
REmail

Integrating e-mail communication in the Eclipse IDE

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I certify that except where due acknowledgement has been given, the work presented in this thesis is that of the author alone; the work has not been submitted previously, in whole or in part, to qualify for any other academic award; and the content of the thesis is the result of work which has been carried out since the official commencement date of the approved research program.

Vitezslav Humpa
Lugano, 17 May 2010

Abstract

Software system developers have to communicate about the project they are building. Especially when they work in open source projects and they are spread all over the world, developers use e-mails to communicate.

Studies tell us that e-mails are, by far, the most used means of communication used during the development, opposed to instant messaging, commits, or code comments. Therefore, we can imagine that development mailing lists contain essential information concerning various entities of the source code, that unfortunately get lost with time, since they are not easy to retrieve.

We have developed REmail, an Eclipse plugin that integrates e-mail communication into the the IDE. It allows developers to seamlessly handle source code entities and e-mails concerning the source code, without ever exiting from the IDE, using several techniques to provide the most appropriate linking between mailing list and software project in mind.

Acknowledgements

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Chapter 1

Introduction

REmail is an Eclipse plugin we are developing that integrates e-mail communication in the IDE to get the most out of it. Using the current release, REmail allows a developer, without ever exiting from the Eclipse IDE, to select a Java class, automatically retrieve all the related messages from a specified e-mail archive, and read them in a convenient way. REmail is currently under heavy development, but the basic functionality of the plugin has been established.

As usually, introduction (since also it should point out the basic ideas of the following chapters and so...) and conclusion to be written as almost the last...

1.1 Motivation

Chapter 2

Related work

2.1 Lightweight methods

Chapter 3

REmail as an Eclipse plug-in

Introduction to the chapter, short description of what this chapter shall offer.

3.1 Eclipse

With the goal of putting the idea of e-mail integration into practice, we had to decide what IDE we would actually use. There are many choices, especially if we consider various development environments for different programming languages.

The idea was certainly to make REmail work in an IDE that can be used for developing systems in multiple languages. Therefore many environments, especially those centered on C/C++ put out of question.

Eclipse structure as a collection of a bunch of plugins.

Important parts of Eclipse plugin development.

Plugin.xml

Plugin class - lazy loading in the startup and so on.

Eclipse plugins that are used by REmail.

3.2 "User Manual"

3.2.1 Source formats

Explanation of the basic differences, intro into this subsection.

MBox

Possibilities of getting an MBox file of the entire Mailing Lists.

Miler to obtain mailing lists

How to use Miler.

Future Improvement/integration of Miler into the REmail preferences or so.

PostgreSQL

Description of how the PostgreSQL can be used.

Some sort of explanation, that it's not really working that well now - viz. next section.

3.2.2 Using REmail

Introduction unto the real "User Manual"

Instalation

Setting up

Searching

Browsing e-mails

Editor Integration

3.3 Implementing REmail

Introduction into the story of implementation

Early stages as SDE project.

Ideas of using thunderbird

Idea to make a separate thunderbird plugin

Why we decided otherwise.

...

Chapter 4

Future

4.1 Points of improvement

4.2 Future goals

Appendix A

Some retarded material

A.1 It's over...

Glossary

