Eclipse Practical (winter term 2012/13)

Welcome!

Welcome to the Confluence Wiki of the Eclipse Practical 2012/2013. What this Wiki is all about:

- It's the place where we post important information on the practical, such as due dates and similar information.
- It's also the place where we post tutorials on developing Eclipse applications. You will spend the first part of the practical working through the tutorials before starting your individual projects.
- And finally, it's the place where each group will document their project.

About This Practical

This practical will give you an introduction to programming Eclipse applications. The first half will consist of tutorials on different parts of Eclipse programming, each accompanied by an introductory presentation by Miro or Christoph Daniel. Each participant will work on the tutorials on his or her own, handing in his or her results a week later. For the second half of the tutorial you will be working in groups on projects that will allow you to apply your new Eclipse knowledge.

This is what we want the practical to teach you:

- Version management with Git.
- Programming Eclipse with several important technologies:
    - Plug-in architecture (plug-ins, extension points, extensions, ...)
    - Programming GUIs (SWT, JFace, menu contributions, views, editors, ...)
    - Modeling components (EMF, GMF, ...)
    - Model transformations and DSLs (Xtext, Xtend)
    - Eclipse e4 application model?
- Working in groups and self-organization

Getting Help

Responsible for this practical are Christoph Daniel Schulze and Miro Spönemann. If you need assistance, feel free to send us an email or ask for an appointment.

Tutorials

Here's the list of tutorials you will be working through during the first part of the practical. Click a tutorial's name to navigate to its Wiki page. We will add the tutorials as the practical progresses. Each tutorial comes with two dates: the posted date, specifying when you may start working on it; and the due date, specifying when the tutorial is due to be handed in. Please resist the temptation to start working on tutorials before they have been officially posted; those are still being worked on and may change, rendering your previous work obsolete. In fact, tutorials that haven't been written yet can still change alltogether.

Tutorial	Main Advisor	Posted	Due	Description
Git	Miro	Oct 17th	Oct 24th	Introduction to the Git source code management tool. *Note:* We won't be reviewing the results of this tutorial!
The Plug-in Architecture of Eclipse	Christoph Daniel	Oct 24th	Oct 31st	Introduction to the Eclipse architecture and basic UI concepts.
The Eclipse Modeling Framework	Christoph Daniel	Oct 29th	Nov 7th	Develop a Turing Machine model and generate the necessary Java code using the Eclipse Modeling Framework.
Textual Modeling with Xtext	Miro	Nov 5th	Nov 14th	Create a textual syntax for your Turing Machine models.
Graphical Modeling with Graphiti	Miro	Nov 12th	Nov 21st	Create a graphical syntax for your Turing Machine models.
Model Transformation with Xtend	Christoph Daniel	Nov 19th	Nov 28th	Transform a Turing Machine into a model of a simple imperative programming language.
Code Generation with Xtend	Christoph Daniel	Nov 26th	Dec 5th	Generate code for arbitrary models of the imperative programming language.

Group Projects

Organizational Stuff

We will hold regular meetings each Monday from 16:00 to 17:30 in room 1118. The meetings will usually consist of a presentation about the next tutorial or a presentation of one of the groups.

We have weekly review sessions where each group presents its results to either Miro or Christoph Daniel. Those will be held each Thursday from about 10:00 to 11:00, with each review session scheduled at a certain time.

Important Dates

Here's a handy list of the most important dates:

Date	Description
2013/01/14 16:00	First milestone of the group projects in room 1118.
2012/11/29 12:00	Review sessions for the sixth tutorial.
2012/11/26 16:00	Seventh meeting in room 1118.
2012/11/22 12:00	Review sessions for the fifth tutorial.
2012/11/19 16:00	Sixth meeting in room 1118.
2012/11/15 12:00	Review sessions for the fourth tutorial.
2012/11/12 16:00	Fifth meeting in room 1118.
2012/11/08 12:00	Review sessions for the third tutorial.
2012/11/07 23:59	Hand-in of third tutorial results.
2012/11/05 16:00	Fourth meeting in room 1118.
2012/11/01 12:00	Review sessions for the second tutorial.
2012/10/31 23:59	Hand-in of second tutorial results.
2012/10/29 16:00	Third meeting in room 1118.

Here's the list of group projects, along with the group members. Click the project names to navigate to their respective Wiki pages. The groups and group projects will not be formed until some point in the semester.

Project	Group Members
Java Debugging Visualization with Application to Layout Algorithm Development	Heiko, Tibor
Transformation Mapping Visualization for Theoretical Computer Science	Helge, Gunnar, Stanislaw

2012/10/24 23:59	Hand-in of first tutorial results.
2012/10/24 14:15	Second meeting in room 1118.
2012/10/17 14:15	First meeting in room 1304b. (13th floor of the high-riser)

Recent Updates

Recently Updated

As you and your team create content this area will fill up and display the latest updates.