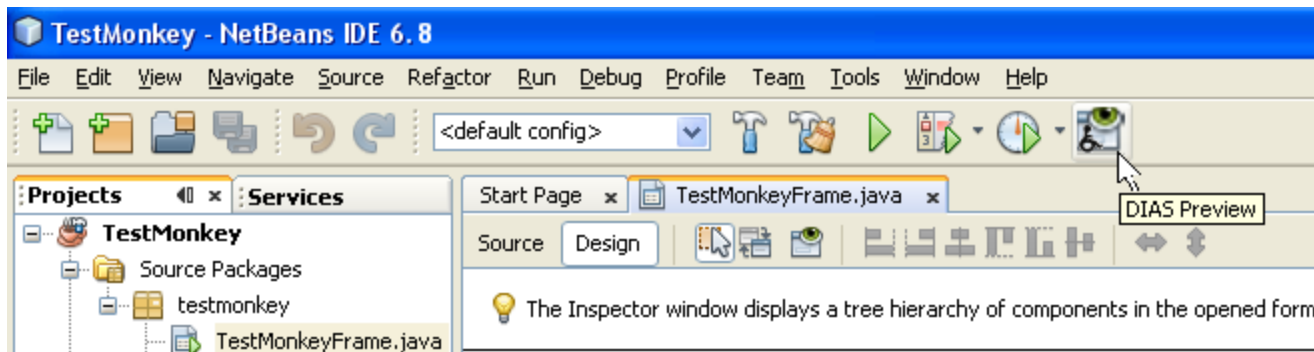


DIAS Developer Designer aid module

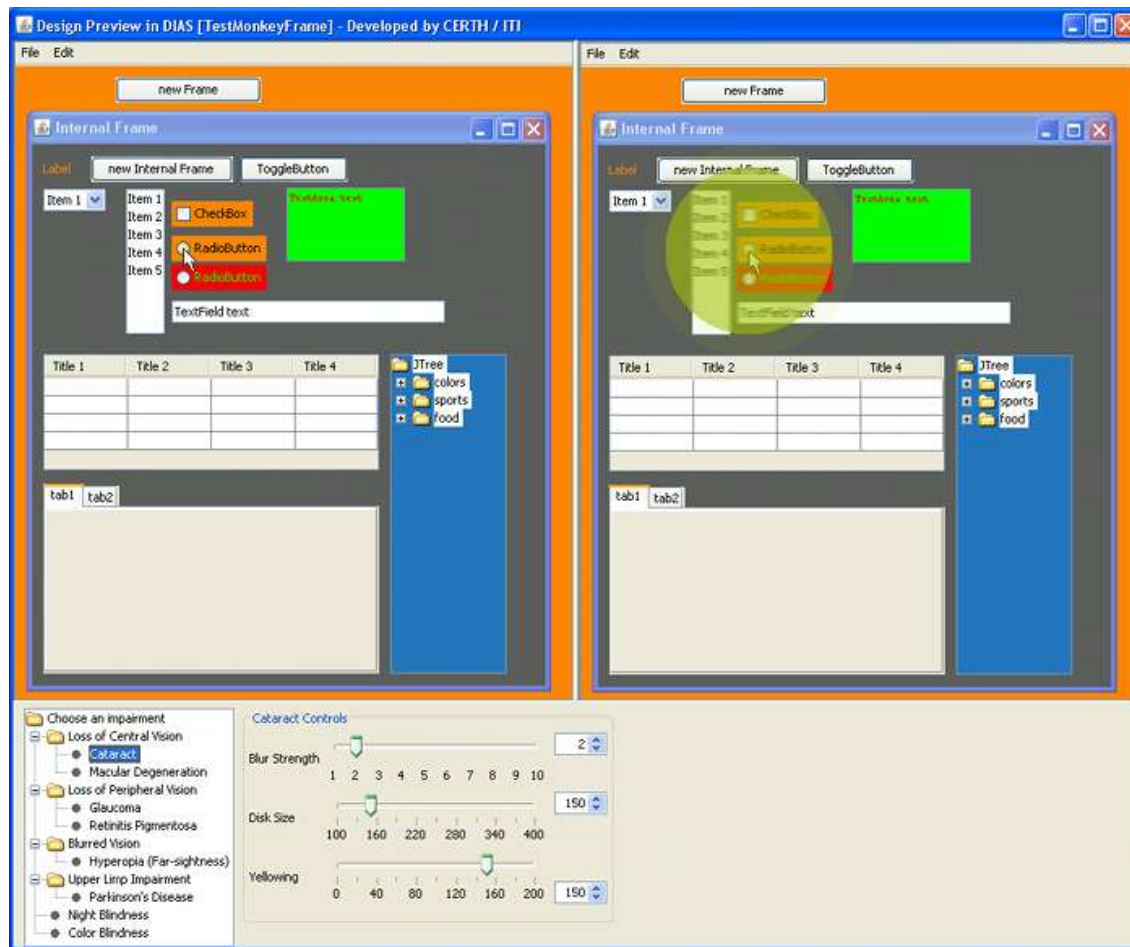
Konstantinos Votis
CERTH/ITI

- ❑ **ICT based products are used by older people or people with disabilities but are not fully accessible**
- ❑ **Existing development tools give little assistance or make it impossible to design and develop accessible ICT Java solutions**
- ❑ **Thus, developers and designers need tools that provide guidance in order to apply the accessibility principles**
- ❑ **As a result accessible applications will be produced that can be used by people with disabilities**

- ❑ Provides a visual design preview feature that allows developers and designers to realize how their implemented forms are being displayed
- ❑ It is activated when a Java Swing GUI has the focus



- ❑ Consists of two window boxes that present the previewed and the simulated forms
- ❑ Example of the simulation of cataract



- ❑ All detected and possible accessibility errors are presented
- ❑ The problematic element is highlighted
- ❑ Guidelines and recommendations on how to solve the detected problems are provided to the user

The screenshot shows the NetBeans IDE interface with a Java Swing window titled 'TestMonkeyFrame'. The window contains several components: a 'new Frame' button, an 'Internal Frame' containing a 'new Internal Frame' button, a 'ToggleButton', a 'CheckBox', a 'RadioButtons' group, and a 'TextField text'. The 'DIAS Preview Result Window' at the bottom displays a table of accessibility errors:

Type	Rule	Recommendation / Description	Component
❗	Background Color	No red/green color combination for Background/Foreground should be used. Users with pr ...	JTextArea1
❗	Background Color	No red/green color combination for Background/Foreground should be used. Users with pr ...	JRadioButton2
❗	Preferred Size	The Width/Height should be increased so that users with Parkinson's disease will not have ...	JLabel1
⚠	Foreground Color	No red/green color combination for Background/Foreground should be used. Users with pr ...	JTextArea1
⚠	Foreground Color	No red/green color combination for Background/Foreground should be used. Users with pr ...	JRadioButton2
⚠	Preferred Size	The Width/Height should be increased so that users with Parkinson's disease will not have ...	JDesktopPa...

- ❑ When the problem is fixed the errors/warnings list is updated

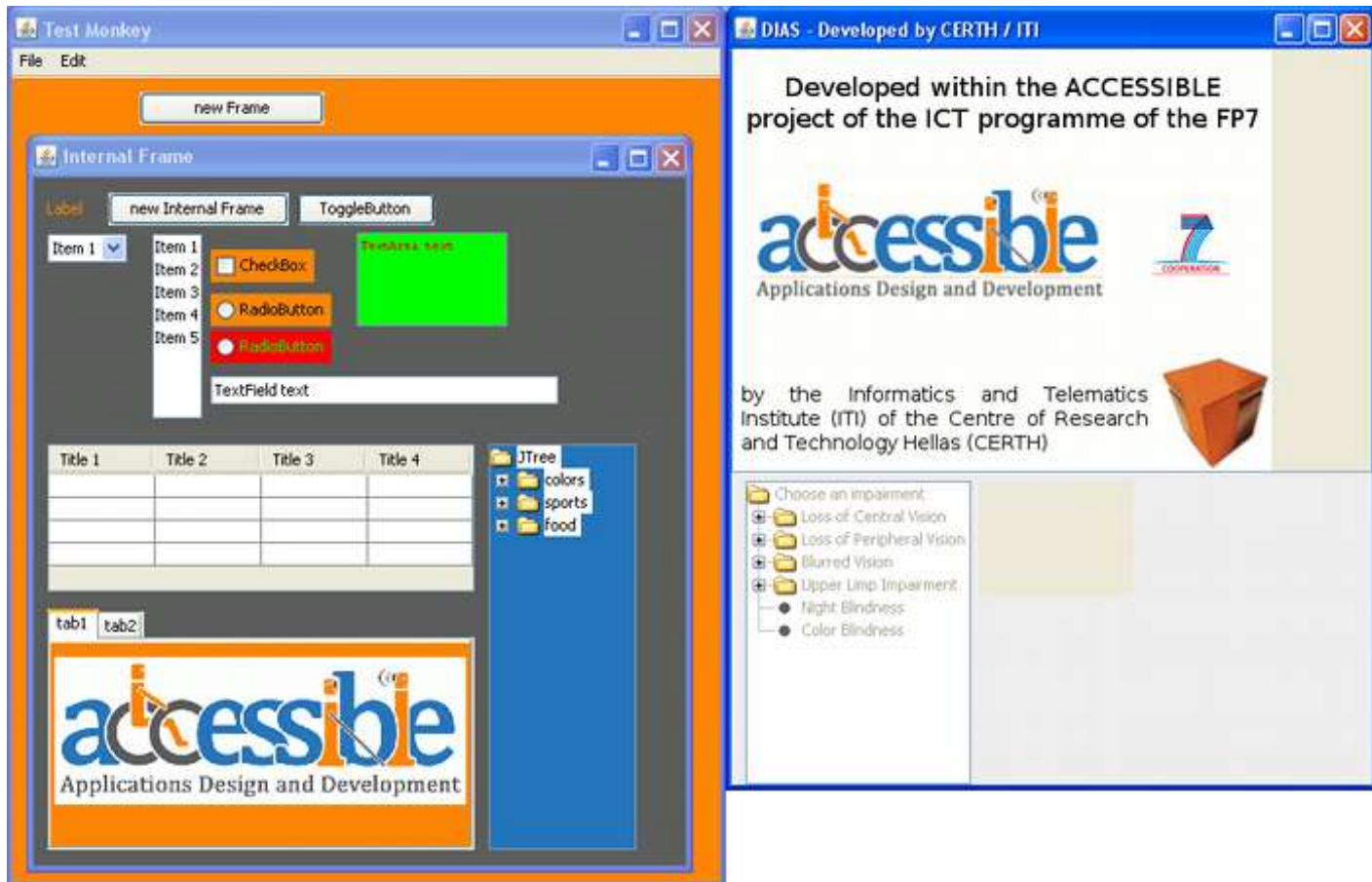
The screenshot shows the NetBeans IDE interface. The main window is titled 'TestMonkeyFrame.java *' and is in 'Design' mode. It displays a Swing window titled 'new Frame' containing an 'Internal Frame' with various UI components like 'new Internal Frame', 'ToggleButton', 'CheckBox', 'RadioButton', 'TextField', and 'JTree'. The 'Inspector' panel on the right shows the selected component, 'jRadioButton2 [JRadioB...', with its properties and binding options. At the bottom, the 'DIAS Preview Result Window - TestMonkeyFrame' is open, displaying a table of accessibility errors.

Type	Rule	Recommendation / Description	Component
❗	Background Color	No red/green color combination for Background/Foreground should be used. Users with pr...	jTextArea1
❗	Preferred Size	The Width/Height should be increased so that users with Parkinson's disease will not have ...	jLabel1
⚠	Foreground Color	No red/green color combination for Background/Foreground should be used. Users with pr...	jTextArea1
⚠	Preferred Size	The Width/Height should be increased so that users with Parkinson's disease will not have ...	jDesktopPa...

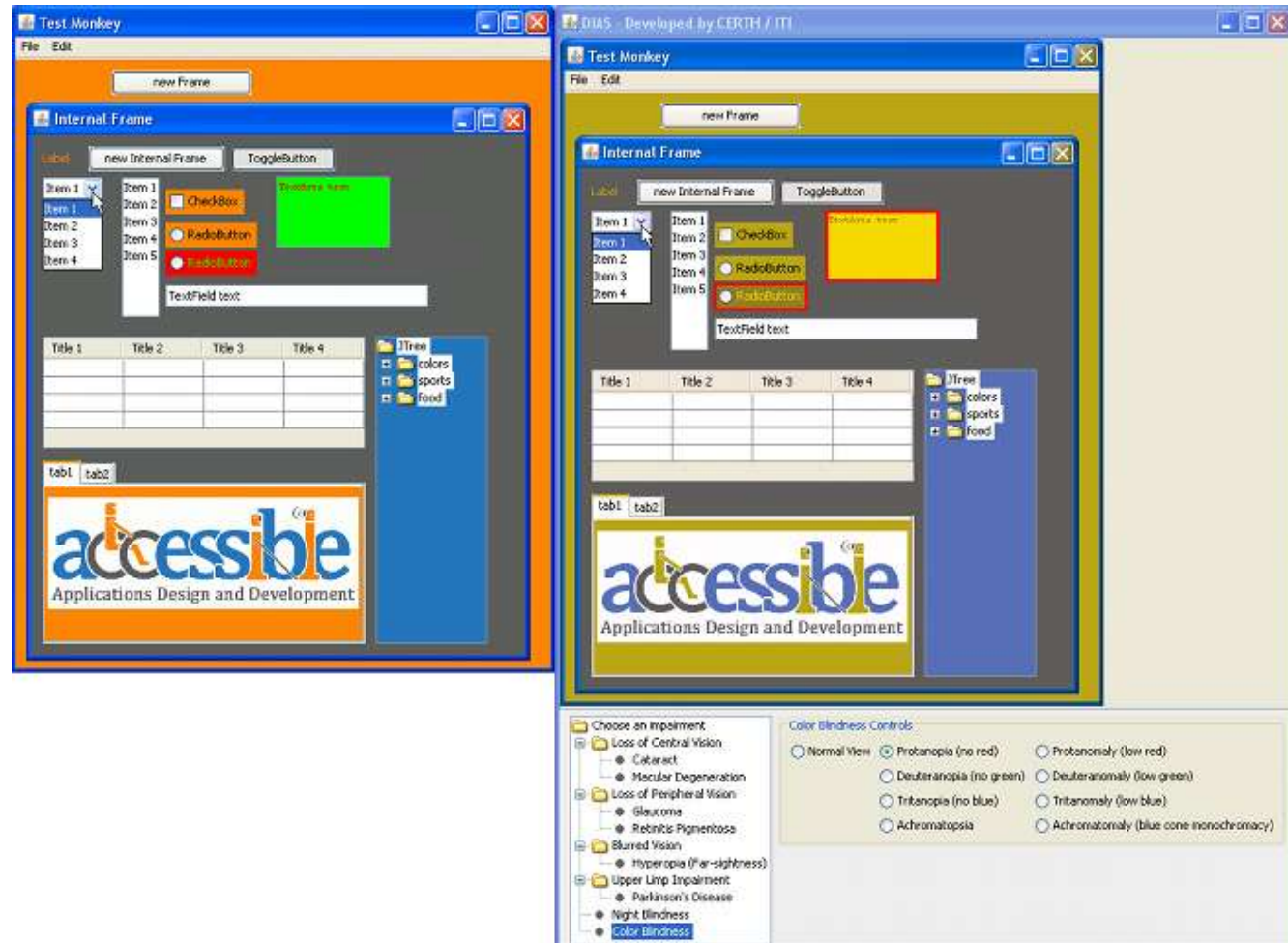
- ❑ Gives the developers/designers the ability to execute and run in real time their Java Swing applications
- ❑ Verifies if the included functionalities and components contain any accessibility constraint



- ❑ Consists of the simulated version of the actually running application
- ❑ Inherits the Look and Feel that was set to the application by the developer



- ❑ Gives useful information on any Java GUI component with possible accessibility errors
- ❑ Simulation of protanopia



- ❑ Provides information regarding the problematic GUI component as well as recommendations on how to fix the detected problem

