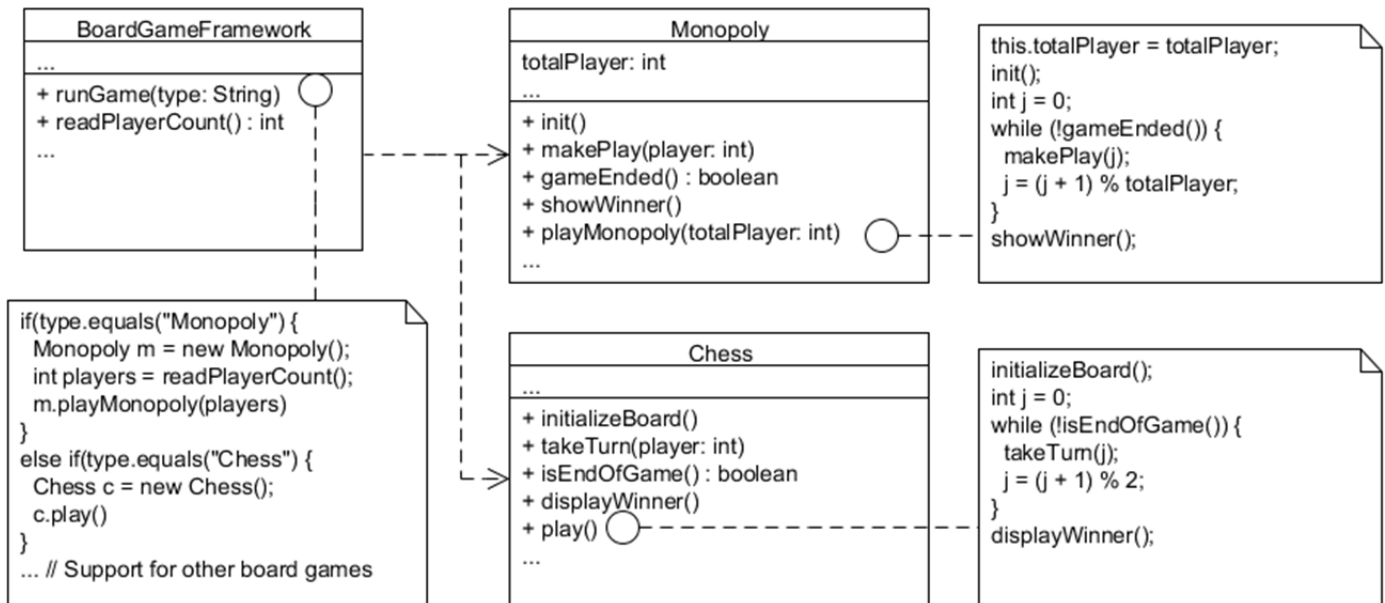# CSSE 374: Lab 6-1 (Design Studio)

Review the design below and answer the following questions in **docs/Answer.pdf** file:

Q1. List and explain all of the problems in the design of the Board Game Framework. [**10 points**]

- BoardGameFramework does not rely on abstraction. It relies on concrete implementation classes: Monopoly and Chess.
- The current design of the games is duplicating code rather than reusing them.
- They current design violates the Open-Closed principle. The changes in BoardGameFramework and the game classes are not encapsulated meaningfully. Currently, we have to modify BoardGameFramework to add new games.

Q2. Fix all of the problems listed in Q1 and present your improved design using UML class diagram. You may reuse the *docs/BoardGameExample.uxf* file. [**30 points**]
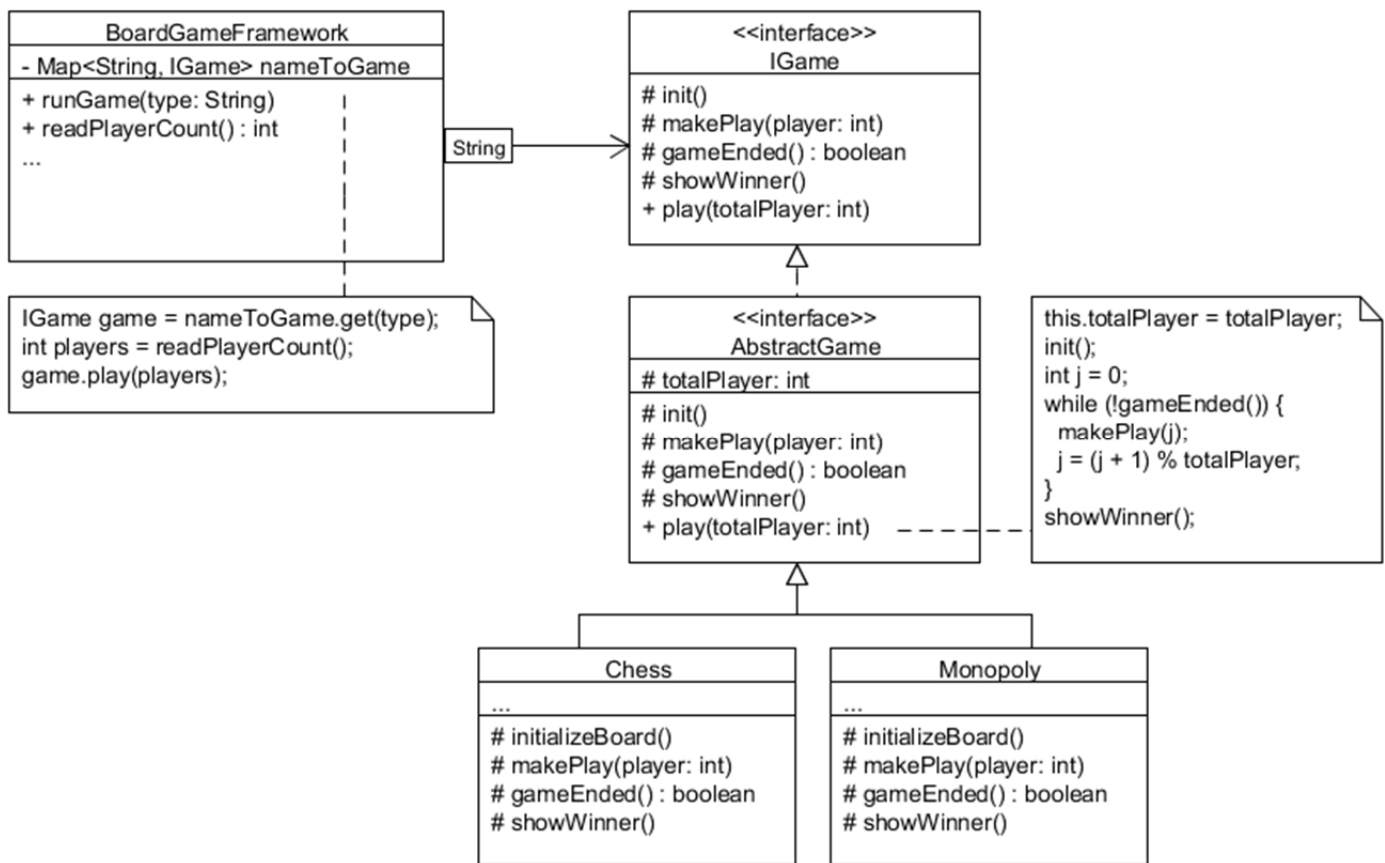
Q3. Explain your design and identify all of the patterns that you have applied in your new design. [**10 points**]

We are using a Map in BoardGameFramework to allow dynamic addition of new games into the framework. We are using Template Method to provide skeleton for the games that is reused by all of the similar board games.

Deliverable

Turn in **only Answer.pdf** on Moodle.