# Draft Design of Node Editor

The idea is to separate view and controller (MVC design pattern) and implement specific mode controllers for all the modes used in Dragoon. This will help us to remove flags and switches that we currently have for all the modes, which is causing a lot of bugs and has proven to be hard to maintain.

NodeEditorController

AuthorModeNodeEditorController

CoachedModeNodeEditorController

StudentModeNodeEditorController

NodeEditorHelper

NodeEditor

**NodeEditor**: View Frame of Node Editor with separate panels of each tab.

**NodeEditorController**: Java Interface with all the methods necessary for the Modes. Every mode must implement these methods. It contains methods for check, giveup actions and other actions.

**NodeEditorHelper**: Abstract class having common methods used in all the modes of Dragoon. All the mode implementation classes with extend from this class.

**StudentModeNodeEditorController**: Class implementing NodeEditorController interface for Student Mode and extending from NodeEditorHelper. It provides a separate implementation of Check, Giveup and other functions with specific behavior in Student Mode (also called tutor mode).

**AuthorModeNodeEditorController**: Class implementing NodeEditorController interface for Author Mode and extending from NodeEditorHelper.

**CoachedModeNodeEditorController**: Methods implemented specific to Coached Mode. This class also extends from NodeEditor helper to use the common methods.

All the Tab Panels (Description, Plan etc) will also be using controller methods for all the actions.