Executable Class Documentation

Source File: 'Component.h'
Namespace: ca
Class Header: `class Executable`

Overview

The *Executable* abstract class is a template for computer components connected to bus interconnection structures.

Constructors

- `Executable()` (default constructor)
  - **Purpose**: Sets bus to null.
- `Executable(BusCom*)`
  - **Purpose**: Sets bus to null.
- `Executable(const Executable& obj)` (copy constructor) [deleted]

Destructor

- `~Executable()` [virtual]
  - **Purpose**: Remove the bus.

Assignment Operator

- `operator=(const Executable& rhs)` [deleted]

Methods

- `link(BusCom& bus)` [virtual]
  - **Purpose**: Connects bus to the component.
  - **Parameter(s)**:
    - *bus*: A *BusCom* pointer object.
- `unlink()` [virtual]
  - **Purpose**: Removes bus from the component.
- `linked(BusCom& bus) const` [protected]
  - **Purpose**: Check if *obj* is the connected to the component
  - **Parameter(s)**:
    - *bus*: A *BusCom* pointer object.
  - **Return**: True if *obj* is linked; otherwise, false.
- `lines()`
  `lines() const`
  - **Purpose**: Retrieves the bus of the component.
  - **Exception**:
    - *Runtime Error*: Occurs if bus is not set.
  - **Return**: A *BusCom* reference.
- `configured() const` [virtual]
  - **Purpose**: Checks if the component is configured.
  - **Return**: A true if a bus is attached; otherwise, a false.
- `process()` [pure virtual]
  - **Purpose**: Performs an execution cycle if the component is completely configured.
- `manual()` [pure virtual]
  - **Purpose**: Provides a list of control bus codes for the `process()` method.
  - **Return**: A string representation of the list