

GWT Exercises: Widgets

Make a new Google Web Application Project called “ExercisesWidgets” (or some such -- my solution set is called GwtWidgetsExercises). Since you are not using any of the code in the “server” package, edit war/WEB-INF/web.xml and remove the servlet and servlet-mapping tags at the top. Then, delete all the classes in the “server” package.

1. Designate 2 divs (one after another) in your host HTML page. One should have an id of “dates”, another should have the id of “menu-for-dates”.
2. Place a Grid into the “dates” region. The grid should have only 1 row and as many columns as you think you’ll need for the following.
3. Place a label “Date 1” followed by a DateBox, followed by some space, followed by a label “Date 2”, followed by a DateBox, followed by some space, followed by an HTML widget. The HTML widget is where some results are going to go, so for now initialize it with “<i>Results will go here</i>”.
4. Attach a FlowPanel to the “menu-for-dates” region. It should have 1 horizontal menu with a caption “Show”. Upon click on “Show”, a drop-down menu should appear with the following menu items: “Days Between”, “Date in 3 months of Date 2”, “Date in 3 days of Date 1”, “Are the dates the same?”
5. Upon clicking on each one of these menu items, the results area you created in #3 should get updated with the appropriate message. Use GWT’s CalendarUtil class to figure out the answers.
6. Validate your input! So far, if the DateBox was empty, you would get a NullPointerException. Fix that by first creating an AlertDialog (extends DialogBox), which should pop up with a custom message (passed in through its constructor) for each situation. Make the AlertDialog popup relative to the “Show” menu. Also, make the background of the AlertDialog red and the message white. Add some padding around the message so it looks a bit better.
7. Bonus. Currently, the “Show” menu spans the entire width of the page (or whatever it is you placed it into). Make it such that the menu bar only goes about a few pixels past the “Show” menu button.