

Design Pattern Analysis Group 11

While creating our version of the board game Blokus. The use of Information expert is a key pattern used when creating our game, this was a very vital pattern in our creation, it ensures that the object that has the information required to accomplish a task is the one that does the task. The use of Information expert helped to create cohesion within our code since it helps to focus the tasks in the objects with the necessary information. High Cohesion also exists within our code, classes are focused on the specific tasks they should accomplish and nothing more. Within our code we also used the creator pattern quite frequently since some classes required having objects of other classes to accomplish their goals. We've also used Polymorphism in our code, where some methods had a default functionality that changed within a subclass

Pattern	Class Example	Description
Information Expert	Game.java	Our Game.java class has a lot of information within it since it is the main class that controls the gameplay, this causes it to have many examples of using the Information Expert pattern to accomplish many tasks.
High Cohesion	GameOver.java	The GameOver.java class is a very highly cohesive class within our code, it contains all the code for triggering the end of game sequence, meaning it sets up the game over screen and displays the winner with the option to play again or to not play again. This class is very focused containing exactly what it is named after, the GameOver.
Creator	GameBoard.java	The GameBoard.java class is a great example of the creator pattern; it creates many instances of the customButton.java class which allows it to make an array of customButtons that ultimately create the array(board) which pieces are placed on
Polymorphism	Player.java	The Player.java class implements many methods from our shapesList.java class, that either had no real functionality or had default functionality that needed to have different functionality.