Dry-ing Magritte

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Do it yourself

- Gofer new
  - url: 'http://smalltalkhub.com/mc/DiegoLont/QCMagritte/main';
  - package: 'ConfigurationOfQCMagritte';
  - load.
- ConfigurationOfQCMagritte project development load: #('Demo').

Introduction

- Magritte framework describes domain objects and how to show them

- Very abstract

- Hooks not very obvious

Hexagonal architecture

- Use a domain model

- Use ports and adapters for all concerns

  - UI

  - Validation

  - Persistency

  - Network

This presentation

- Extend Magritte

- With as little duplication as possible

- Without having to write parallel hierarchies

- Without having to subclass everything

Example

- We use Twitter Bootstrap as a case
  - Model is small
  - Hard to extend

Custom rendering

- Default: renders table

- You can change table layout (a bit) in css

- Next option:

  - Custom components

  - Custom descriptions

  - Custom renderer

Custom Component

- For displaying a field different

- E.g. a European date format instead of US

- Problem

  - Needs to be set for each field

Custom descriptions

- each domain type needs its own description
  - birthdate may be different from other date types (history/future, defaults)
- Only usefull for different types
  - You need to make a component as well

Custom renderer

- Allow different layout than a table (i.e. div)

- Does not allow different components

- Problems:

  - Needs to be set for each domain object

  - Does not propagate (on "add / details")

DescriptionBuilder

- Problem:

  - Each description needs same settings

- Solution:

  - Custom description builder

  - Root class

  - Different package (monkey patch)

Multi language labels

- Editor for several languages

- Default is "toString" of the key

- Languages can be added

- Translation can be exported / imported from/to csv

- => DescriptionBuilder

Ajax

- Rendering is easy
  - use custom renderer
  - generates ajaxLabels
- Problems
  - memento doesn't apply domain rules
  - description isn't updated

Memento

- Generic dictionary, no domain class
- Setting one value doesn't affect others
  - firstname change <=> fullname change
- no domain validation in the memento
- solution: AjaxMemento
  - allows domainrules to be set (influences)

Dynamic descriptions

- Hide fields based on state

- Options based on state

Reports

- Part of ToManyComponent

- A table, generated from a description

- User wants to be able to

  - Filter content dynamically (AJAX)

  - Add / Remove columns

  - Save settings to profile

Dynamic reports

- Quite easy
  - Use custom report renderer
  - Add custom columns to allow AJAX filter
  - Enable filters in to many component

User settings

- Easy to incorporate in component

- Problem

  - Components are hard to re use

Queries

- Basis of report (possible)

- More precise filtering

- Allows for user settings

Thanks

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