Module Abstraction and Problem Decomposition

Lesson Problem Decomposition

Lecture
Designing a Car

Last time, we looked at a set of sequential steps for building a chair

This time, we'll look at designing a car

- The Problem
 - Design a car
- The Constraints
 - Two doors
 - Convertible
 - Various performance requirements
 - Cost under \$30,000

- Various subsystems can be designed in parallel
 - Engine
 - Transmission
 - Chassis
 - Body
- But they are related to each other
 - Engine/transmission
 - Power/chassis
 - Body/Performance

Recap

- For some complex tasks, we can accomplish the subtasks in parallel
- There can be some, or even many, dependencies between the subtasks