StarterKit

JavaFX

# Setup instructions

1. Unzip the zip file to C:\ (everything should be available under C:\StarterKit-JavaFX).
2. Start Eclipse (run eclipse.bat) and open the "C:\StarterKit-JavaFX\workspace" workspace.
3. Right click on the "javafx" project and select Maven -> Update Project...

# Tips & Tricks

## Eclipse

### FXML Preview

To open the “JavaFX Preview” view go to Window -> Show View -> Other... -> JavaFX -> JavaFX Preview

Add the following lines to your FXML file above the import statements:

<?scenebuilder-preview-i18n-resource ../bundle/base.properties?>

<?scenebuilder-stylesheet ../css/standard.css?>

### FXML Editor

Press "Ctrl + 1" on the underlined “fx:id” attribute to add the corresponding field to the controller.

Press "Ctrl + 1" on the underlined "action" attribute to add the corresponding method to the controller.

### Project Setup

To create a mixed Maven/JavaFX project, first create a Maven project (select File -> New -> Project -> Maven -> Maven Project) and then add the JavaFX SDK library to it (Right click on the project in the Package Explorer and then select Build Path -> Add Libraries… -> JavaFX SDK).

Make sure the following properties are set in the “pom.xml” file for the project:

<properties>

<maven.compiler.source>1.8</maven.compiler.source>

<maven.compiler.target>1.8</maven.compiler.target>

</properties>

## Scene Builder

### Preview style sheet

To set the preview style sheet go to Preview -> Scene Stylesheets -> Add a Style Sheet and select the “C:\StarterKit-JavaFX\sources\StarterKit-JavaFX-main\javafx\src\main\resources\com\starterkit\javafx\css\standard.css” file.

### Preview resource bundle

To set the preview resource bundle go to Preview -> Internationalization -> Set Resource and select the “C:\StarterKit-JavaFX\sources\StarterKit-JavaFX-main\javafx\src\main\resources\com\starterkit\javafx\bundle\base.properties” file.

### Internationalized string

To add an internationalized string for a field of a control, select the control, go to that field in Properties panel and hover the mouse over the right side of the field. When a gear appears, click it and select Replace with Internationalized String.

### Change in CSS not visible in preview

If preview does not refresh after a change in a CSS file, go to Preview -> JavaFX Theme, change the theme to different one and back to original.

# Exercises

## Exercise 1

Build a client application for managing a library, which uses the REST server prepared during exercises for other topics. The required functionalities are searching for books and adding a new book.

## Exercise 2

Build a simple image viewer. The user selects a directory. The application displays a list of images in the selected directory (\*.jpg, \*.png, etc.). The user selects an image and the application displays it. If the image is too big to fit in the window scroll bars should be shown. The user can also zoom in or out the image and move it to see a specific part of the image. The user can also display the next or previous image using corresponding buttons and start a slideshow (the next image is displayed automatically after a specified amount of time).

## Exercise 3 (optional)

Build a TV remote control application (only the GUI part). The application should display a real remote control device – see RemoteControl.jpg. Please note that:

* the buttons contain text and/or pictograms
* the buttons have different shapes, ie. the arrow buttons are trapezoids
* the buttons have round corners, each corner may have a different radius
* the buttons have different colors

The groups of buttons should be moveable along the vertical axis, ie. the number buttons may be moved to the bottom. If a button is clicked it should be visible and a key code should be logged in application log.

Hint: It is possible to create the pictograms without using bitmaps.