

Lesson 8: Miscellaneous Topics

- Variable initialization
- Const-correctness
- Casts
- Bool
- Forwarding functions



8.1 Variable Initialization

- Ways to initialize a single variable
 - Default initialization
 - Function declaration
 - “The most vexing parse”
 - Copy construction
 - Copy assignment
- Guidelines

8.2 Const-Correctness

- Keyword “const”
 - Powerful tool for writing safe code
 - Use as much as possible, but no more
- Analyze code
 - Look for incorrect usages of const
- Keyword “mutable”
- Guidelines

8.3 Casts

- 4 C++ cast operators
 - `const_cast`
 - `dynamic_cast`
 - `reinterpret_cast`
 - `static_cast`
- Guidelines

8.4 Bool

- Do we really need a bool type?
- Analyze options if we didn't have bool
- Conclusion

8.5 Forwarding Functions

- Function that hands off work to another function or object
- Should be efficient
- Guidelines