

Name: _____

Date: _____

Software Engineering Specialization

Exercises: Design Patterns

Exercise 1: Which of the following are disadvantages of using inheritance to provide Duck

behaviour (Choose all the apply.)?

- ☐ A. Code is duplicated across subclasses.
- ☐ B. Runtime behaviour changes are difficult.
- ☐ C. We can't make ducks dance.
- ☐ D. Hard to gain knowledge of all duck behaviours.
- ☐ E. Ducks can't fly and quack at the same time.
- ☐ F. Changes can unintentionally affect other ducks.

Exercise 2: How does the observer pattern use the following principles?

Design Principle: Identify the aspects of your application that vary and separate them from what stays the same.

Design Principle: Program to an interface, not an implementation.

Design Principle: Favour composition over inheritance.