

client

ETF_MODEL +

feature

```
check_class_found (cn : STRING)
  --- Check if class exists
check_feature_name_clash (cn: STRING; fn: STRING)
  -- Check for feature name clashes
check_feature_exists (cn, fn : STRING)
  -- Check if feature exists
check_param_name_clash (params: ARRAY[TUPLE[STRING,STRING]]): BOOLEAN
  -- Check for parameter name clashes
check_dup_params (params: ARRAY[TUPLE[STRING,STRING]]): BOOLEAN
  -- Check for duplicate parameter names
check_parameter_type_invalid (params: ARRAY[TUPLE[STRING,STRING]]): BOOLEAN
  -- Check for invalid parameter types
check_return_type_invalid (rt: STRING): BOOLEAN
  -- Check for an invalid return type
```

feature -- attributes

```
dup_parameters: ARRAY[STRING]
params_clash: ARRAY[STRING]
param_types_invalid: ARRAY[STRING]
classes: ARRAYED_LIST[LANG_CLASS]
current_class: LANG_CLASS
current_routine: STRING
current_query: LANG_QUERY
current_command: LANG_COMMAND
current_attribute: LANG_ATTRIBUTE
current_assignment_instruction: LANG_ASSIGNMENT
assignment_expressions: ARRAYED_STACK[EXPRESSION]
pretty_printer: PRETTY_PRINTER
type_checker: TYPE_CHECKER
code_gen: CODE_GENERATOR
```

feature -- commands

```
out: STRING
```

```
classes: ARRAY[LANG_CLASS]
current_class: LANG_CLASS
current_attribute: LANG_ATTRIBUTE
current_query: LANG_QUERY
current_command: LANG_COMMAND
current_assignment: LANG_ASSIGNMENT
```

supplier

*
LANG_FEATURE

LANG_CLASS +

```
feature -- make
-- Constructor
```

```
feature -- make_empty
-- Constructor
```

feature -- attributes

```
name: STRING
features: ARRAY[LANG_FEATURE]
attributes: LINKED_LIST[LANG_ATTRIBUTE]
commands: LINKED_LIST[LANG_COMMAND]
queries: LINKED_LIST[LANG_QUERY]
```

```
feature -- commands
out: STRING
```

LANG_ATTRIBUTE+

```
feature -- make
-- Constructor
```

```
feature -- make_empty
-- Constructor
```

feature -- attributes

```
name: STRING
type: STRING
```

```
feature -- commands
out: STRING
```

LANG_ASSIGNMENT+

```
feature -- make
-- Constructor
```

```
feature -- make_empty
-- Constructor
```

feature -- attributes

```
class_name: STRING
feature_name: STRING
var_name: STRING
```

```
feature -- commands
out: STRING
```

LANG_QUERY+

```
feature -- make
-- Constructor
```

```
feature -- make_empty
-- Constructor
```

feature -- attributes

```
name: STRING
parameters: ARRAY[TUPLE[STRING]]
return_type: STRING
```

```
feature -- commands
out: STRING
```

LANG_COMMAND+

```
feature -- make
-- Constructor
```

```
feature -- make_empty
-- Constructor
```

feature -- attributes

```
name: STRING
parameters: ARRAY[TUPLE[STRING, STRING]]
```

```
feature -- commands
out: STRING
```