# A programming environment supporting an instance-based introduction to OOP

Carla Griggio<sup>†</sup> Germán Leiva<sup>†‡</sup> Guillermo Polito<sup>†‡</sup> Gisela Decuzzi<sup>†</sup> Nicolás Passerini<sup>†‡</sup>

<sup>†</sup>Universidad Tecnológica Nacional – Argentina <sup>‡</sup>Universidad Nacional de Quilmes – Argentina {carla.griggio | giseladecuzzi | leivagerman | guillermopolito | npasserini}@gmail.com

### **Abstract**

This paper describes the features that a programming environment should have in order to help learning the object-oriented programming (OOP) paradigm and let students get the skills needed to build software using objects very quickly. This proposal is centered on providing graphical tools to help understand the concepts of the paradigm and let students create objects before they are presented the class concept [?]. The object, message and reference concepts are considered of primary importance during the teaching process, allowing quick acquisition of both theory and practice of concepts such as delegation, polymorphism and composition [1].

Additionally, a current implementation of the proposed software and the experience gained so far using it for teaching at universities and work trainings. Finally, we describe possible extensions to the proposed software that are currently under study.

Categories and Subject Descriptors CR-number [subcategory]: third-level

General Terms term1, term2

Keywords keyword1, keyword2

### 1. Introduction

The text of the paper begins here.

### A. Appendix Title

This is the text of the appendix, if you need one. 1

## Acknowledgments

Acknowledgments, if needed.

#### References

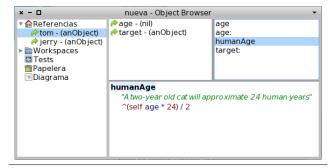


Figure 1. ObjectBrowser

Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. To copy otherwise, to republish, to post on servers or to redistribute to lists, requires prior specific permission and/or a fee.

WXYZ '05 date, City.

Copyright © 2005 ACM [to be supplied]...\$10.00