

INF43: Introduction to Software Engineering

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05/01/2009

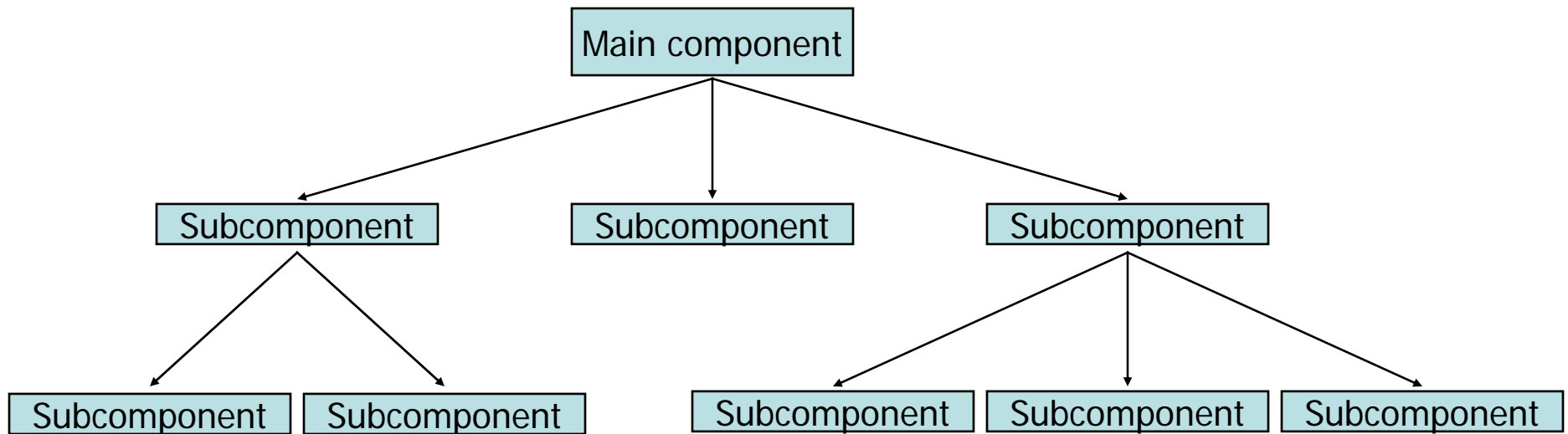
Announcement

- Midterm
 - May 5th (Tuesday)
- Phase 2 Assignment:
 - May 8th (Friday) 9:00 pm

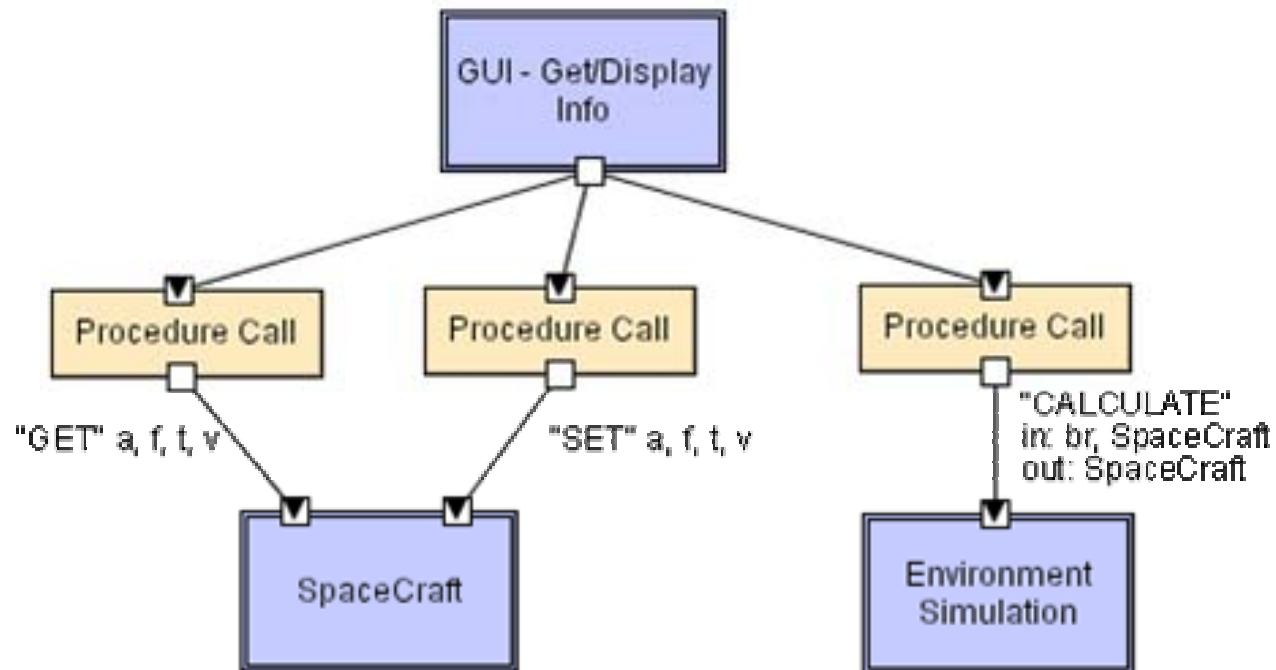
Architectural styles

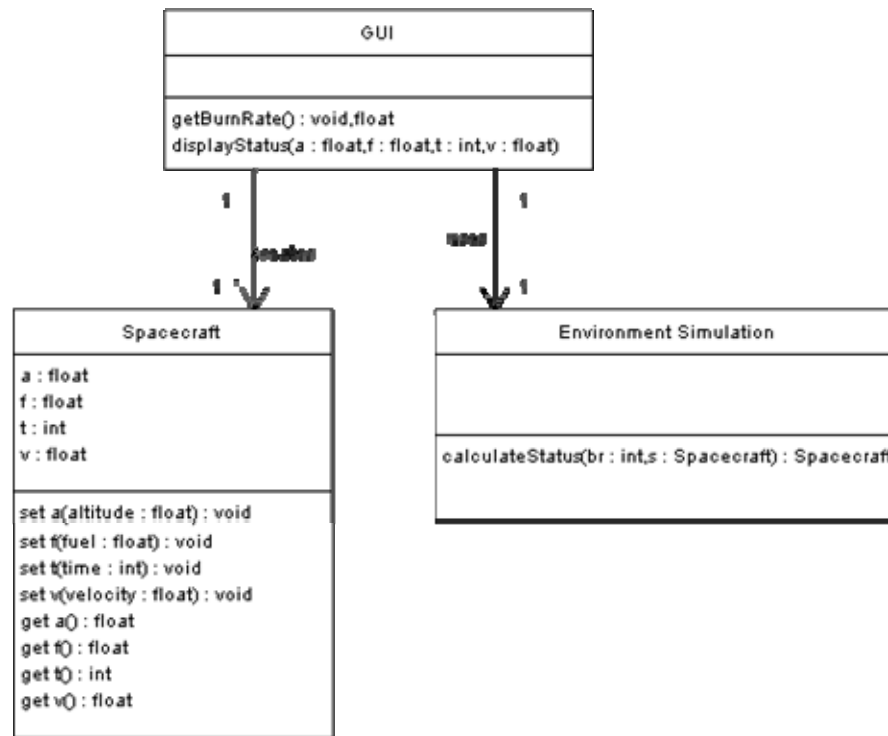
- Architecture is a formal arrangement of architectural elements.
- An architectural style abstracts from the specifics of architecture.
 - we concentrate on the types of its elements and their interconnections
- Architectural style
 - Describes a certain codification of elements and their arrangement
 - Constrains both the elements and their interrelationships.

Style: Main program with subroutines

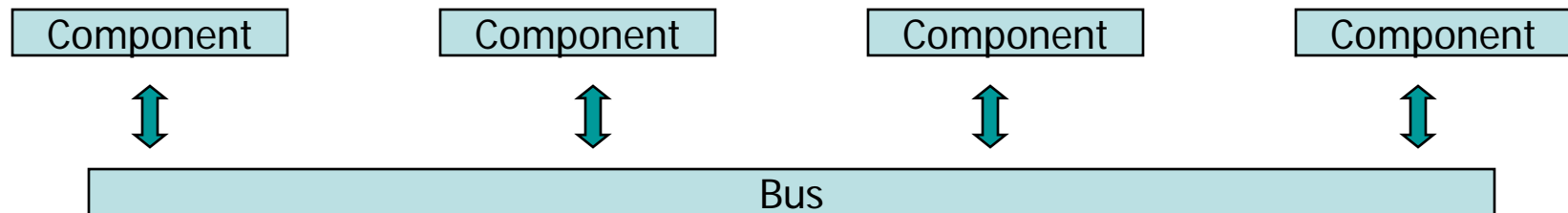


Style: Abstract data type

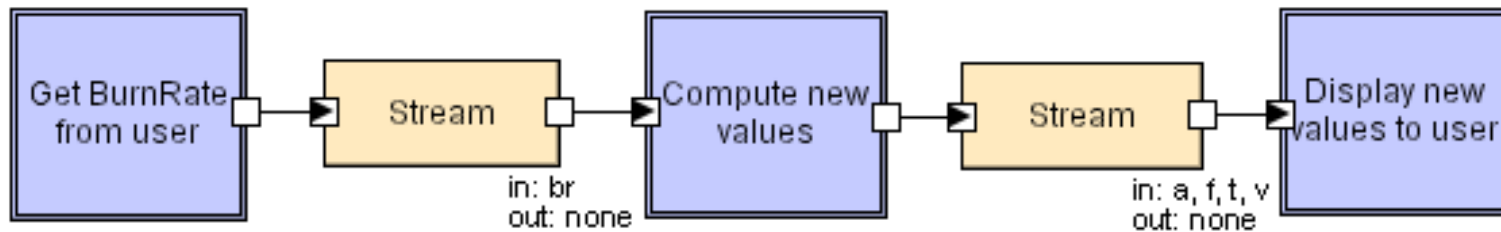




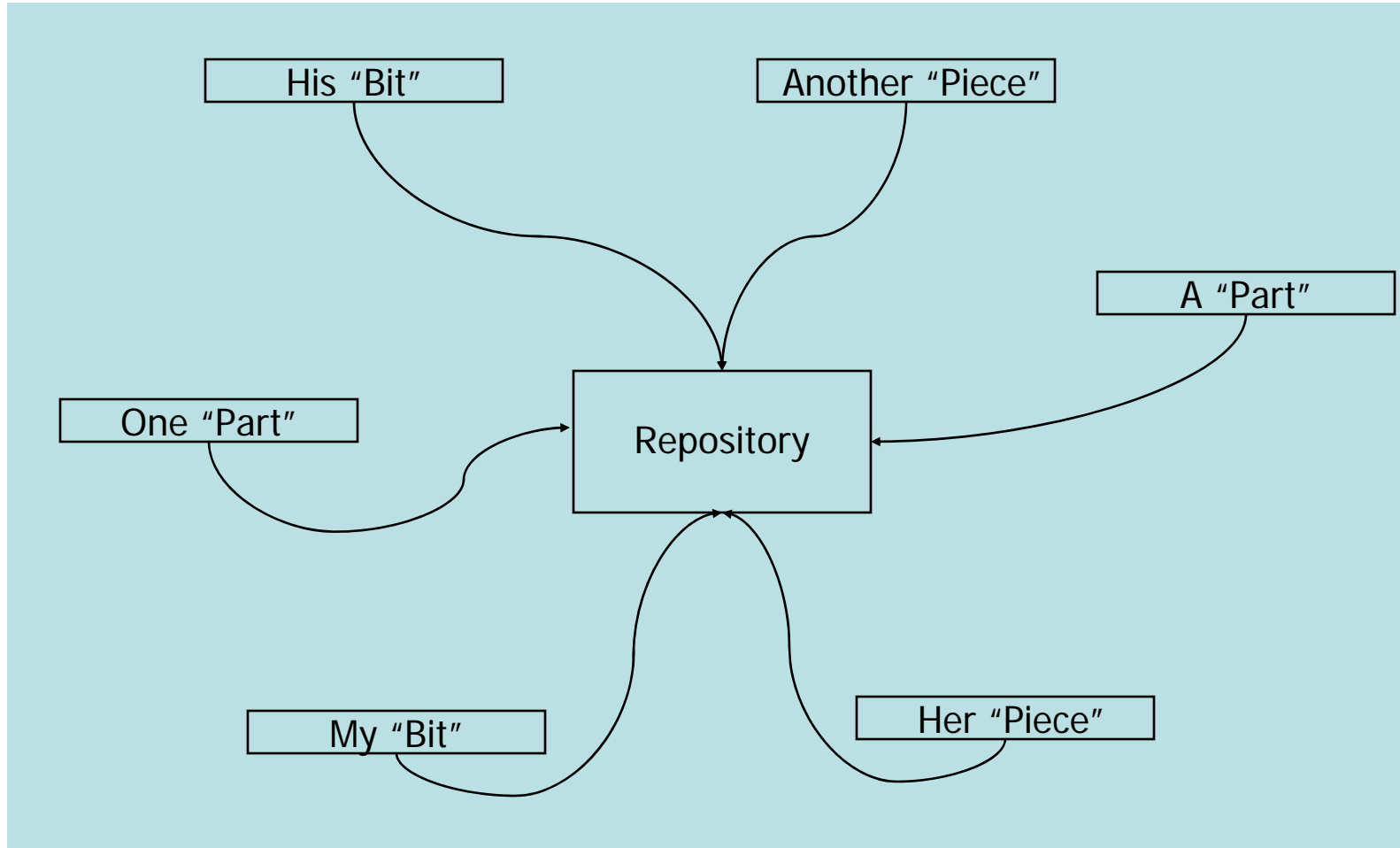
Style: Implicit invocation



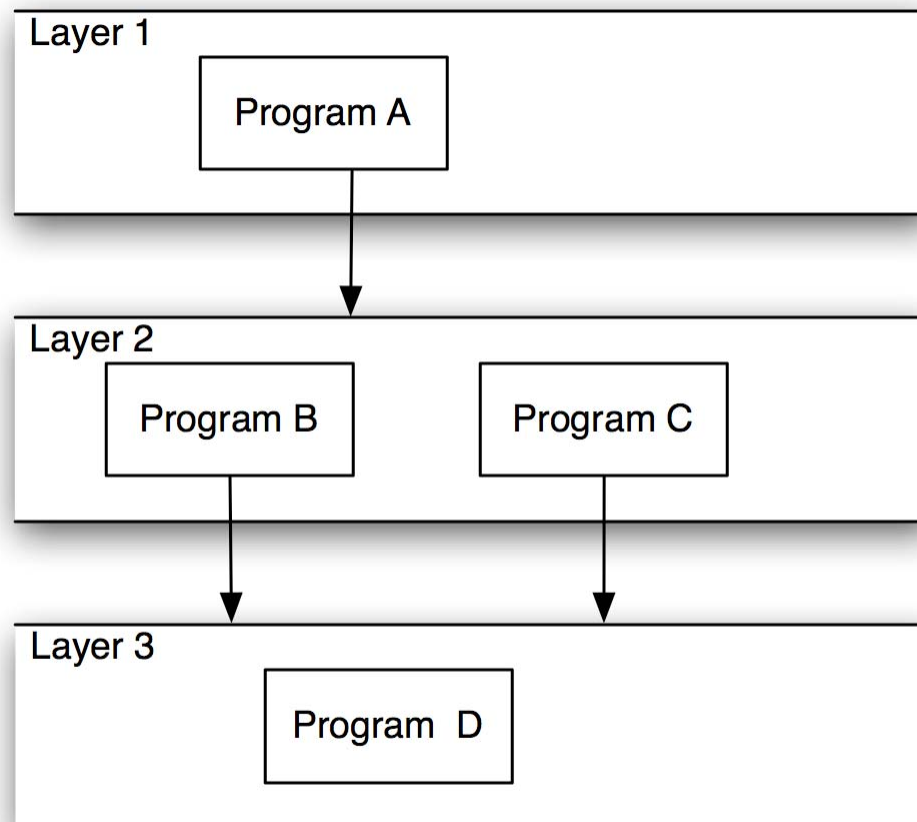
Style: Pipes and filters



Style: Repository



Style: Layered



Styles Summary

| Styles | Detailed styles |
|--|--|
| Traditional, language influenced styles | Main program and subroutines abstract data type (Object-oriented) |
| Layered (multi-level client-server) | Virtual machine Client-server |
| Data-flow styles | Batch sequential Pipe and filter |
| Shared memory | Repository (Blackboard) Rule based |
| Interpreter | Interpreter Mobile code |
| Implicit invocation (event announcement instead of method invocation) | Event-based Publish-subscribe |
| Peer-to-peer | |
| Derived styles (more complex styles) | C2(implicit invocation;event/layering/MVC) CORBA (distributed objects) |