UMKC

Spring-2017

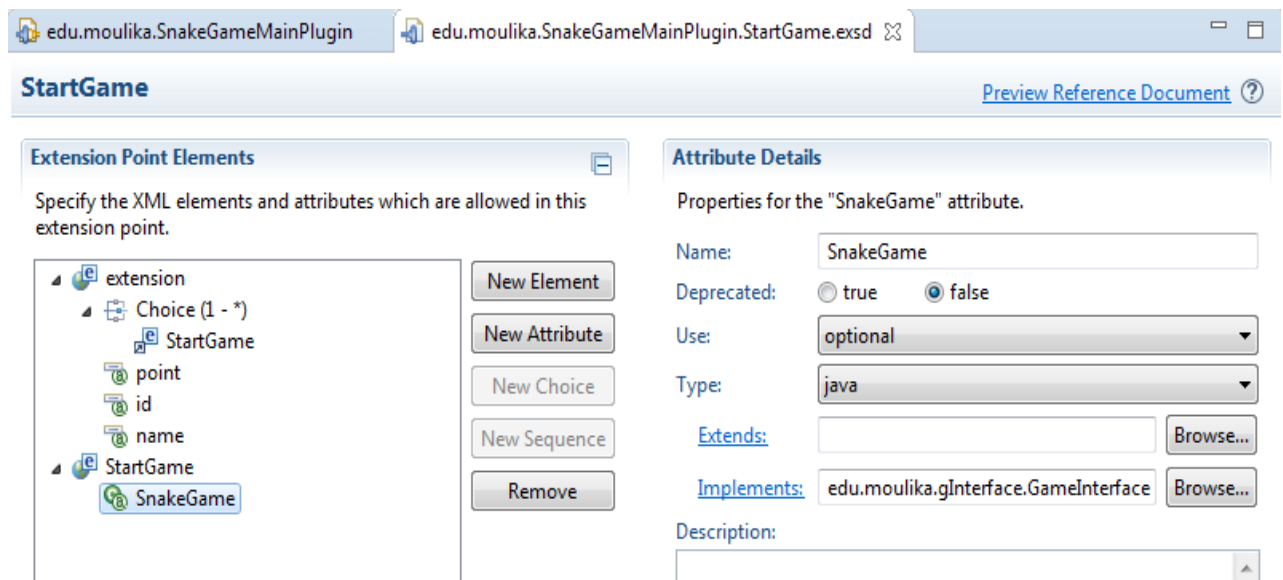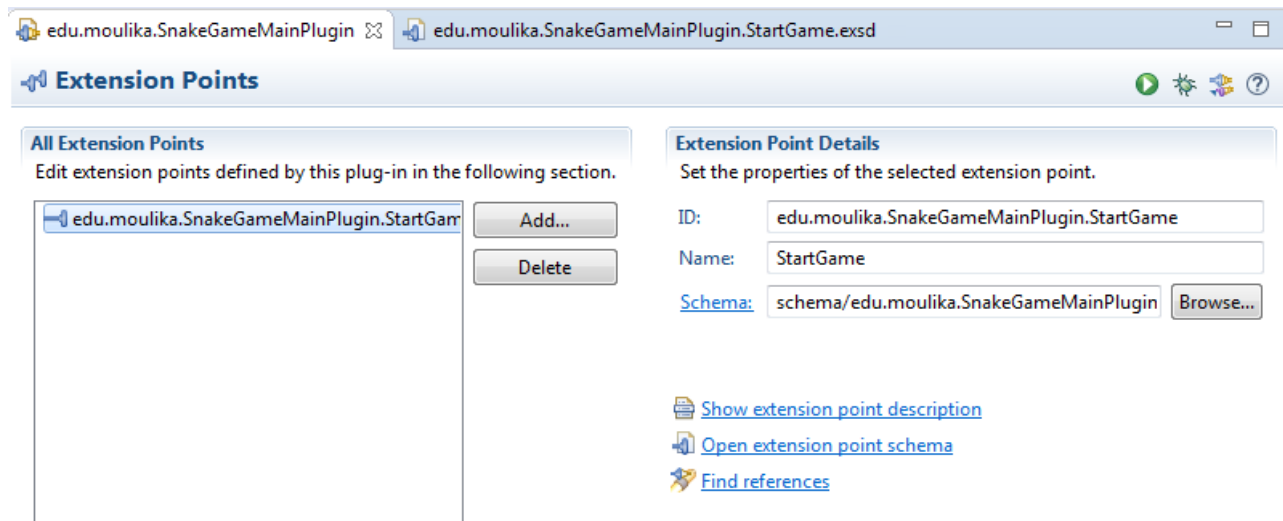Software Methods and Tools

Assignment-4

Submitted by:

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This assignment is about Eclipse plug-ins, and the extension and extension point mechanism. The Snake Game in java application is converted to eclipse plugin using extension and extension points. I created below 4 plugins and used extension and extension points to convert game to eclipse plugin.
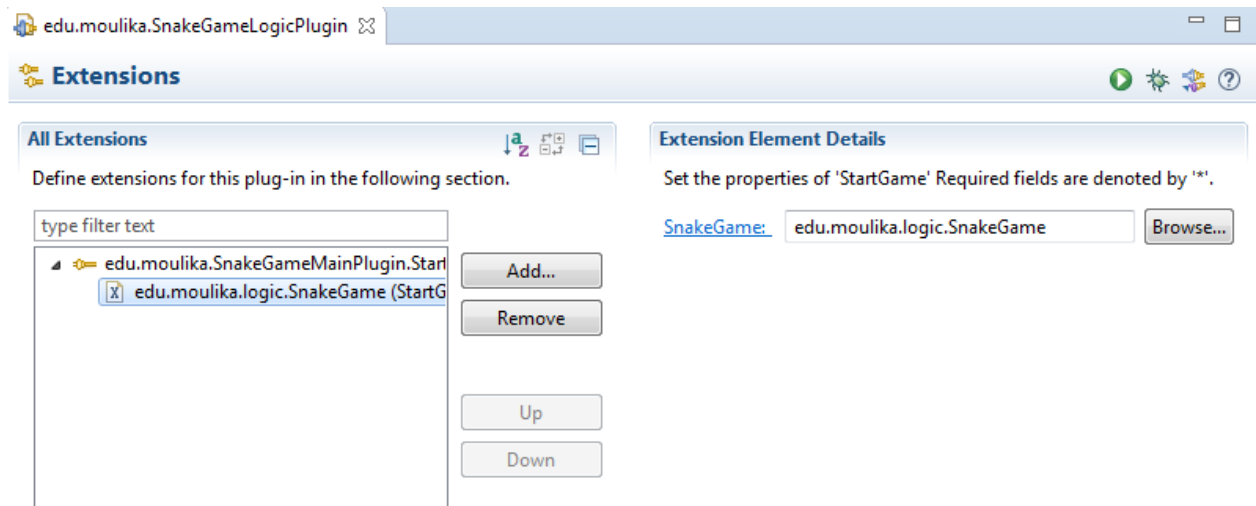
1. **SnakeGameMainPlugin:**

   This plugin is the starting point of the project, in which extension point is created to main class Snake Game. Using Handler, the function startGame() in SnakeGame class is invoked.
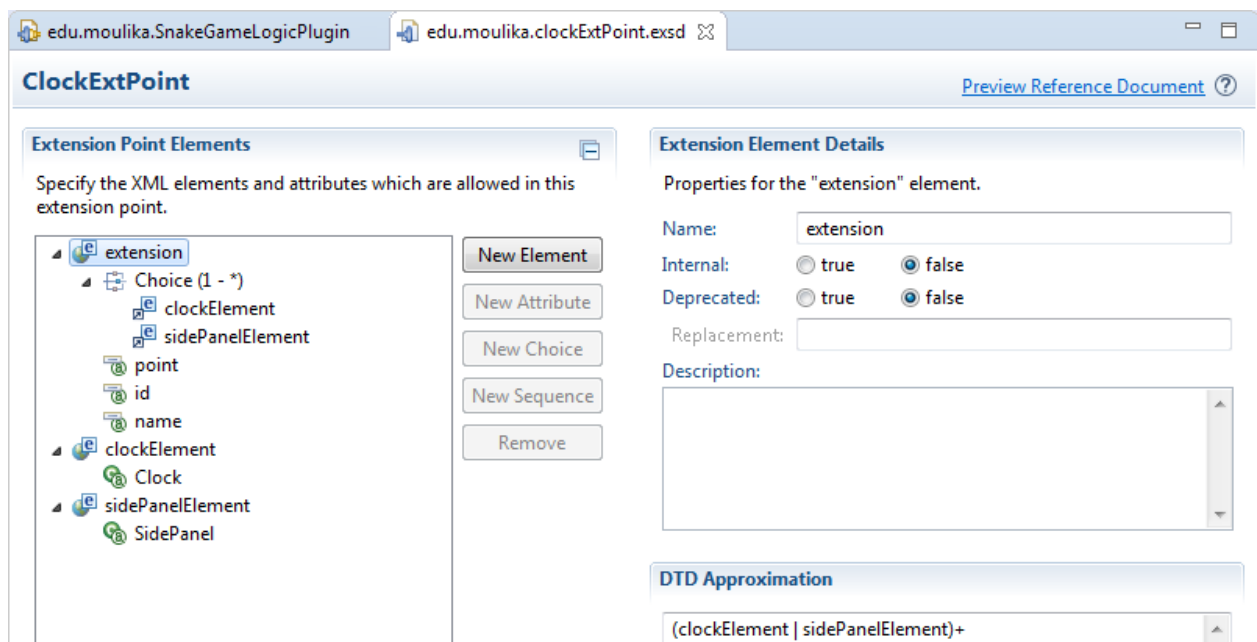
2. SnakeGameLogicPlugin:

This plugin contains main class SnakeGame and also BoardPanel class. The BoardPanel class contains the logic for Game Board Control and the elements appears on Board. Extension is created in this plugin for extension Point of SnakeGameMainPlugin and SnakeGame class is invoked, where the main game logic starts.
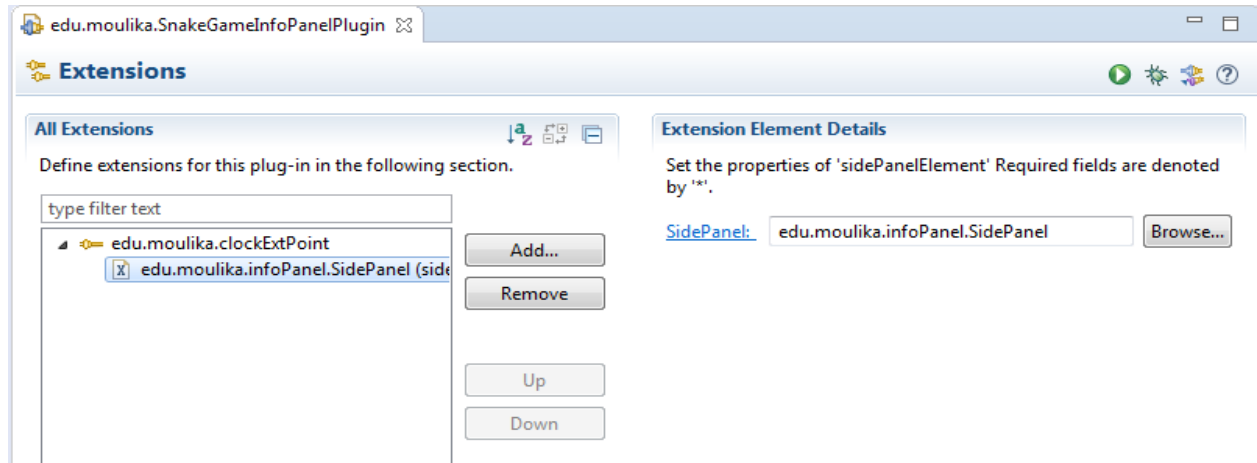

Also extension point is created for Clock and SidePanel class, whose logic is implemented in other plugins.
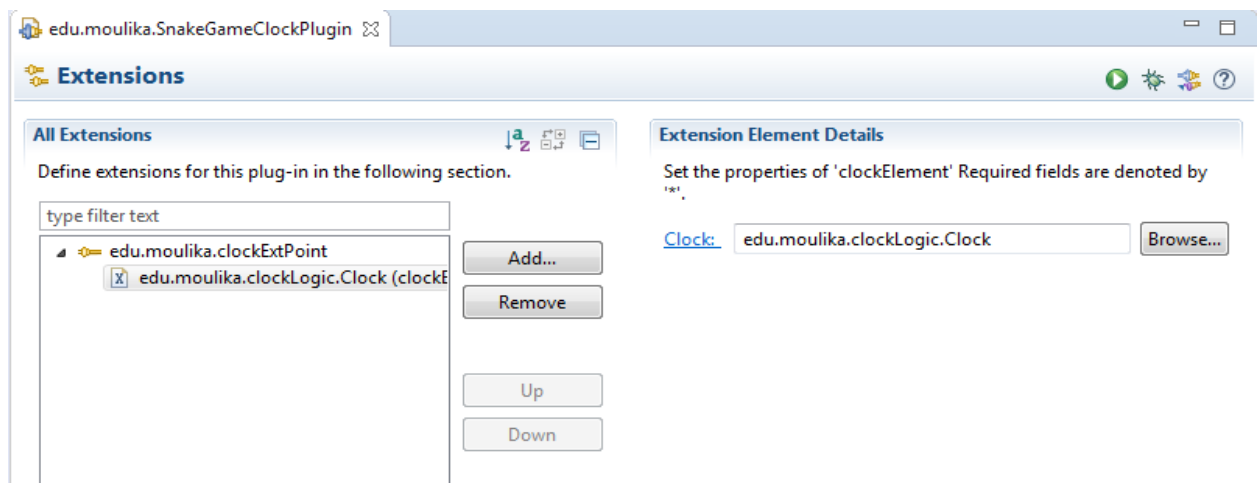
3. **SnakeGameInfoPanelPlugin:**

   This plugin contains SidePanel class which is responsible for displaying the game controls and information such as score,fruit eaten etc. to the right of game board. Extension is created for extension point created in SnakeGameLogicPlugin which invokes SidePanel class.

4. **SnakeGameClockPlugin:**

   This plugin contains Clock class that is responsible for maintaining cycles in Game. Extension is created for extension point created in SnakeGameLogicPlugin which invokes Clock class.

Finally, SnakeGameMainPlugin is executed as Eclipse Application to run the plugin. Also, exported the entire project as plugins and installed the same in Eclipse.