

Undocumented Matlab

unbelievable features; unbelievable quality; unbelievable cost effectiveness; unbelievable service

ADVANCED MATLAB GUI

COURSE OUTLINE



1. Advanced GUI topics

- a. The figure's main menu
- b. Context menus
- c. Toolbars
- d. Passing information around the GUI
- e. Uitools: uitable, uitree, uitab, ...
- f. Integrating ActiveX controls
- g. GUIDE vs. m-programming trade-offs
- h. Hidden undocumented properties
- i. Listening to action events
- j. Listening to property-change events

2. Using Java with Matlab GUI

- a. Matlab and Java Swing
- b. Integrating Java controls
- c. Compatibility aspects and trade-offs
- d. Safe programming with Java in Matlab
- e. Java's EDT
- f. Containers & position – Matlab vs. Java
- g. Monitoring memory & CPU utilization
- h. GUI Look-and-Feel
- i. Using built-in Matlab controls/widgets
- j. Using JIDE
- k. Integrating 3rd-party Java GUI components: charts/graphs/widgets/reports

3. Advanced Matlab-Java GUI

- a. Using HTML
- b. Updating existing Matlab uicontrols
- c. Figure menu customization
- d. Figure toolbar customization
- e. Figure-level customization
- f. Handling Java events as Matlab callbacks
- g. Deployment issues

4. Where next? – topics and resources for further learning

Summary

A 1 or 2 day advanced Matlab course.

You will learn:

- how to customize the figure's toolbar and main menu
- how to use HTML for simple rendering
- how to integrate ActiveX and Java components in Matlab GUI
- how to customize your Matlab GUI using Java
- how to create a modern-looking professional GUI in Matlab

In the 2-day course, the topics will be expanded and a sample program will be analysed as a classroom exercise project.

Target audience

Matlab users with a solid experience using Matlab graphics and GUI, who wish to improve their program's quality, appearance and usability; Matlab users who wish to sell professional-looking Matlab-based software GUI.

Familiarity with Matlab GUI is assumed.