**The need**
The Web has evolved from the old navigation of simple hypertexts.
Now: a platform for complex applications (events+business logic+RIA/AJAX)
Old interaction paradigm (content pages + hyperlinks) is not valid anymore.

In **browsers**, back and forward buttons reflect the old document navigation.
**Sites** are unable to offer effective backward navigation and rollback.
**Sites** do not grant correct management of (cross-session) application state.
**Users** are getting used to misbehaviours.

**The objective**
1. Moving from a browsing paradigm based on Pages and Back / Forward buttons to a
   full-fledged interactive paradigm based on States and Undo/Redo actions.
2. Offering design-time and run-time support to create web applications under this new paradigm.

**The solution**
MOF-compliant metamodel, based on the **UML state machines** sublanguage.
Adapted to the web application domain by means of adding web concepts like Page and **GraphicalElement**.
**Domain specific notation** describing the concepts in a concise and clear to understand way.

**Example:** **CMS**: transactional change of fields of objects.

**Example:** **online mailer**: login and browsing of messages; deletion of a message.

**The tool**
**API** for state recording, state change, undo/redo, and transactions.
**Online editor** of Web state diagrams.
**Automatic code generation** of running prototype that exploits the API.

**The online demo**
is available at: http://home.dei.polimi.it/mbrambil/safeinterfaces.html

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