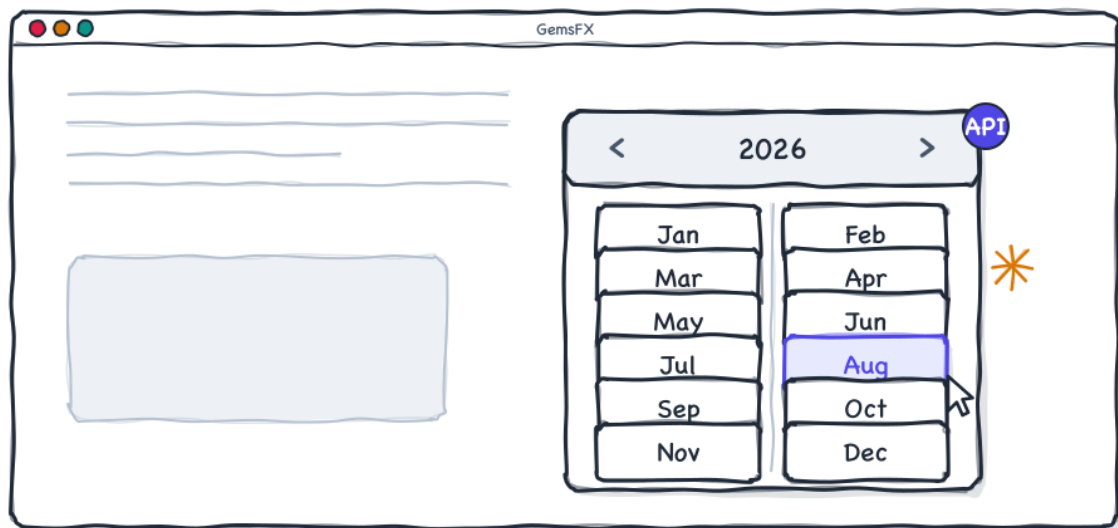


YearMonthView

Developer Manual

GemsFX • com.dlsc.gemsfx • JavaFX Custom Controls



Generated cartoon overview of YearMonthView.

YearMonthView displays the twelve months of a year as selectable cells, optionally bounded by earliest and latest months. It is useful as a standalone month selector and as popup content inside richer date controls.

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1. Introduction

YearMonthView is part of the GemsFX module `com.dlsc.gemsfx`. This manual documents only behavior verified in the control, skin, CSS, resource bundles and demo app.

1.1 Key features

- Selects a `java.time.YearMonth` value, initialized to `YearMonth.now()`.
- Header with previous / next year buttons can be shown or hidden.
- Month names are formatted by a `StringConverter`.
- Optional `earliestMonth` and `latestMonth` disable months outside the valid range.
- Selected and current months receive pseudo-class state in the skin.

1.2 Maven dependency

```
<dependency>
  <groupId>com.dlsc.gemsfx</groupId>
  <artifactId>gemsfx</artifactId>
  <version>4.4.1</version>
</dependency>
```

Use package `com.dlsc.gemsfx`.

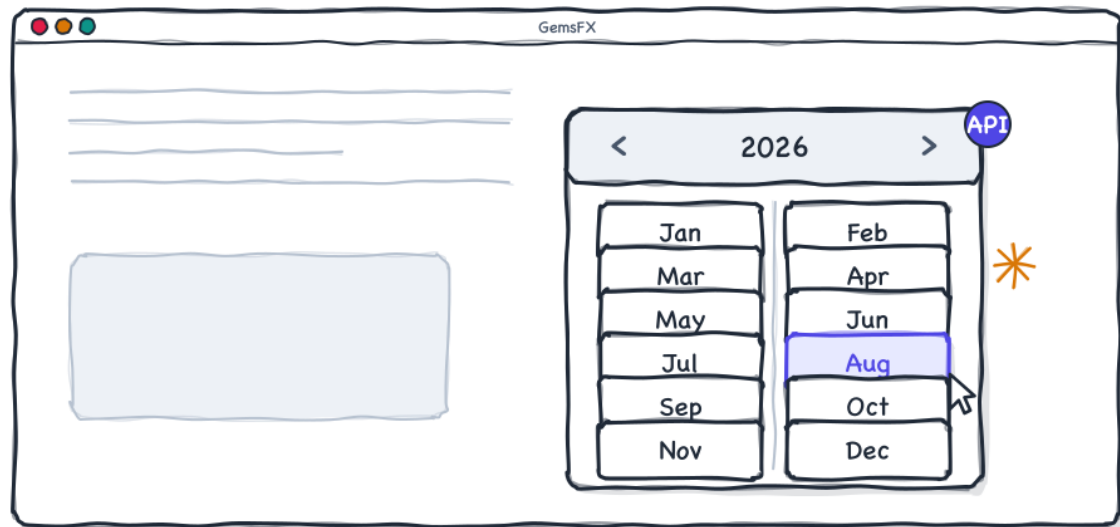
2. Getting started

Create the control, set the properties that define its valid values, and listen to the value or selection property that the control owns.

```
YearMonthView view = new YearMonthView();
view.setEarliestMonth(YearMonth.now().minusYears(1));
view.setLatestMonth(YearMonth.now());
view.setMaxSize(Region.USE_PREF_SIZE, Region.USE_PREF_SIZE);

view.valueProperty().addListener((obs, oldValue, newValue) -> {
    System.out.println("selected month = " + newValue);
});
```

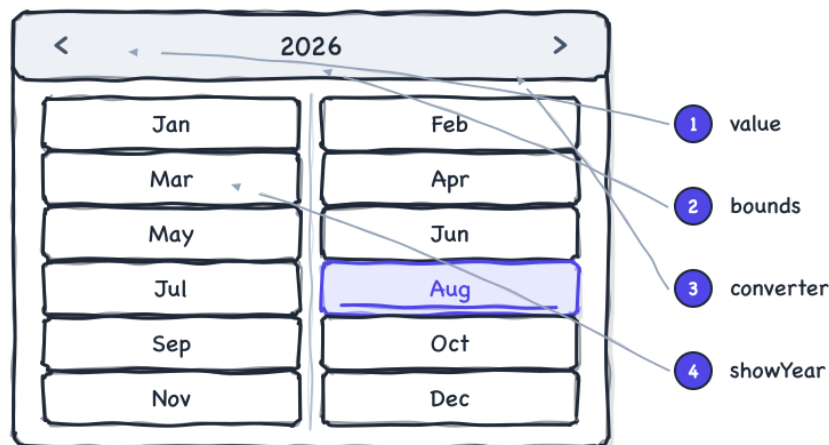
A compact setup for YearMonthView.



A first look at the control in a simple application window.

3. Anatomy

The skin builds the visible nodes below the public control. The table lists the style classes and nodes that are useful when reading the source or writing CSS.



The main parts of the control.

Part	Style / node	Description
Root	year-month-view	Control root and stylesheet hook.
Container	container	VBox containing the optional header and month grid.
Header	header	Left arrow, year label and right arrow; hidden when showYear is false.
Grid	grid-pane	Six rows and two month columns separated by a divider.

Part	Style / node	Description
Month cell	month-box / month-label	Selectable month label created from <code>converter.toString(month)</code> .
Indicator	indicator	Visible for the selected month via the selected pseudo class.

4. Control API

4.1 Selection

Property	Type	Default	Description
value	<code>ObjectProperty<YearMonth></code>	<code>YearMonth.now()</code>	Selected year and month. Programmatic changes are constrained to <code>earliestMonth/latestMonth</code> when those bounds exist.
earliestMonth	<code>ObjectProperty<YearMonth></code>	null	Earliest selectable month; earlier month boxes are disabled.
latestMonth	<code>ObjectProperty<YearMonth></code>	null	Latest selectable month; later month boxes are disabled.

4.2 Display

Property	Type	Default	Description
showYear	<code>BooleanProperty</code>	true	Shows the year header. Styleable via <code>-fx-show-year</code> .
converter	<code>ObjectProperty<StringConverter<Month>></code>	full month name for default Locale	Formats the month names shown in each month box. <code>fromString</code> returns null in the default converter.

5. Behaviour

5.1 Bounded month selection

Changing value, `earliestMonth` or `latestMonth` keeps the selected value inside the allowed interval. The arrows are disabled at the boundary year and individual month boxes are disabled if their `YearMonth` is outside the range.



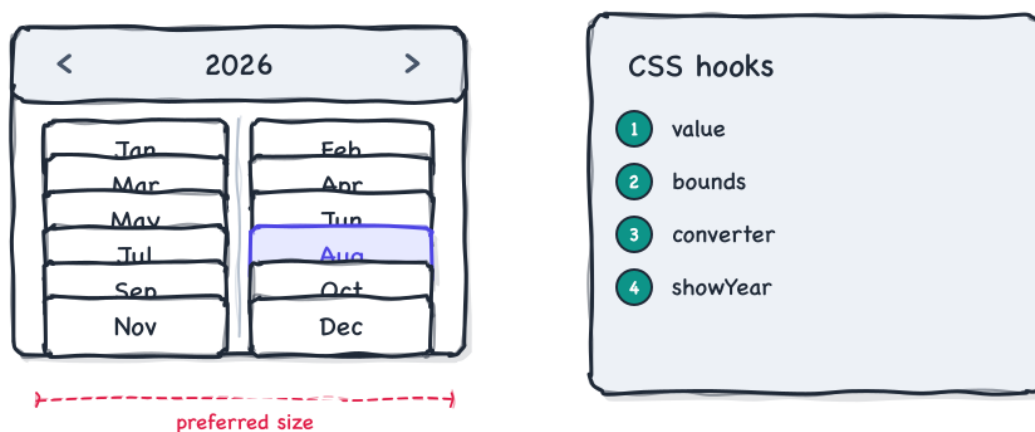
Interaction and value-flow behaviour.

5.2 Month formatting

The skin creates one label per Month by calling the converter. Use this for abbreviations, uppercase month names or domain-specific labels.

6. Styling

The stylesheet is loaded by the control or its base class. The rows below list style hooks verified in the CSS and skin source.



Style classes and pseudo-class states.

6.1 Style classes

Style class	Where used
year-month-view	Root control style class.
container	VBox wrapping header and grid.

Style class	Where used
header	Year navigation row.
arrow-button left-button right-button	Navigation buttons.
arrow left-arrow right-arrow	Arrow glyph regions.
grid-pane	GridPane containing month cells and divider.
month-box	VBox for one month.
month-label	Label created by converter.
indicator	Selection indicator below each month.
divider	Vertical divider between odd and even month columns.
popover	Optional root style class with popup-specific border/background tweaks.

6.2 Pseudo classes

Pseudo class / marker	Meaning
selected	Applied to the selected month-box.
current	Applied to the current month-box when the displayed year is the current year.

6.3 Styleable CSS properties

Property	Type	Default	Description
-fx-show-year	Boolean	true	Shows or hides the header.

```
.year-month-view {
    -fx-show-year: false;
}
.year-month-view > .container > .grid-pane .month-box:selected > .indicator {
    -fx-background-color: -fx-accent;
}
```

Example CSS.

7. Localization

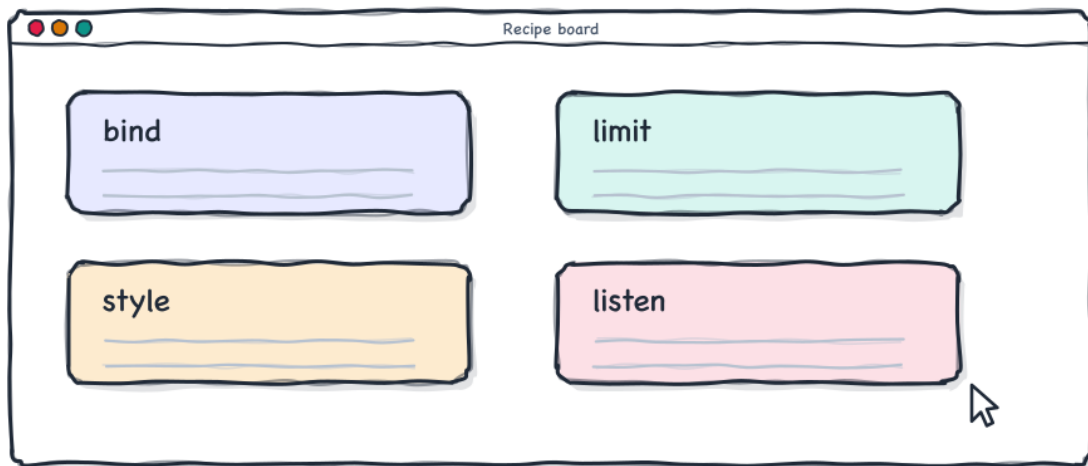
This control uses `ResourceBundleManager` for the following keys.

Key	English default
accessible.role-description	month selector

8. Accessibility

The constructor sets `AccessibleRole.DATE_PICKER` through `AccessibilityUtil.setRole` and uses the localized role description "month selector".

9. Recipes



Common configuration recipes.

9.1 Limit to the last twelve months

```
YearMonthView view = new YearMonthView();
view.setEarliestMonth(YearMonth.now().minusMonths(11));
view.setLatestMonth(YearMonth.now());
```

9.2 Use abbreviated month names

```
view.setConverter(new StringConverter<>() {
    @Override public String toString(Month month) {
        return month.getDisplayName(TextStyle.SHORT, Locale.getDefault());
    }
    @Override public Month fromString(String text) { return null; }
});
```

9.3 Hide the year header

```
view.setShowYear(false);
```

9.4 Bind another control to the selection

```
Label label = new Label();
label.textProperty().bind(Bindings.convert(view.valueProperty()));
```


9.5 Checklist

- 1 Set value before applying tight bounds if you want a specific initial month.
- 2 Use a converter for all visible month text.
- 3 Do not select disabled months in custom event handlers.
- 4 Keep the control at `USE_PREF_SIZE` when using it as compact popup content.

10. See also

Demo app: `YearMonthViewApp`. Run it with:

```
mvn javafx:run -f gemsfx-demo/pom.xml -Dmain.class=com.dlsc.gemsfx.demo.YearMonthViewApp
```

- Related GemsFX controls: `YearMonthPicker`, `YearPicker`, `YearView`, `CalendarView`.
- API documentation: <https://dlsc-software-consulting-gmbh.github.io/GemsFX/api/>