Recommended Eclipse reading list

Chris Aniszczyk

June 20, 2006

Learn about Eclipse with this reading list compiled for developers by Eclipse developers and enthusiasts at IBM.

Introduction

This list is compiled from a variety of sources and is intended for anyone who wishes to find centralized reading material about Eclipse. One of the biggest challenges new Eclipse users face is where to find the right information for a task. This article provides a small step in solving that problem.

Overview

Eclipse is an open source community with projects focused on providing an extensible development platform and application frameworks for building software. This article provides links to the latest Eclipse versions, books, articles, and Web sites.

What is Eclipse?

Wikipedia provides a great overview of Eclipse and its history.

Getting started

If your idea of "Eclipse" is the event when the moon passes between the Earth and Sun or a two-door sports coupe, then this section would be a good start.

Get started now with Eclipse

This developerWorks resource provides answers to many common questions regarding Eclipse. It is part of the developerWorks Eclipse top project resources.

Eclipse Distilled

If you need a broad yet practical introduction to Eclipse, this book by David Carlson is a great start. It covers the basic Eclipse concepts: views, editors, perspectives, debugging, and more.

Development

General development

Java Developer’s Guide to Eclipse

This book (one of the first about Eclipse) provides a superb introduction to the Eclipse platform from the perspective of a Java™ technology developer. It covers topics ranging from general Java development to plug-in development.
Eclipse IDE Pocket Guide
This guide covers the basics of Eclipse in about 100 pages.

Eclipse development

Eclipse Rich Client Platform: Designing, Coding and Packaging Java Applications
If you want to be building, branding and shipping Eclipse RCP-based applications, this should be your first stop.

Contributing to Eclipse: Principles, Patterns and Plug-ins
Kent Beck and Erich Gamma give a step-by-step tutorial on how to create an RCP-based application.

Eclipse: Building Commercial-Quality Plug-ins
This book covers all you need to know about developing an Eclipse RCP-based product from start to finish.

Official Eclipse FAQs
This Eclipse.org wiki covers common questions and answers regarding Eclipse development. If you ever wondered how to create your own project nature, this is a simple way to get that question answered. Note: It is based on the content found in The Official Eclipse 3.0 FAQs.

Rich Client Tutorial Part 1
This series of tutorials from Eclipse.org covers the basics of RCP development. Part 1 covers the absolute basics of what it means to be an RCP application, Part 2 covers user interface-related elements of RCP-based applications, and Part 3 covers creating a really simple RCP-based application.

Web development
The Eclipse project contains a top-level project known as the Web Tools Platform (WTP) that serves as the base for all Web-related tooling.

"Developing Web Services -- Eclipse Web Tools Project"
This article will teach you how to develop a full-blown Web application using WTP.

Business intelligence
The Eclipse project contains an Eclipse-based reporting system, known as the Business Intelligence and Reporting Tools (BIRT) project, that integrates with your application to produce compelling reports for the Web and PDF. BIRT provides core reporting features like report layout, data access, and scripting.

Integrating and Extending BIRT
Convinced you want to use BIRT in your application? This book can help you integrate and customize BIRT in anything from Web applications to stand-alone rich-client applications.

BIRT: A Field Guide to Reporting
Start here to learn about BIRT and how to use it.

Modeling
The Eclipse project has excellent modeling-related technologies. One is the Eclipse Modeling Framework (EMF). EMF helps you rapidly turn models into efficient, correct, and easily customizable Java code. And the Graphical Modeling Framework (GMF) provides the tooling to generate a fully functional graphical editor from your EMF model (and more).
**Eclipse Modeling Framework**
This book is the EMF Holy Grail. Start your EMF adventure here.

"Discover the Eclipse Modeling Framework (EMF) and its Dynamic Capabilities"
Read this article to learn how to manipulate your EMF model dynamically.

**GMF Tutorial, Part 1**
This series of tutorials provides a good overview of GMF. Part 1 covers the development of a sample graphical editor from start to finish and Part 2 covers advanced aspects of the GMF generation and runtime frameworks.

**Introducing the GMF Runtime**
Get an introduction to the runtime that powers all GMF-based editors.

**Debugging and profiling**
In Eclipse, there is a top-level project known as the Test and Performance Tools Platform (TPTP), which is a universal platform for test and performance tools.

"Eclipse Test and Performance Tools Platform"
This series of tutorials covers basic usage of TPTP. Part 1 discusses the basics of testing, profiling, and monitoring applications; and Part 2 discusses collecting and analyzing log files.

**Java Application Profiling Using TPTP**
This article covers an example application of TPTP that involves profiling a Java application.

**User interface development**
Eclipse is built on top of the Standard Widget Toolkit (SWT), which provides access to the user-interface facilities of the operating systems on which it is implemented (and is responsible for Eclipse's snazzy user interface). Eclipse also has the Graphical Editing Framework (GEF), which is a tool built on top of SWT to allow for the rapid creation of graphical editors. Furthermore, Eclipse has the Visual Editor Project (VEP), which serves as a framework to create GUI builders.

**SWT: The Standard Widget Toolkit, Volume 1**
This book covers SWT really well and is written by SWT committers.

**Eclipse Forms: Rich UI for the Rich Client**
Find out about Eclipse Forms, which is a thin graphics toolkit implemented on top of SWT.

**Using OpenGL with SWT**
Find out how to use OpenGL in your SWT applications.

**Extending The Visual Editor: Enabling support for a custom widget**
Read this to find out how to extend the Visual Editor project to support a custom widget.

"A gentle introduction to SWT and JFace"
Read through this series of articles to learn how to create simple Standard Widget Toolkit (SWT) applications using Java technology, Eclipse, and the SWT and JFace libraries.

**Community**

**Mailing lists**

**Eclipse mailing lists**
Mailing lists are a good source of information regarding subject-specific needs. Note: Mailing lists are primarily used by Eclipse committers, and it is recommended to use the Eclipse newsgroups to post questions.
Newsgroups

**Eclipse newsgroups**
This is the most useful resource for Eclipse questions. It contains a veritable tome of information that should be searched by every Eclipse developer.

Wiki

**Official Eclipse wiki**
The Eclipse wiki contains information about projects posted by Eclipse committers.

News

**Planet Eclipse**
Planet Eclipse is a window into the world, work, and lives of Eclipse hackers and contributors.

**EclipseZone**
This is an active site that contains up-to-date information regarding Eclipse happenings.

Blogs

**Wayne Beaton**
Wayne Beaton is the Eclipse Foundation’s Eclipse evangelist.

**John Graham**
John Graham is the PMC chair for the Eclipse Data Tools Platform (DTP) project.

**Wassim Melhem**
Wassim Melhem is the lead of the Plug-in Development Environment (PDE) project.

**Mike Milinkovich**
Mike Milinkovich is the executive director of the Eclipse Foundation.

**Doug Schaefer**
Doug Schaefer is the lead of Eclipse’s C/C++ Tools project (CDT).

**Michael Scharf**
Michael Scharf is a member of the Eclipse architecture council.

**Tim Wagner**
Tim Wagner leads the Web Tools Platform (WTP) project at Eclipse.

Chat

**IRC**
IRC is a great tool to get instant help from the Eclipse community.

Other resources

Magazines

**Eclipse Magazin**
Eclipse Magazin is a German Eclipse magazine.