



Gentleman as a CMS Editor

A web application integration

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Presentation

1. Background
2. Gentleman
3. Demonstration
4. Outlook
5. Questions



Domain-specific
modeling

+

Projectional
editing

Domain-specific modeling

- Software development as a **model-driven activity**
- Solution specified using problem domain concepts
- Leveraging the expertise and knowledge of domain experts from various backgrounds

Projectional editing

- AST is modified directly
 - ✓ Fill-in-the-blank editing flow
 - ✓ Prevent syntactic errors
- Language is not parsed
 - ✓ Free to use any representations
 - ✓ Language composition does not introduce ambiguities



Gentleman

Goal: Make modeling more accessible to domain experts and practitioners

Concept

Encapsulates the concepts used to define a model.
Defined without UML or prior knowledge of a programming paradigm (e.g., OOP).

Types of concept

- **Primitive:** string, number, bool, set, reference
- **User-defined:** Concrete, Prototype, Derivative

Relations specified through attributes and properties

Projection

Representation of a concept that can be visualized and interacted with in the GUI

Container-based


Composed of **specialized elements**
E.g., *Text field, Image, Button...*

⇒ **Help users comprehend the model**

Leverage web technologies
HTML 5 widgets, templates, CSS styling

MEMBERS + New

LIST VIEW Row Card



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Demo



Integrating Gentleman into a CMS for GEODES website

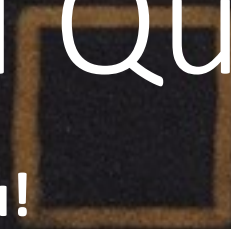
Roadmap

A dark, atmospheric landscape with a winding road leading towards mountains under a cloudy sky. The road is paved and has white dashed lines. The terrain is hilly and appears to be a dry or semi-arid region. The sky is overcast with dark clouds.

- In sight
 - Support for graphical projections
- Coming soon
 - Drag-and-drop support
 - Enable key bindings
 - Advanced importing and exporting options
 - Projection builder
- On the horizon
 - Repository of concepts
 - Intentions and constraints



Discussion and Questions



Thank you!

