

Notes part 11

A Tour of C++. Ch. 3. Modularity

- declare module with *export module*
- import instead of include – `import module foo;`
- module in `.cppm` *module definition files* eliminates need of separation in `.h` *header files* and `.cpp` *source code files*
 - may be called `.cxx`, `.mpp` etc. depending on compiler
- error handling
- contracts
- assertions
- structured binding

Exploring C++20. Ch. 42. Modules

- hiding implementation
- compiling modules

Clean C++20. Ch. 6. Modularization

- information hiding
- strong cohesion
- loose coupling
- SRP – *Single Responsibility Principle* – similar to *Separation of Concerns* in database design
- SLA – *Single Level of Abstraction*
- OCP – *Open-Closed Principle*
- type erasure
- duck-typing
- LSP – *Liskov Substitution Principle*
- final specifier
- RTTI – *run-time type information/identification*
- ISP – *Interface Segregation Principle*
- DIP – *Dependency Inversion Principle*
- Law of Demeter – *don't talk to strangers*
 - *aspect-oriented software development*
 - separate *interface* from hidden *implementatiton*
- avoid anemic classes
- avoid static class members
- BMI – *Built Module Interface* file

Modern C++. Ch. 12. Modules and Advanced C++. Ch. 12. Modules

- Nice for reference

Exploring C++20. Ch. 43. Old-Fashioned "Modules"

- Nice for reference