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/**
 * Controller class.
 *
 * @author Bruce W. Weide
 * @author Paolo Bucci
 */
public final class AppendUndoController1 implements AppendUndoController {

    /**
     * Model object.
     */
    private final AppendUndoModel model;

    /**
     * View object.
     */
    private final AppendUndoView view;

    /**
     * Updates view to display model.
     *
     * @param model
     *         the model
     * @param view
     *         the view
     */
    private static void updateViewToMatchModel(AppendUndoModel model,
        AppendUndoView view) {
        /**
         * Get model info
         */
        String input = model.input();
        String output = model.output().top();
        /**
         * Update view to reflect changes in model
         */
        if (model.output().length() > 1) {
            view.updateUndoAllowed(true);
        } else {
            view.updateUndoAllowed(false);
        }

        view.updateInputDisplay(input);
        view.updateOutputDisplay(output);
    }

    /**
     * Constructor; connects {@code this} to the model and view it coordinates.
     *
     * @param model
     *         model to connect to

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    * @param view
    *         view to connect to
    */
    public AppendUndoController1(AppendUndoModel model, AppendUndoView view) {
        this.model = model;
        this.view = view;
        /*
         * Update view to reflect initial value of model
         */
        updateViewToMatchModel(this.model, this.view);
    }

    /**
     * Processes reset event.
     */
    @Override
    public void processResetEvent() {
        /*
         * Update model in response to this event
         */
        this.model.setInput("");
        this.model.output().clear();
        this.model.output().push("");

        /*
         * Update view to reflect changes in model
         */
        updateViewToMatchModel(this.model, this.view);
    }

    /**
     * Processes append event.
     *
     * @param input
     *         value of input text (provided by view)
     */
    @Override
    public void processAppendEvent(String input) {
        /*
         * Update model in response to this event
         */
        this.model.setInput("");

        String top = this.model.output().top();
        this.model.output().push(top + input);

        /*
         * Update view to reflect changes in model
         */
        updateViewToMatchModel(this.model, this.view);
    }
}

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/**
 * Processes undo event.
 *
 */
@Override
public void processUndoEvent() {
    /**
     * Update model in response to this event
     */
    this.model.output().pop();

    /**
     * Update view to reflect changes in model
     */
    updateViewToMatchModel(this.model, this.view);
}
}
```