

## **Advantages of Using Design Patterns**

Using Design patterns in the project brings flexibility to the code and it will help us minimize the effort of redesigning during an addition of a new functionality or changes to the existing one. Following design pattern while coding, facilitates the development of highly cohesive modules with minimal coupling. Thus, it is easy to accommodate changes to existing solution. It helps the developer get a high-level design overview and pattern used to design the solution easily.

Using techniques like abstract factory class reduces dependencies of the code with actual program. For example, when a base class like NumberExpression is changed, the only place we need to change in the code will be in the makeNumberExpression() method in the factory, by pointing it to new class, thus creating an abstract layer and making the code more flexible. It also helps in avoiding any changes from client's perspective.