Chapter 3. Building a GWT application: enhancing HelloWorld

This chapter covers

- Enhancing chapter 2's output for the real world
- Using widgets, panels, and layout panels, and handling events
- Manipulating the Document Object Model (DOM)
- Managing history in a GWT application

In the last chapter, we went through the steps to generate a basic GWT application using the Google Plugin for Eclipse (GPE). The result was the framework of an application with a simple entry point whose `onModuleLoad` method displayed the text "Hello World!" on the browser page. It wasn't the most exciting of applications, but it allowed us to examine the structure of a GWT application as well as run it in development mode and compile it for web mode—the basics of GWT development, we called it.

We hope you're comfortable with those steps now, so it's time to take the next step—enhancing the basic framework to provide the functionality you want. You could add more HTML content to the application's web page; enhance the Java code to use more widgets, panels, and handle events; manage a user clicking Forward and

Back browser buttons; and apply styling to make the application look beautiful—we called these the typical techniques used in a nontrivial GWT application.

We'll be up front here: Rather than walk through the steps to do some of these typical techniques, we'll look at a new `BasicProject` and explore how to implement those techniques. The way to get the most out of this chapter is to download the chapter's examples and start playing with the code. `BasicProject` was built using the process in chapter 2 and then physically enhanced to implement the mock-up in figure 2.1 as figure 3.11 near the end of this chapter.

This chapter's main example, called `gwtia-ch03-basicproject`, contains `BasicProject`, which you can import into Eclipse without getting any conflicts or confusion. Along the way, we'll also discuss the `gwtia-ch03-historyhelper` project, which helps you explore GWT's approach to history in a simple and isolated manner.

Now that you're back from getting and importing the examples, the first thing we should do is recap what you're trying to build and what it shows you about GWT.