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(54) **LIVE SOFTWARE CONSTRUCTION WITH DYNAMIC CLASSES**

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(57) **ABSTRACT**

A system for software development provides an underlying object-oriented programming language and a language front-end supporting software development in a programming methodology of the object-oriented programming language, the system providing a graphical programming environment permitting access to classes of the object-oriented programming language and permitting subclasses to be defined and modified dynamically ("dynamic classes") while the software under development is executing. Modifications to the dynamic classes can be reflected in future instances of the classes and in instances of the classes existing prior to the changes. In one embodiment, the object-oriented programming language is Java. The dynamic classes coexist with compiled classes of the object-oriented programming language, the dynamic and compiled classes each being capable of calling methods on instances of any class. The dynamic classes may be created as subclasses of other dynamic classes or of compiled classes ("parent classes") and may selectively override methods of the parent class.

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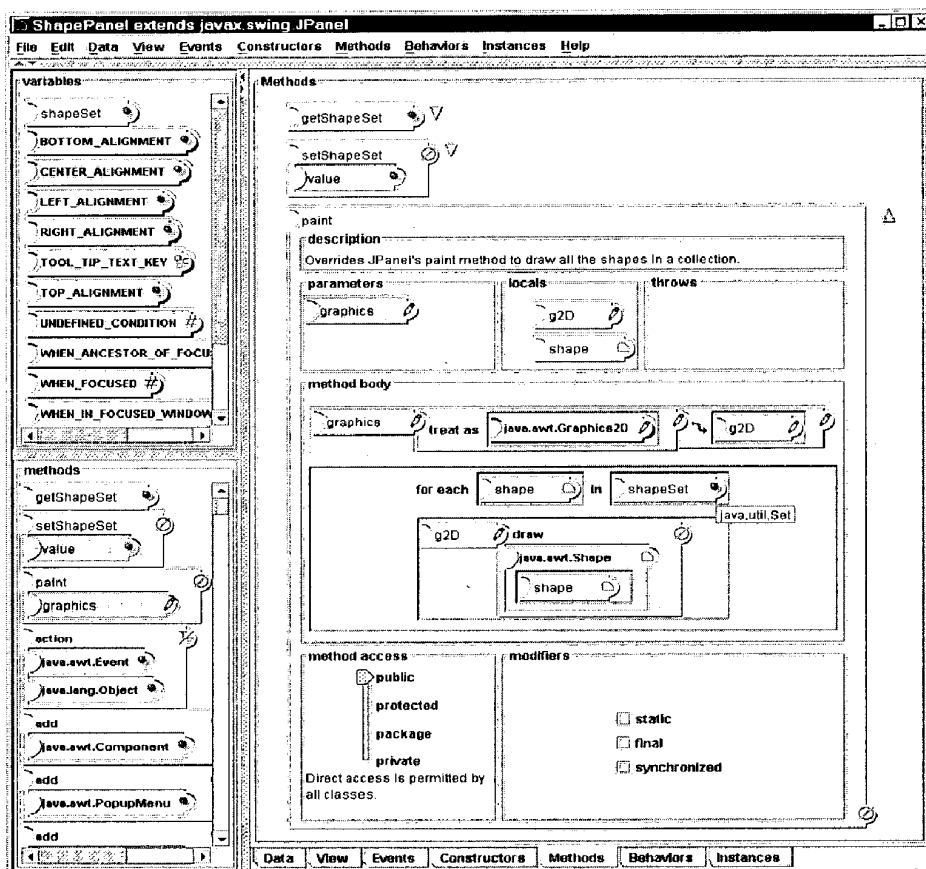
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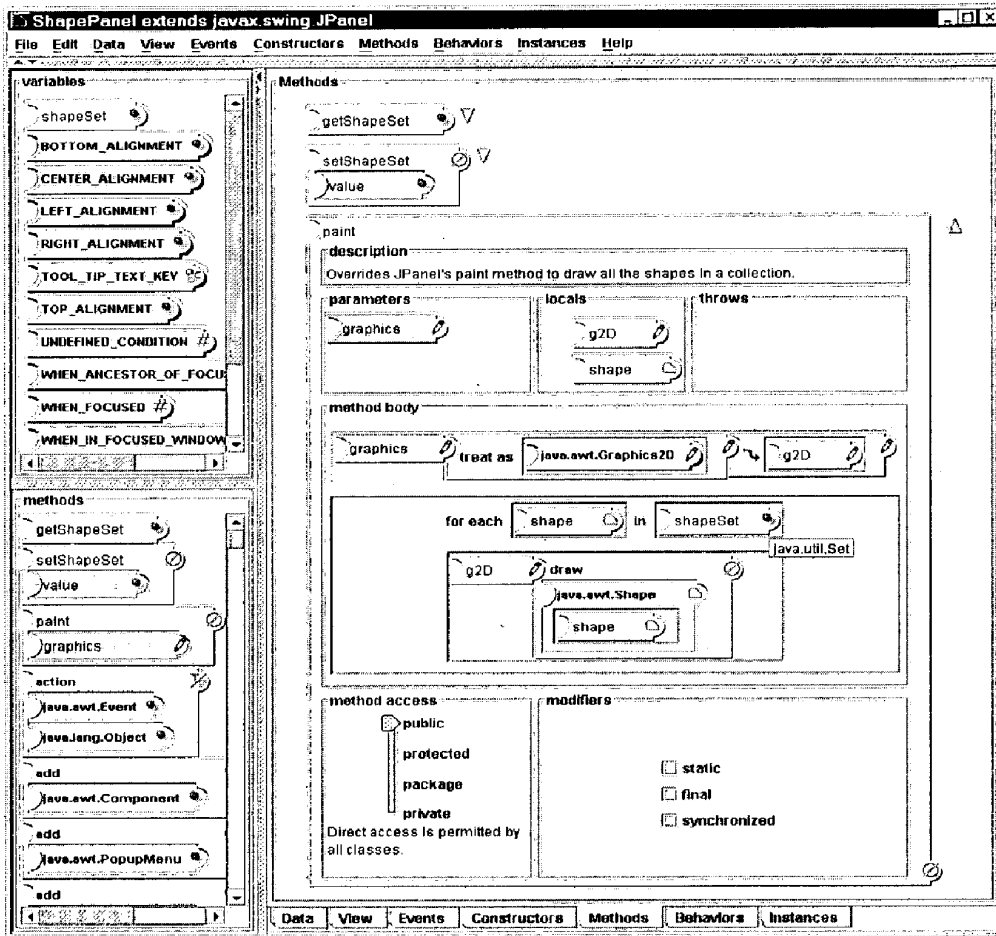


FIGURE 1

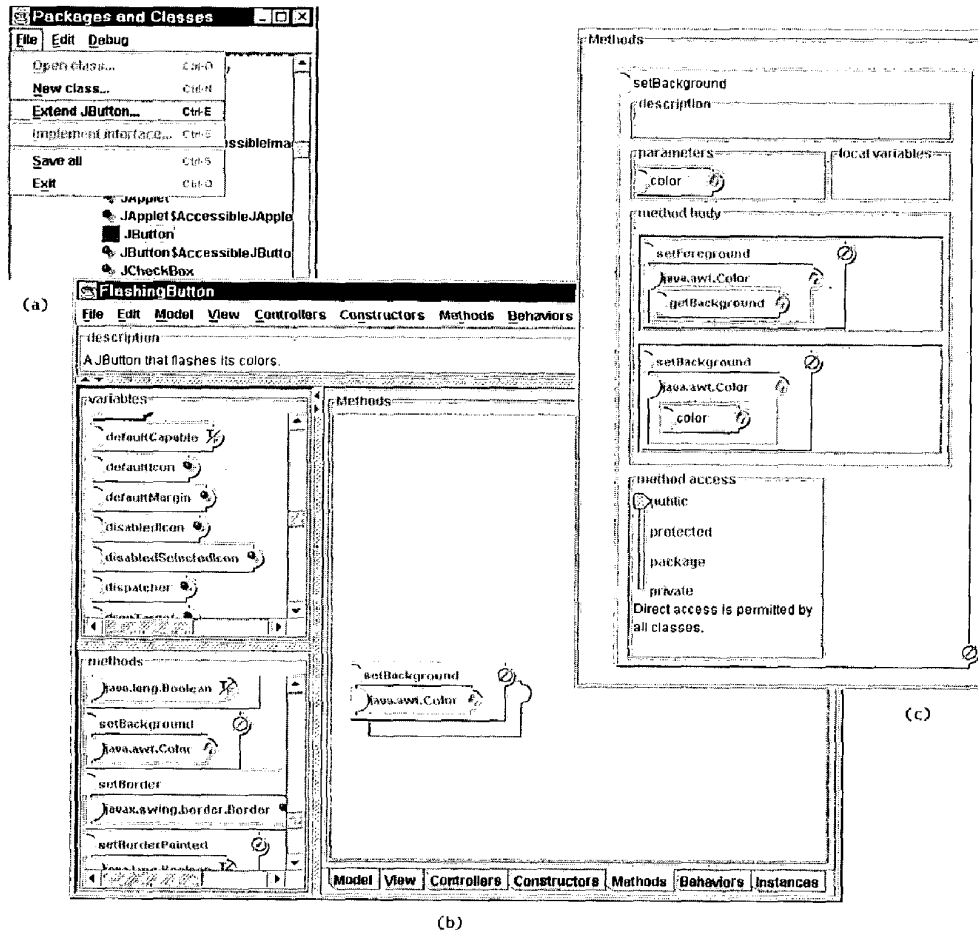


FIGURE 2

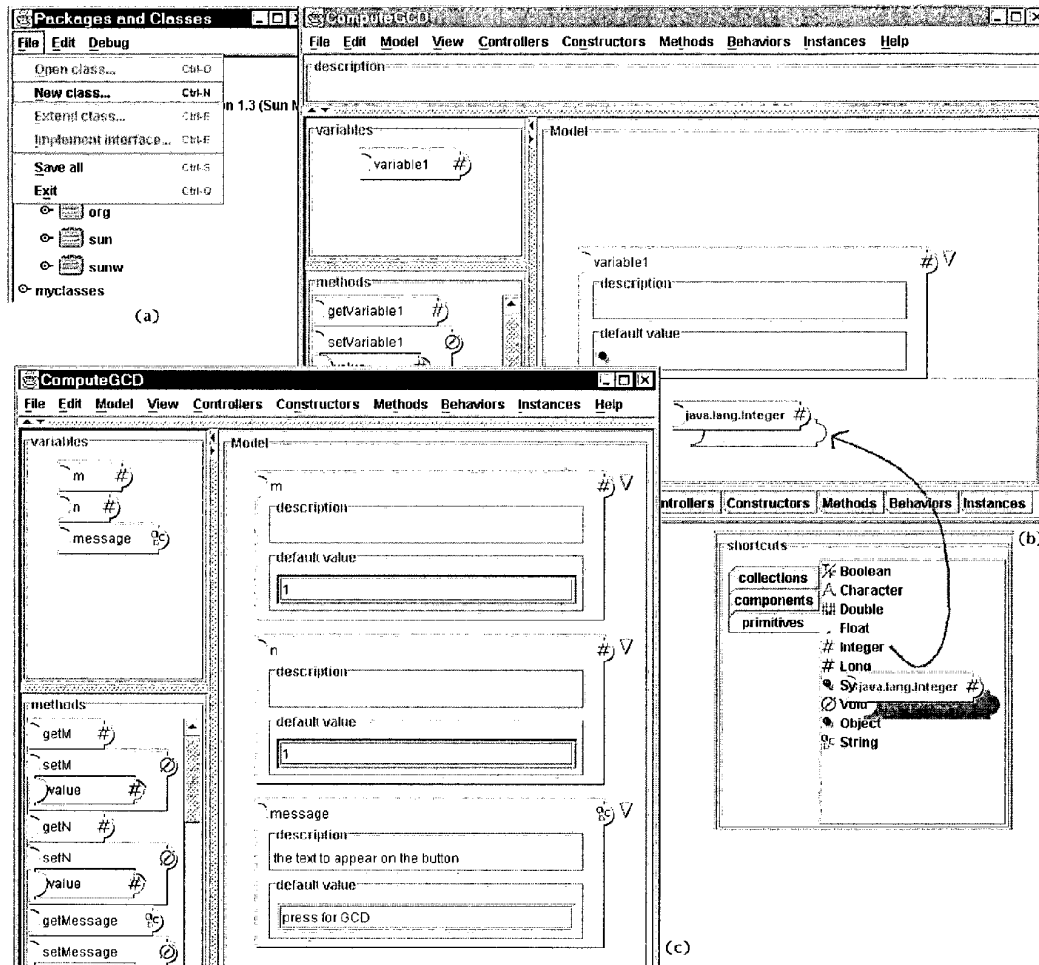


FIGURE 3

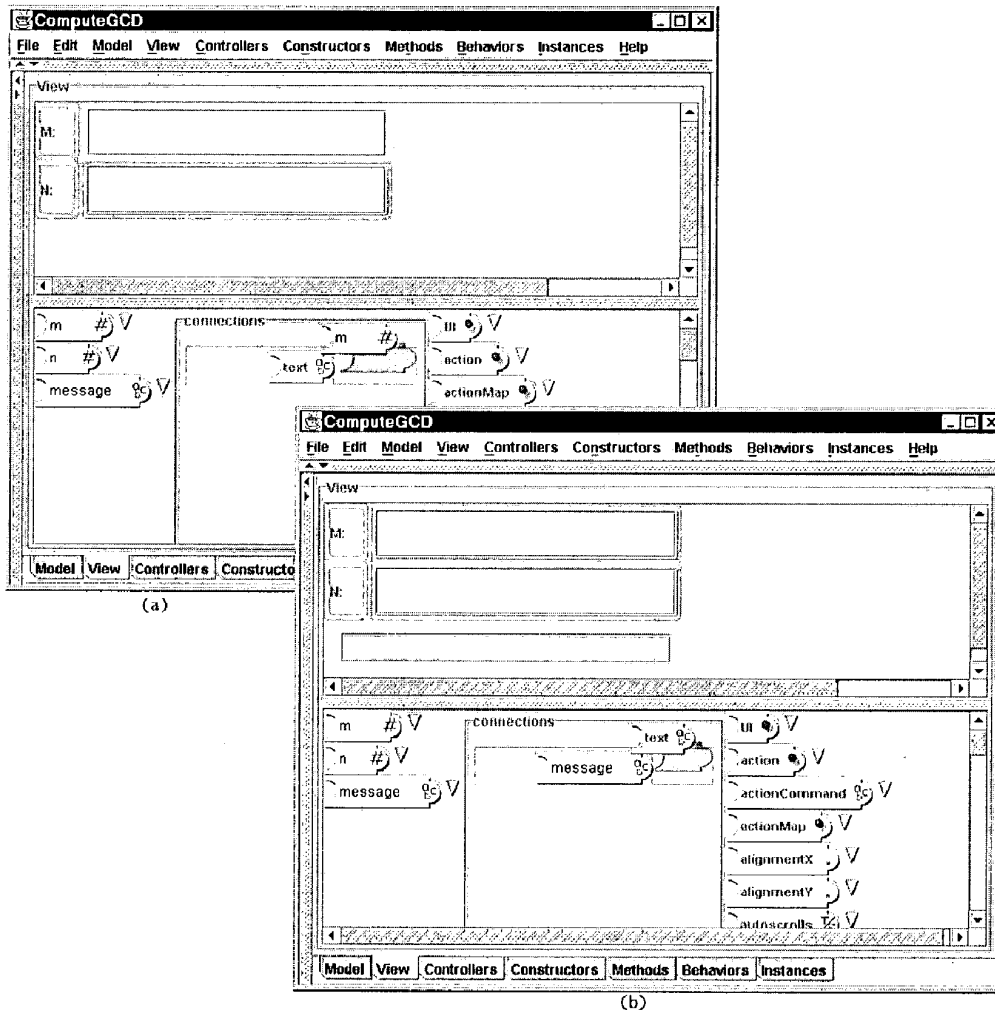


FIGURE 4

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