, SemanticFunction and SemanticClass. Each SemanticRecord has the following member variables:

* SemanticRecordType semanticType;
* std::string identifier;
* bool declared;
* SemanticStructure semanticStructure;
* int arrayDimension;
* int address;

Semantic Variable: in addition to inherited members, has VariableKind kind; (normal or parameter)

SemanticFunction: in addition to inherited members, has:

* std::list<SemanticVariable\*>\* params;
* SymbolTable\* localSymbolTable;

SemanticClass: in addition to inherited members, has: