

Swing Dynamic GUI*

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Abstract

The presentation layer is an integral part of most computer software. It often happens that its development and maintenance require too many resources, especially when the data model changes. Swing Dynamic GUI library overcomes this problem and simplifies both the development and maintenance of the user interface. This module provides a set of ready-to-use mechanisms, which allows for rendering and validating form fields, managing form layouts, as well as generating data-driven tables. Thanks to reflection and Bean Validation mechanisms this library handles all the Java Swing components configuration, components data binding as well as input validation allowing the generation of fully functional user interfaces in a fraction of time and effort by using dedicated annotations and a few lines of code.

Keywords: Java; Form generation; Annotation processing; Science gateways;