Guided Authoring:

Enforcing Editing Rules

Octavian Nadolu

octavian_nadolu@oxygenxml.com
@OctavianNadolu

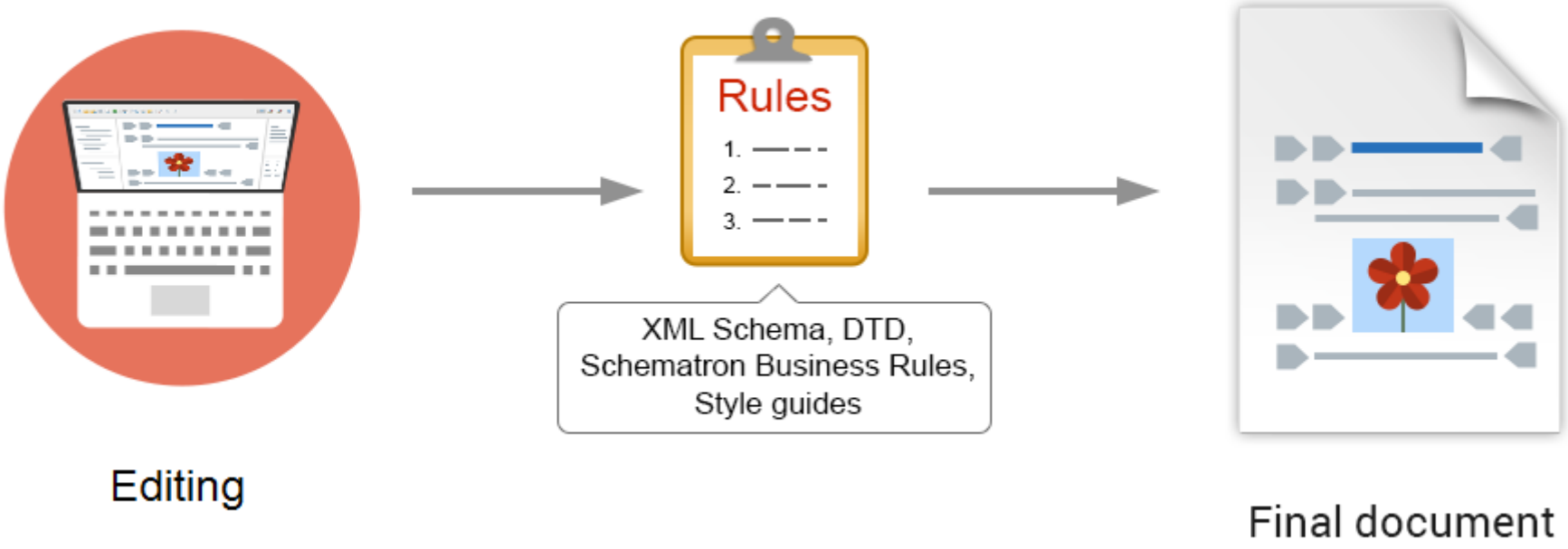
syncro soft

<oXygen/> XML Editor

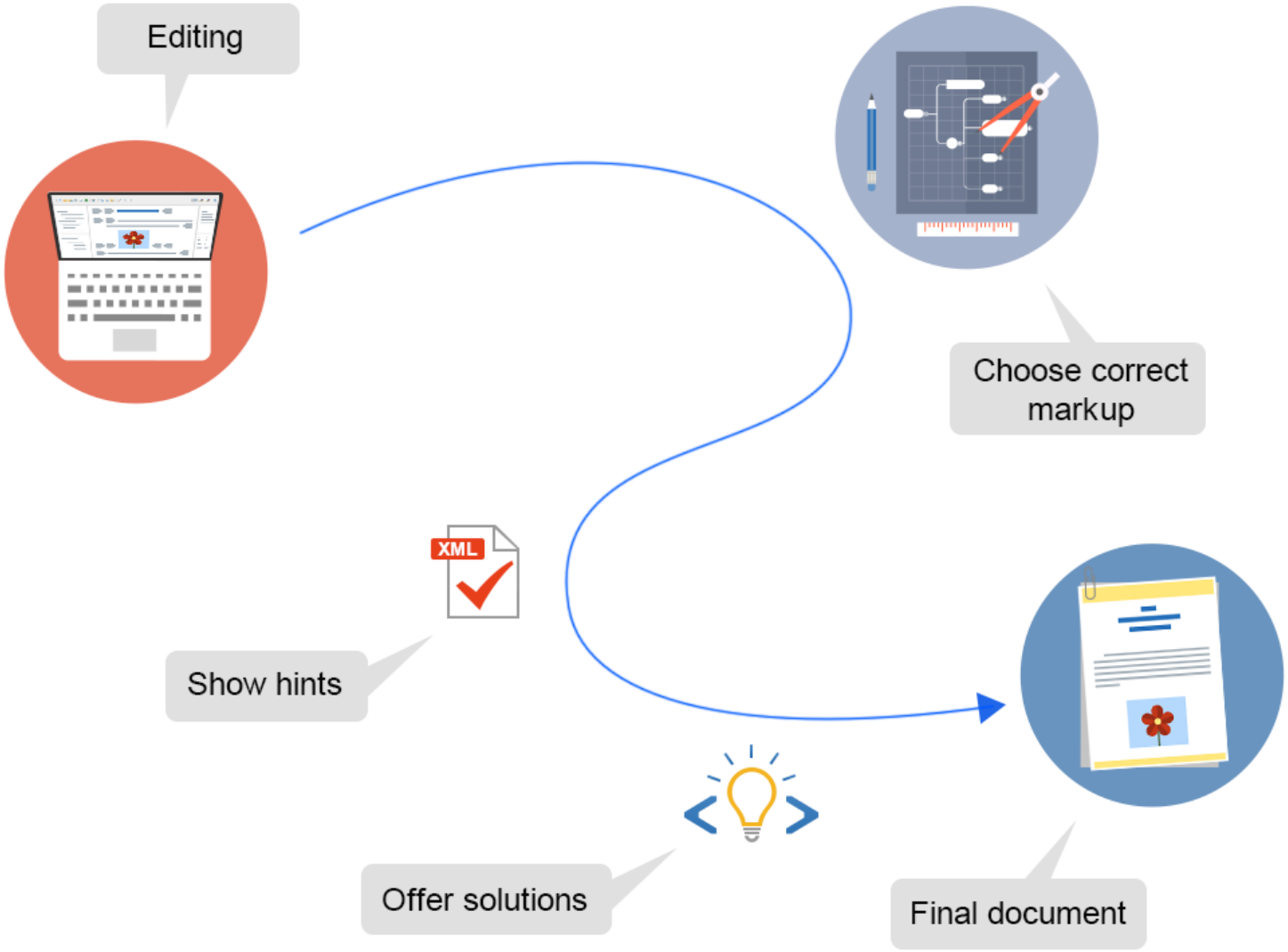
Overview

- Guiding users to choose the correct markup in certain situations
- Imposing a set of business rules
- Identifying potential problems in generated output
- Solutions for fixing the signaled rule violations

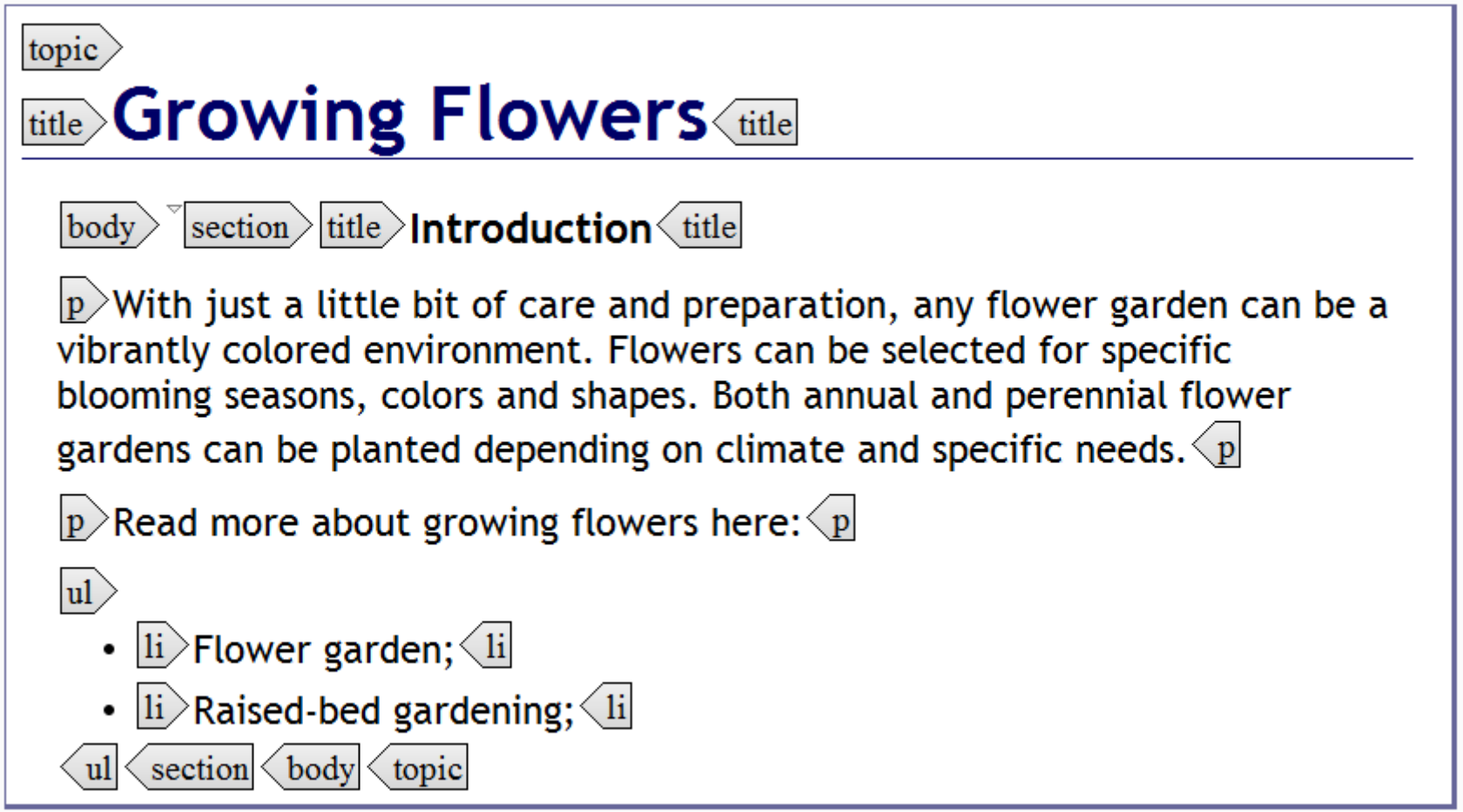
Enforcing Editing Rules



Guiding the User



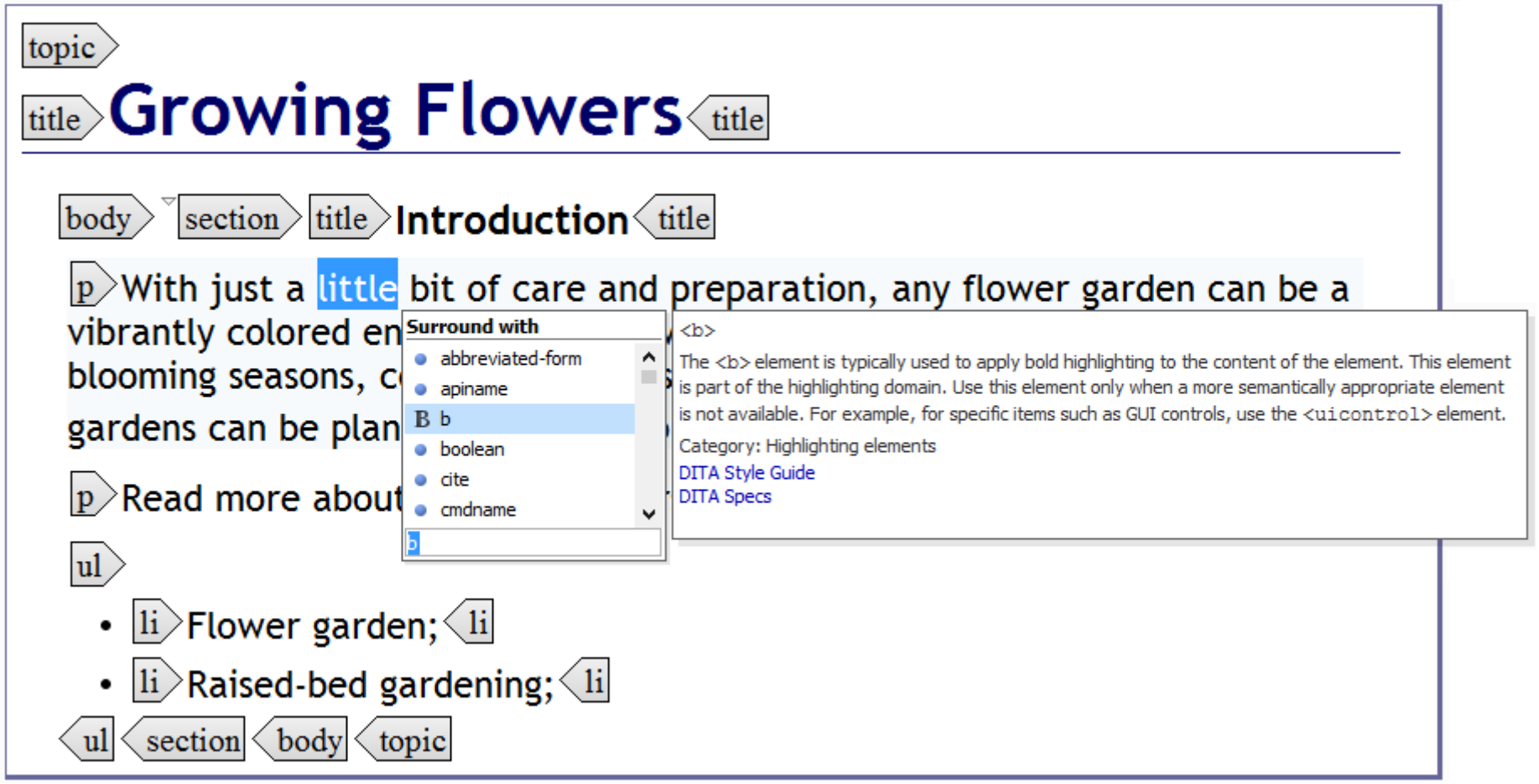
Document Structure



Document Structure Rules

- Impose a document structure using a schema language:
  - DTD
  - XML Schema
  - Relax NG
  - NVDL
- Oxygen supports all schema languages

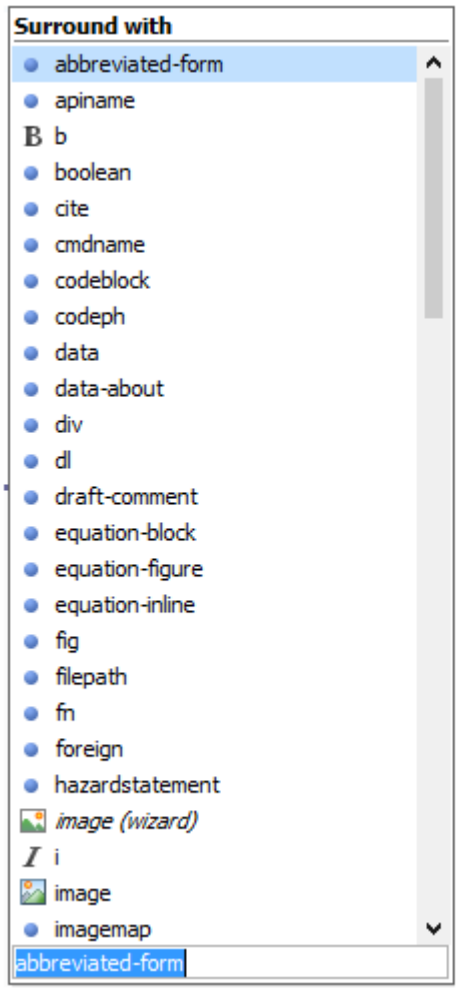
Content Completion and Annotations



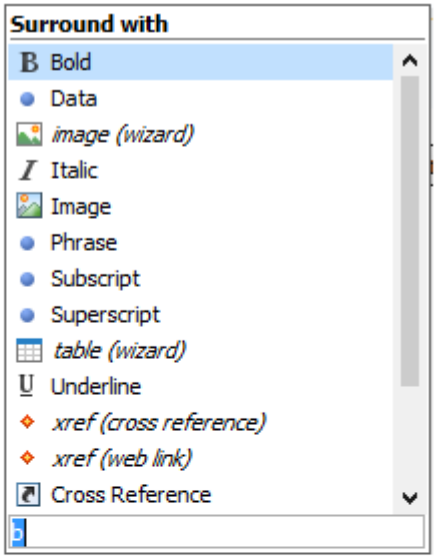
Content Completion and Annotations

- Suggestions to insert valid markup
- Annotations to help you understand what the markup represents
- Links to the specification and style guide

Limit the Number of Proposals



~90 proposals

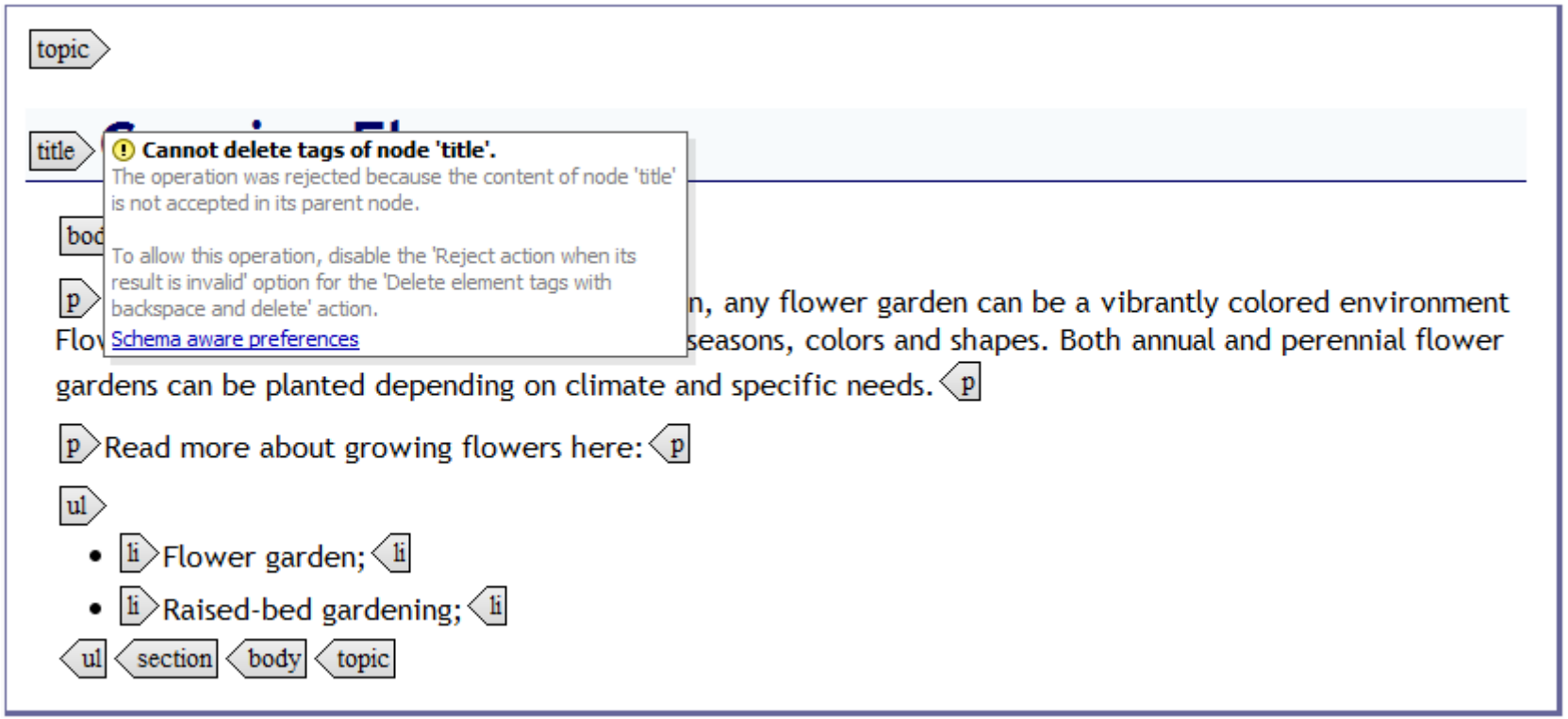


~15 proposals

Limit the Number of Proposals

- Help the user to choose the right elements and attributes in particular contexts
- Configure the proposals for elements and attributes
- Lightweight DITA
- Controlled Values & Markup Options presented at oXygen Users Meetup

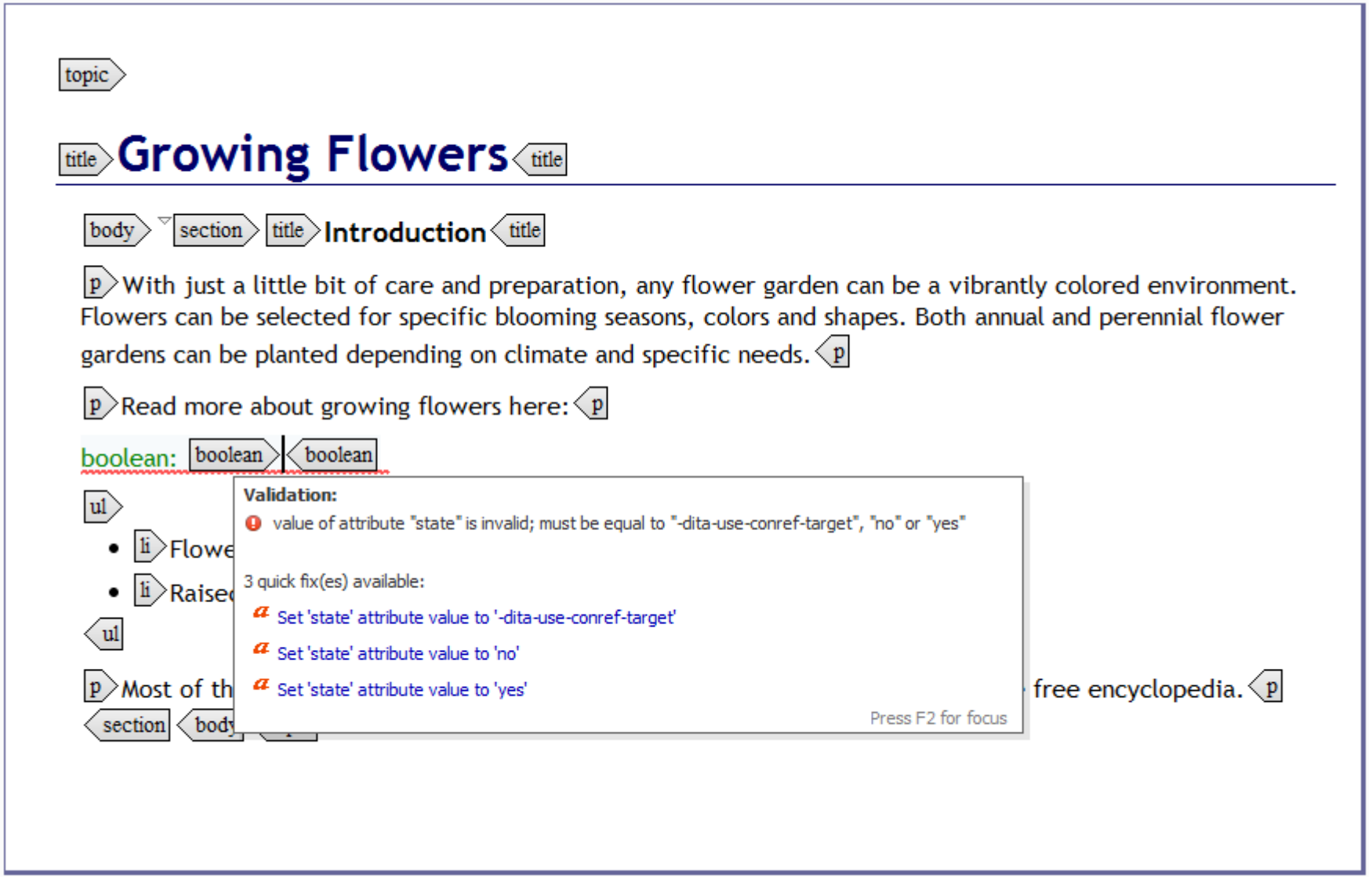
Show Hints


topic
title
Cannot delete tags of node 'title'.
The operation was rejected because the content of node 'title' is not accepted in its parent node.
To allow this operation, disable the 'Reject action when its result is invalid' option for the 'Delete element tags with backspace and delete' action.
Schema aware preferences
p
n, any flower garden can be a vibrantly colored environment
seasons, colors and shapes. Both annual and perennial flower
gardens can be planted depending on climate and specific needs.
p
p Read more about growing flowers here: p
ul
li Flower garden; li
li Raised-bed gardening; li
ul section body topic

Show Hints

- Signal document structure problems
- Suggestions to correct the problems
- Preferences to change the schema-aware options

Signal Problems and Offer Solutions

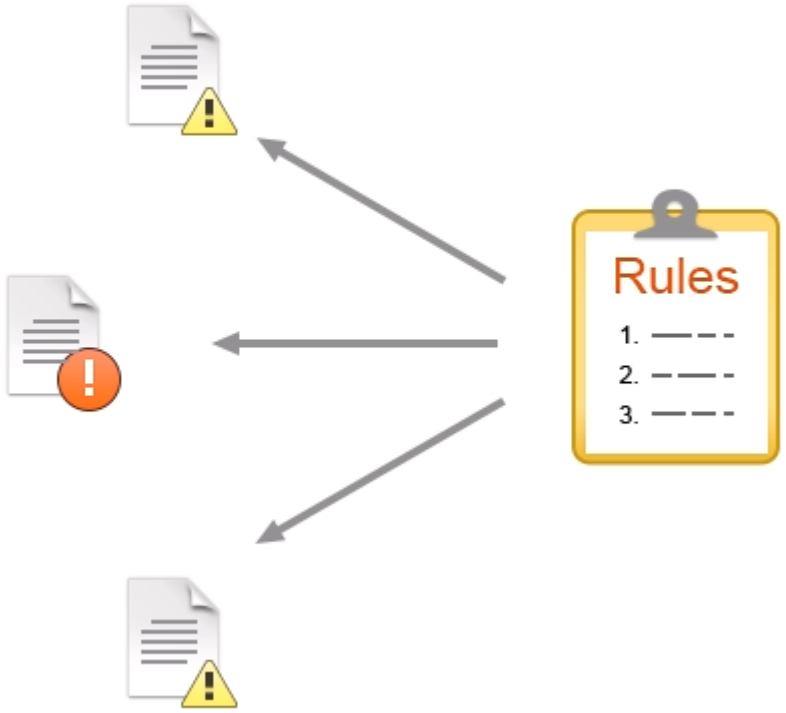


Signal Problems and Offer Solutions

- Actions to guide the user to fix the problems
- Multiple solutions for a problem
- Better understanding of the problem

Business Rules

Rules for your documents that cannot be imposed by the schema

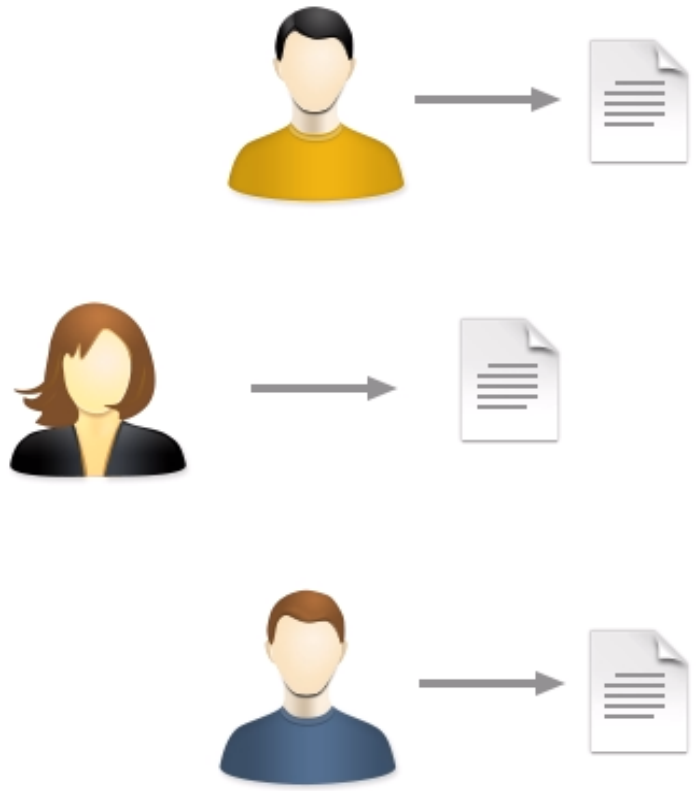


Examples:

- Titles should have content
- Consecutive lists are not allowed
- IDs must follow a certain pattern
- Consecutive notes of a same type
- Too many entries in a table row
- Sections must have IDs
- Titles are too long
- ...

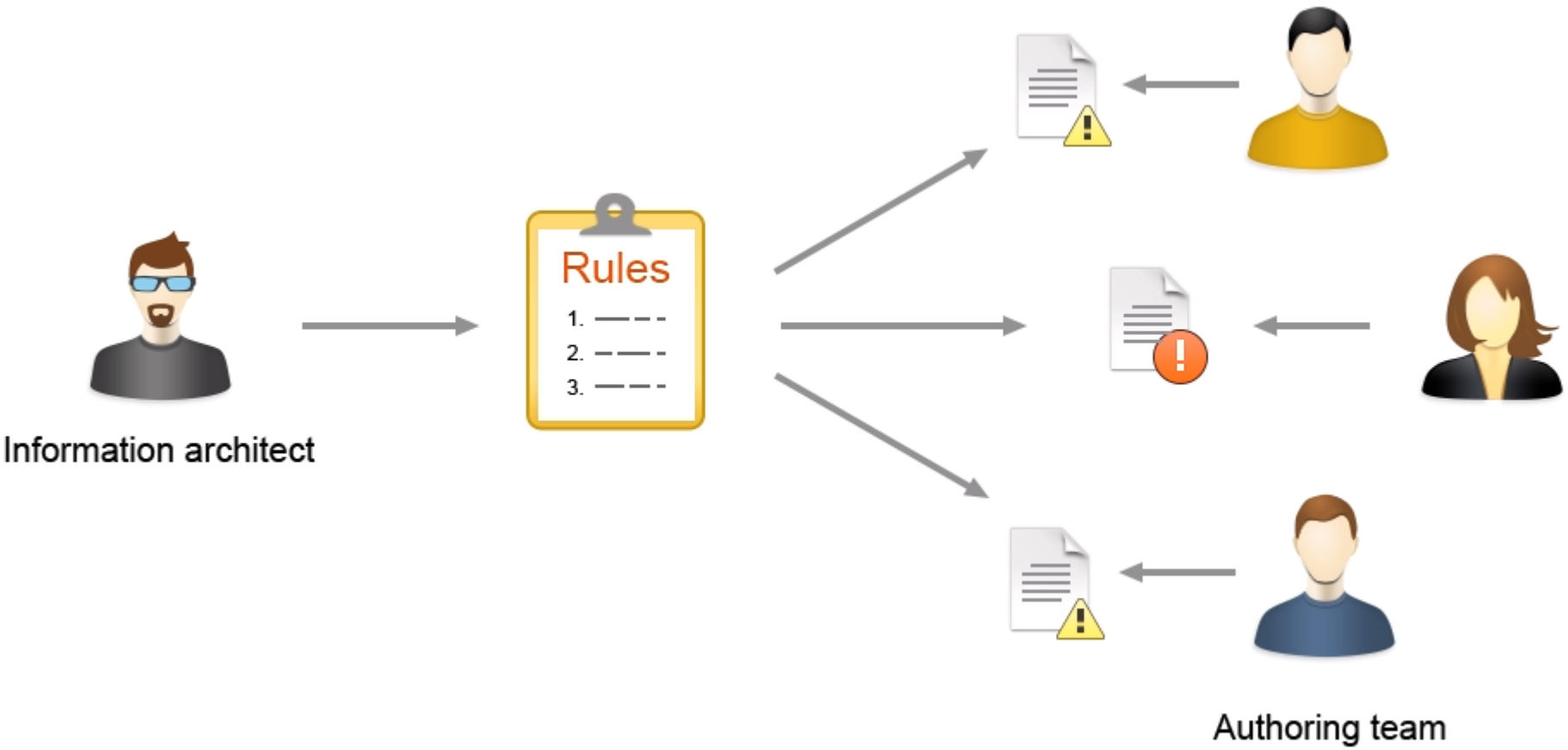
Team Collaboration

All team members must follow the same rules



Authoring team

Rules for All Documents

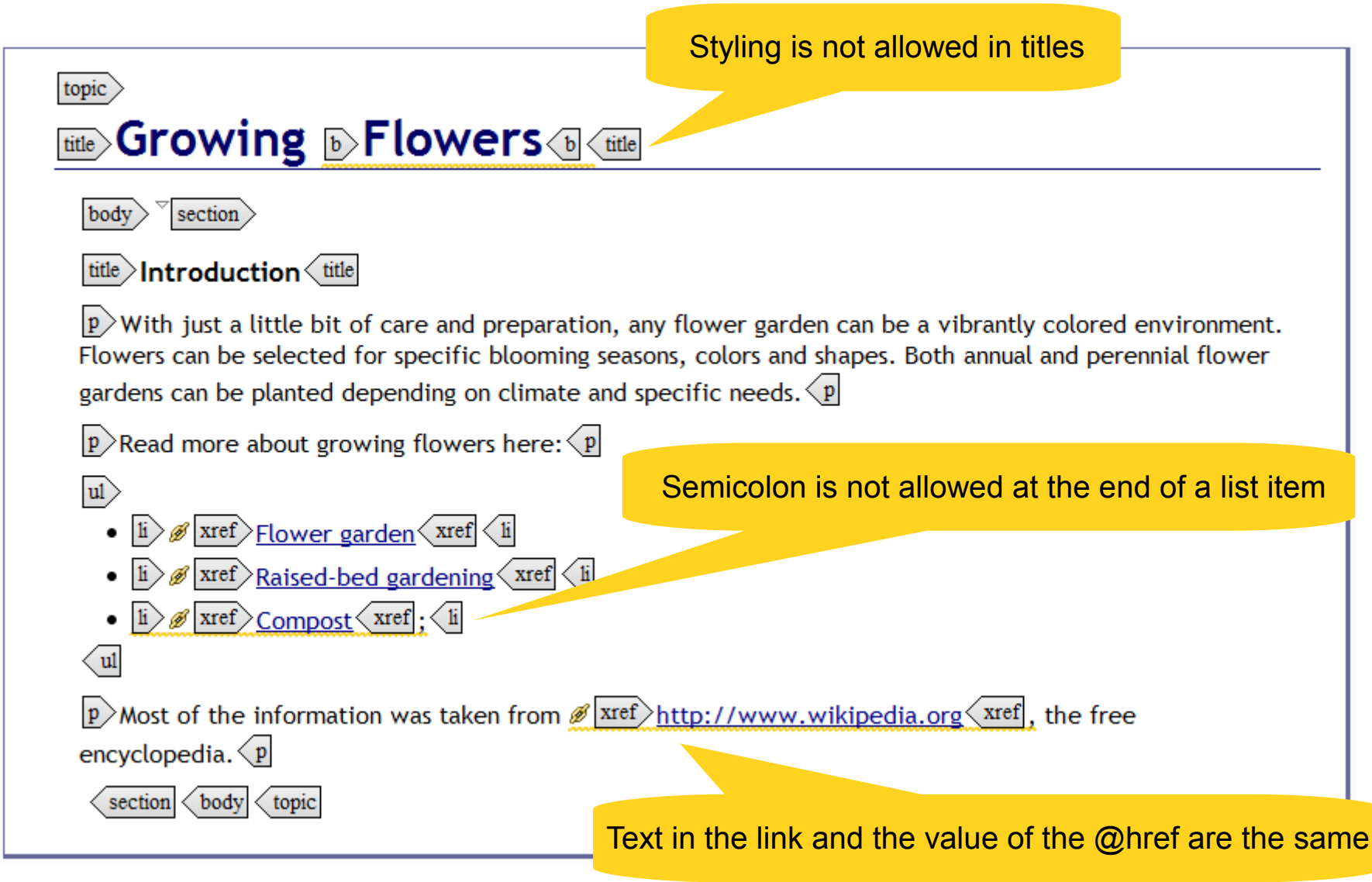


Business Rule Types

Various types of business rules:

- Simple style rules
- Editing consistency rules
- Structure rules
- Output related rules

Simple Style Rules

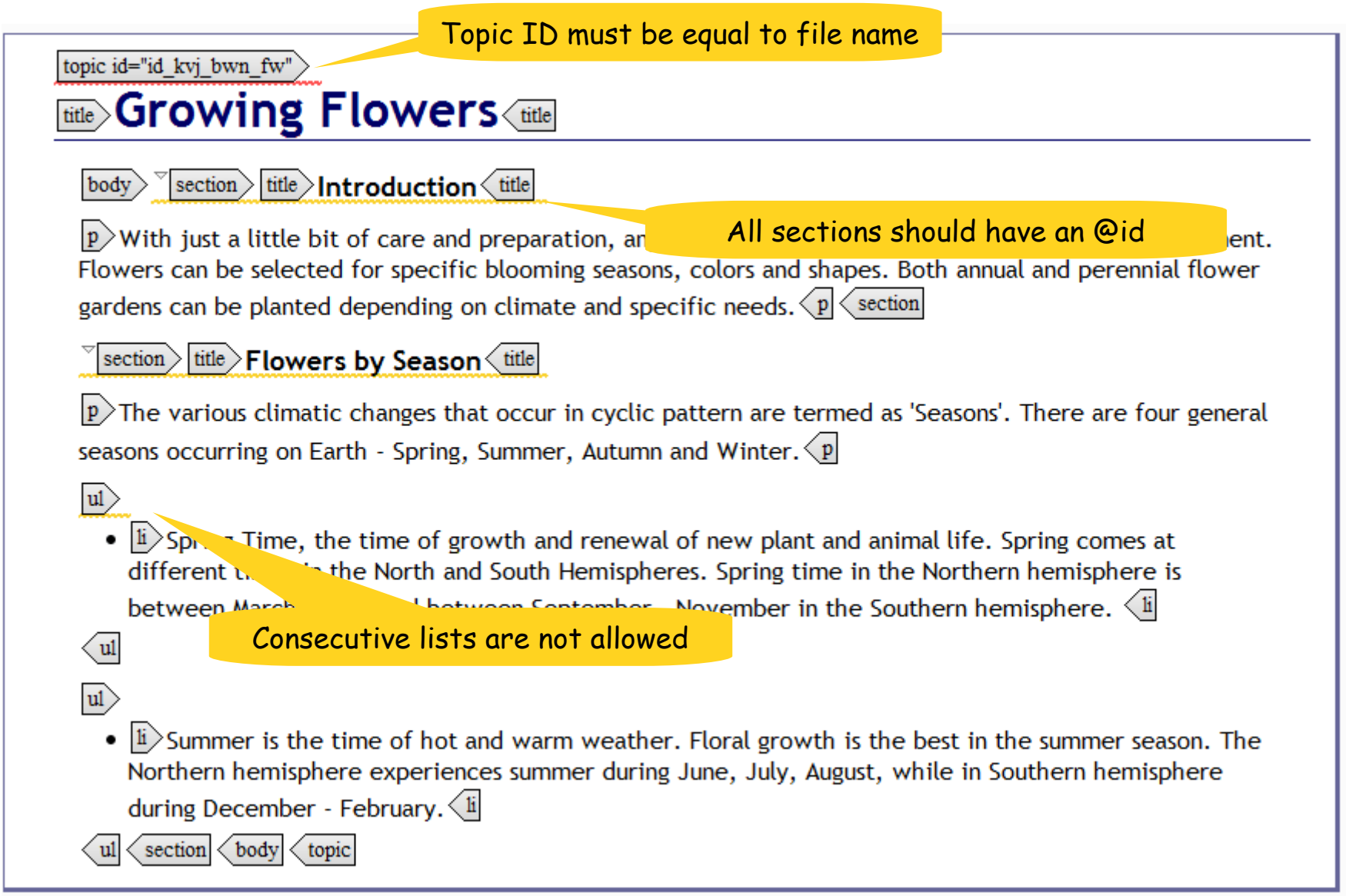


Simple Style Rules

Other simple style rules:

- No empty titles
- Titles should not exceed a certain number of characters
- Text is not allowed directly in the section
- The figure element should always be wrapped in a paragraph
- The definition list element should be wrapped in a paragraph to make the output look better
- Report possible cases where a codeblock contains XML that was not marked appropriately

Editing Consistency Rules



Editing Consistency Rules

Other editing consistency rules:

- IDs must follow a pattern
- The list should have an ID attribute
- Consecutive notes of a same type are not allowed
- For sections with examples in the title, use a specialized element
- We should avoid using 'oXygen' inside index term elements
- Remove "(Optional)" text from step elements and add the attribute @importance=”optional” instead.

Structure Rules

Growing Flowers

Care and Preparation

Missing cells in a table

Flower	Type	
Chrysanthemum	perennial	well drained
Gardenia	perennial	
Gerbera	annual	sandy, well-drained
Iris		

Flowers by Season

Too many nested lists

- Spring Flowers
  - Iris - is a genus of between 200-300 species of flowering plants with showy flowers.
    - Irises are extensively grown as ornamental plants in home and botanical gardens.
    - Some rhizomes are traded as orris root and are used in perfume and medicine, though more common in ancient times than today.
  - Snowdrop - is the common name for small genus of about 20 species in the family Amaryllidaceae.
- Summer Flowers

List contains only one item

  - Gardenia - is a genus of about 250 species of flowering plants in the coffee family, Rubiaceae, native to the tropical and subtropical regions of Africa, southern Asia, Australasia and Oceania.

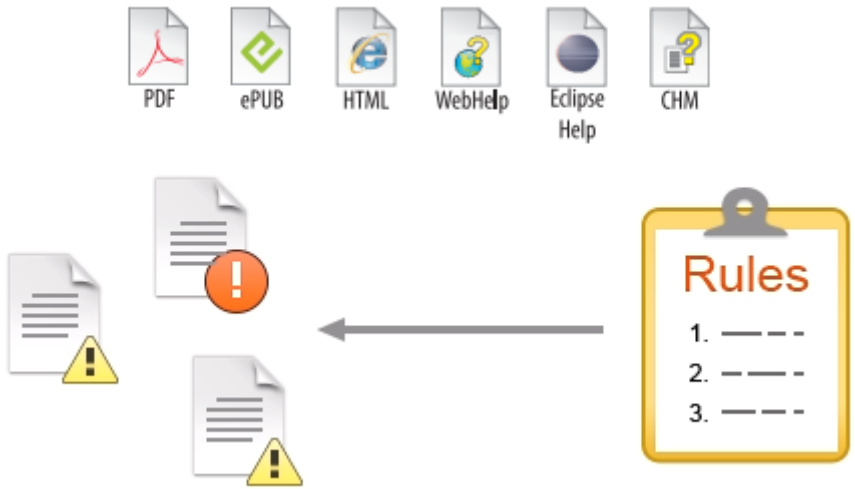
Structure Rules

Other structure rules:

- Tables with more entries than number of columns
- No image referenced in the fig element
- XML Schema used instead of DTD
- The figure should have a title
- Menucascade element should have more than one uicontrol element

Output Related Rules

Impose rules to make sure your output will be generated correctly



Output Related Rules

Sample

On **Linux**, the Java command should look like this:

```
java -Xmx600m -XX:MaxPermSize=256m "-Dcom.oxygenxml.editor.plugins.dir=$OXYGEN_HOME/plugins"

java -Xmx600m -XX:MaxPermSize=256m\
 "-Dcom.oxygenxml.editor.plugins.dir=$AUTHOR_HOME/plugins"

java -Xmx600m -XX:MaxPermSize=256m\
 "-Dcom.oxygenxml.editor.plugins.dir=$DEVELOPER_HOME/plugins"\
```

Sample

On **Linux**, the Java command should look like this:

```
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java -Xmx600m -XX:MaxPermSize=256m\
 "-Dcom.oxygenxml.editor.plugins.dir=$DEVELOPER_HOME/plugins"\
```

Output Related Rules

Other output required rules:

- Title contains quotes. This breaks the Java Help System.
- The indexterm element should be in a prolog
- The figure element should always be in a paragraph
- The definition list element should be wrapped in a paragraph to make the output look better
- Text is not allowed directly in the section

Business Rules

- ✓ Create business rules for your documents

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- ✓ Impose rules for all of your documents

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- ✓ Add new rules when you encounter problems

Business Rules

- Create business rules for your documents
- Impose rules for all of your documents
- Add new rules when you encounter problems
- ✓ Make sure that all of your team members follow the same rules

Dynamic Information Model (DIM)

- An implementation of an intelligent style guide
- Describes and enforces rules
- Schematron for Information Architects
  presented by George Bina at XML Prague
- Open source project available on GitHub
  https://github.com/oxygenxml/dim

What's Next?

- Extend multilingual support for proposed fixes
- Allow business rules to report information (as opposed to errors or warnings)
- Determine fix proposals in more situations when an automatic fix can be offered

Business Rules Fix Proposals

Discover the technology behind the fix proposals for business rules by attending our next webinar:

Jul 14 webinAr

Understanding and Developing Schematron Quick Fixes

Thank you!

Questions?

<oXygen/> XML Editor

http://www.oxygenxml.com

octavian_nadolu@oxygenxml.com

@OctavianNadolu