Design Patterns Exercises - Head First Design Patterns 2nd Edition

<https://learning.oreilly.com/library/view/head-first-design/9781492077992/preface02.html>

Read introduction and Chapter 1. References to Sharpen your Pencil may refer to sections in previous editions but complete the chapters and work through as many exercises as time allows.

1. Patterns in code at <https://github.com/tmaronson-hcl/sandbox>. This is in another file in Training Session on Teams with other links and information.
2. Chapter 4 - Sharpen Your Pencil and related code exercises on Factory and related patterns. See the Java classes NumberFormat and DateFormat among others.
3. Chapter 3 - Sharpen Your Pencil and related code exercises on the Decorator pattern. See the Java API classes and interfaces in the java.io package.
4. Chapter 2 - Sharpen Your Pencil and related code exercises on the Observer Pattern. Think of MVC or Model View Controller pattern or architecture. Controller observeres interaction between Model and View and updates view accordingly. Java Message Service, part of JEE, has a publish-subscribe model. Please look at JavaDocs and investigate the Observer class and Observable interface.
5. Chapter 9 - Sharpen Your Pencil and related code exercises on the Iterator Pattern. See Iterator interface for all Collections in Java, Iterable interface.
6. Chapter 7 - Look at Turkey and Duck code and explanations. Sharpen Your Pencil and related code exercises on the Adapter and Facade Pattern. Also, work on exercise that converts an Iterator to an Enumeration. Enumeration is considered legacy or older Java code used with legacy classes Vector, Hashtable. The example in the book works on the reverse case for the adapter.
7. Chapter 8 - Template pattern Remember JdbcTemplate and how it compares to this pattern.
8. Chapter 5 - Singleton pattern Singleton bean in Spring. Think of private constructors and member variable as same type as class.
9. Chapter 12 - MVC pattern Think Spring MVC for Model View Controller. Other parts of chapter are good also.
10. Chapter 14 - Groups many of the other structural, creational, behavioral patterns here. Good to get a rough view of those you did not concentrate on but may find useful or at least know where to look if you can use them in the future.
11. Work through other chapters if you have time. T Do not memorize patterns but understand what problems they solve and what best practices you gain with them and why these are best practices.