

LAB-5205: Developing JFC/Swing™ Applications using the NetBeans™ 4 IDE

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LAB-5205

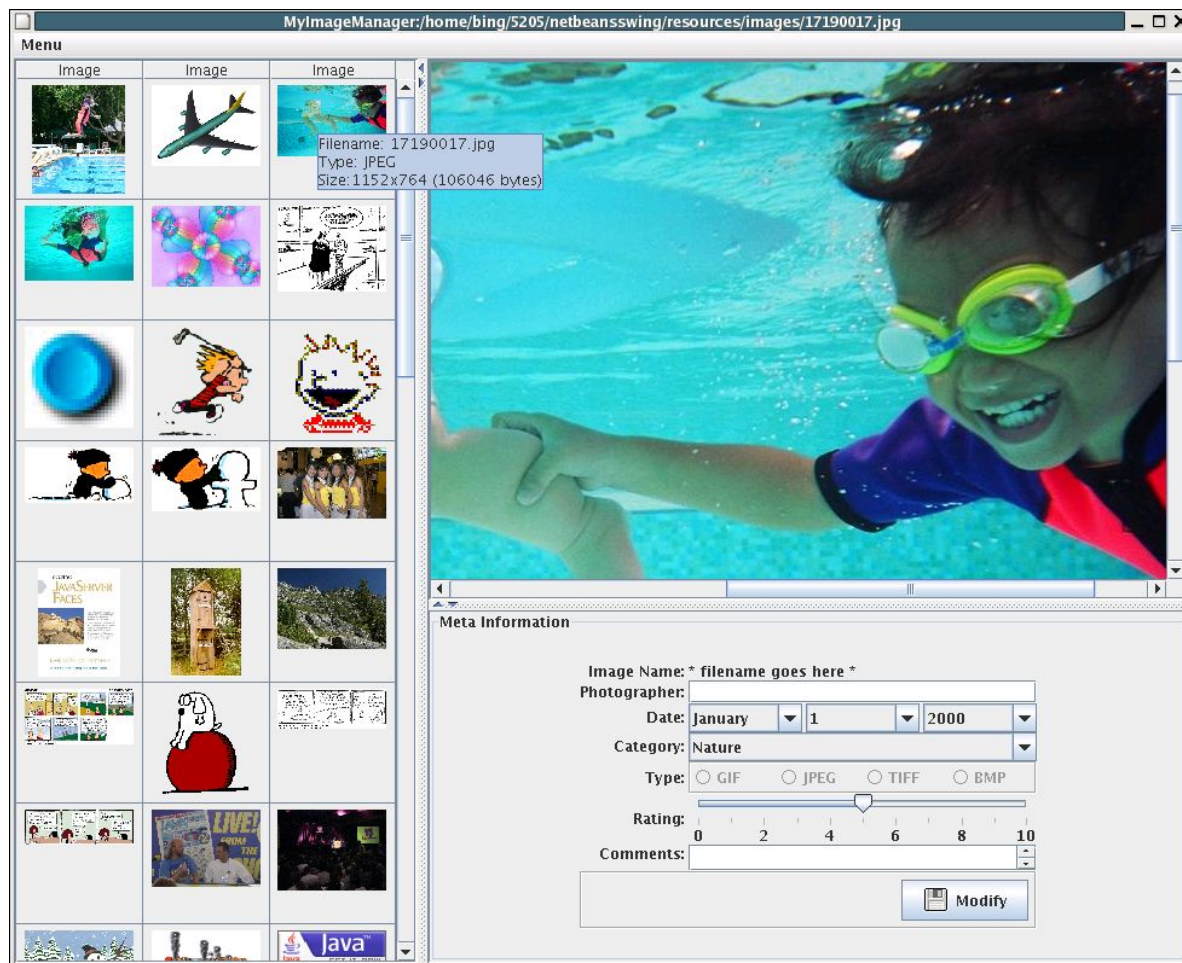
How Instructor-Led Hands-on Lab Works

- Instructors will guide you through whenever appropriate
- Mostly you will do the lab by reading the lab document that is displayed on your screen after log-in
- The hard-copy of the lab document is also provided
- Feel free to get help from on-site proctors

Quick Walk-through

- If you have not logged in, log in with
 - username: 5205 (Lab number)
 - password: javaone
- Online lab document gets displayed
- All necessary software (J2SE™ SDK 5.0 and NetBeans™ IDE 4.1 in this lab) and lab files are already installed on your lab machine
- Start from Step 1: Exercise 1

Objective



- Learn to develop JFC/Swing applications w/ Netbeans through building an image viewer

Exercise 1:

NetBeans 4.1 Familiarization (5 minutes)

- Opening a sample project
- Various NetBeans windows
- Terminology
- UI Design vs. Source view
- Recommended if you have used NetBeans 3.x only

Exercise 2:

Starting a New Project (2 minutes)

- Creating a New Project
- Creating a Java Package
- 😊 Solutions provided (just in case)

Exercise 3:

Using Swing Widgets & Layout Managers (25 minutes)

- UI Design Editor
- Swing widgets
- Layout Managers
- Layout Customizers

The image shows a Java Swing window titled "Testing Form [MetadataPanel]". The window contains a form with the following elements:

- Meta Information**: A section header.
- Image Name**: A text field with a placeholder text "* filename goes here *".
- Photographer**: A text field.
- Date**: A date picker showing "January", "1", and "2000".
- Category**: A dropdown menu showing "Nature".
- Type**: Radio buttons for "GIF", "JPEG", "TIFF", and "BMP".
- Rating**: A horizontal slider with a range from 0 to 10, with a diamond handle positioned at 5.
- Comments**: A large text area.
- Modify**: A button at the bottom right.

Exercise 4:

Customizing GUI Behavior (20 minutes)

- Modifying component Properties
- Creating Enumerations to match components
- Adding tooltips and focus traversal
- Adding Java Bean Properties
- Adding a Bean to the Palette

Exercise 5:

Advanced Swing Widgets (20 minutes)

- Importing & Refactoring Source Code
- Incorporating pre-built components
- Adding a Menubar and Menu Items
- Using Split Panes & Scroll Panes
- Using JTable

Exercise 6:

Handling Events (15 minutes)

- Intercepting Events
- Action Listener for JMenuitem & JFileChooser
- Customizing the runtime env. (VM options)

Exercise 7:

Extras (at your own leisure)

- Changing L&F to L2FProd's SkinLF
- Suggested fixes to ImageManager app:
 - List View vs Thumbnails
 - Thumbnail scaling
 - Multithreading of Image loading
 - Database Integration
- Internationalization
- JavaDoc Generation
- Have fun implementation your own favorite features

Finishing Up

- Fill up the quick online survey – You will find the link at the end of the online document
- Log out
- You are welcome to try other hands-on labs
 - Other scheduled instructor-led labs in this room
 - Self-paced labs in this room
 - Bring-Your-Own-Laptop in room E 132

Submit Session Evaluations for Prizes!

Your opinions are important to us

- You can win a \$75.00 gift certificate to the on-site Retail Store by telling us what you think!
- Turn in completed forms to enter the daily drawing
- Each evaluation must be turned in the same day as the session presentation
- Five winners will be chosen each day (we'll send the winners email)
- Drop-off locations: give to the room monitors or use any of the three drop-off stations in the North and South Halls

Note: Winners on Thursday, 6/30, will receive and can redeem certificates via email

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