

# Topic: Managing similarity and variability in a software chrestomathy

- ▶ **Motivation:** The *101companies chrestomathy* contains, by design, substantial amounts of redundant code, as the same system is implemented in different ways time and again. Consider, for example, all Java-or Haskell-based implementations. While these implementations differ in important ways because of technology choices, they also share some elements. For instance, many Java implementations contain a similar object model. Such similarity and variability should be managed for the good of code sharing and navigation between implementations.
- ▶ **Objective:** Identify some product line technology to capture variability. Make similarity and variability discoverable and explorable (navigatable) so that one understands how a given set of implementations differs and what common elements exist. Implement a product line. Support some transformation operators to be able to push some refactorings (e.g., renaming) through all present implementations.

This is a topic for a *master thesis* or a *research practical*.