

std::exception Hierarchy Solutions

std::exception Hierarchy Interface

- Explain why the what() member function of std::exception is virtual
 - A virtual what() function allows child classes to override it
 - A child class can return an appropriate error message for the exception it represents
- Explain why the destructor of std::exception is virtual
 - In order that dynamic binding is used when destroying child classes
 - This ensures that objects are correctly destroyed

std::exception Hierarchy Interface

- The `logic_error`, `runtime_error` and their subclasses all have a constructor that takes a string argument
- What is this string used for?
 - The string argument populates the error message that is returned by `what()`
- What data should we put in this string?
 - Information about the error condition for which the exception is being thrown