

Traits - How far are they from components?

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Close

- Components are for composition

Far

- Traits are for programming in the small
 - Classes are made of traits
- Components are for programming in the large
 - (Atomic) components are made of classes (for instance)

Far

- Traits cannot be instantiated
 - Close to (mixin) modules (a link unit, text rather than value, no runtime existence)
- Components can be instantiated (runtime existence)

How far from modules?

- Far
 - Classes are made of traits
 - Lack of encapsulation
 - Strange asymmetry between provided and required services (eg aliasing)

How to get there?

- Hide the implementation
 - Add state
 - Add classes
 - Instantiation?
- Are these still traits (eg the flattening property is lost)?
- Trait layers