

# Software Design

## 1. Task

Our task is to modernize an obsolete program so that it compiles on Visual Studio 2015 while introducing minimal changes to the original code.

## 2. Original program

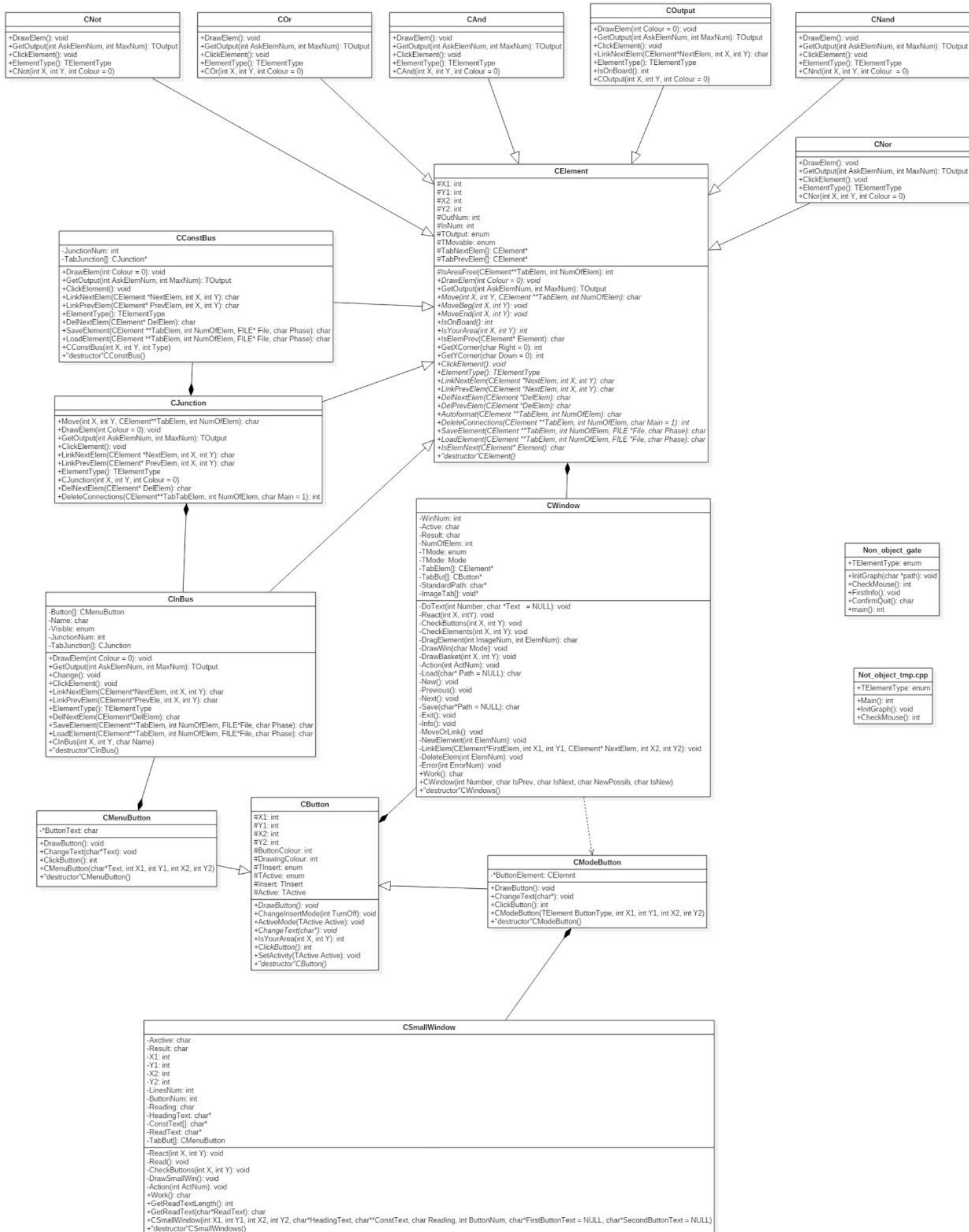
The class diagram on the next page depicts the original program as it was given to us.

We plan to introduce no modifications to this structure – no relations should be modified, no existing classes should be deleted nor any new classes should be added to the structure. All changes should be relegated to methods and contents of those methods. Ideally, no changes should be made to class diagram between original code and our final product beside a removal of few obsolete methods.

## 3. Anticipated changes

Changes made have been categorized into three categories:

1. Implement minor fixes – these modifications will only affect single lines of code.
2. Replace obsolete graphics API – these modifications will modify large swaths of code but should not change number of methods nor their names; these modifications should be relegated to the contents of methods.
3. Remove obsolete cursor handling – these modifications will lead to deletion of methods which only functionality is to handle mouse cursor.
  - 3.1. Anticipated list of methods that will be removed:
    - 3.1.1. CMenuButton::ClickButton(): int
    - 3.1.2. CModeButton::ClickButton(): int
    - 3.1.3. CheckMouse(): int
      - 3.1.3.1. This method can be found in non-class file Gate.cpp
    - 3.1.4. CInBus::ClickElement(): void
    - 3.1.5. CConstBus::ClickElement(): void



Our task is not concerned with structural changes to the program – in fact, introducing as little changes to the code is part of our task. Hence little changes should occur to the structure of the program depicted as its class diagram.

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Version 2.0 – 04.12.2017