A Method for Analyzing and Designing GUI Plug-ins

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Abstract—Today, GUI plug-in development is typically made in an ad-hoc way and starts directly with the implementation phase. Without a prior analysis and design, the final plug-in is likely to be unreliable and difficult to maintain and extend with new functionalities. The current paper addresses these problems by suggesting a systematic method for analyzing and designing GUI plug-in systems. This method is based on the Business Object Notation approach and consists of a number of well-defined steps. These steps are described and illustrated on a study case in which an Eclipse environment for the RAISE tool set is being developed.

I. Introduction

What is the paper about.

A. Background

What problems do we run into when starting building an Eclipse plug-in.

B. Related work

What solutions have other papers brought

II. ANALYSIS AND DESIGN METHOD

The steps used to design and analyze the plug-in.

A. User interface

UI mock-ups.

Requirements identification. Captured in BON scenario chart.

B. Events

Incoming events representing user actions and outgoing events meant to inform the user.

C. Components

Major components captured in BON static_diagrams using cluster_chart and class.

D. Components communication

Component interfaces added to the interface diagram using *feature*, *require* and *ensure*. This will later result in plug-in extensions and extension points.

Update scenarios with events.

E. Code generation

Beetlz generates the Java code from BON specification.

III. CONCLUSION

In conclusion

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REFERENCES

 H. Kopka and P. W. Daly, A Guide to ETEX, 3rd ed. Harlow, England: Addison-Wesley, 1999.