Document Structuring Techniques

Considerations for Technical Writers

Terry Snyder for Anita Kanakis, United Airlines

Creating Smart Data Requires "Smarter" Technical Writers

- —Beyond content and format . . .
- —How to author within structure
- —Which elements (text block types) are best for presenting information
- —What metadata and links add value
- —How to make a document parse
- —Writing for maximum reusability
- —Identifying required granularity

How Technical Writers Get Smarter

- —Learn benefits of structure and markup language
- —Take courses in structuring documents
- —Consistently employ the right user tools to build structured documents
- —Read the brilliantly enlightening book, "*Aviation Information Management – From Documents to Data*"

Essential User Tools

- Comprehensive Writing Standards
- Effective Publishing Process
- Structure Rules
  - Via Authoring Application (SGML, XML)
  - Applying structure discipline concepts while waiting for conversion to ML

Writing Standards

- Proper tense, voice, and formality
- Approved acronyms, definitions, and terminology
- Conventions with strong business cases
- Consistent with emerging industry standards

Publishing Process

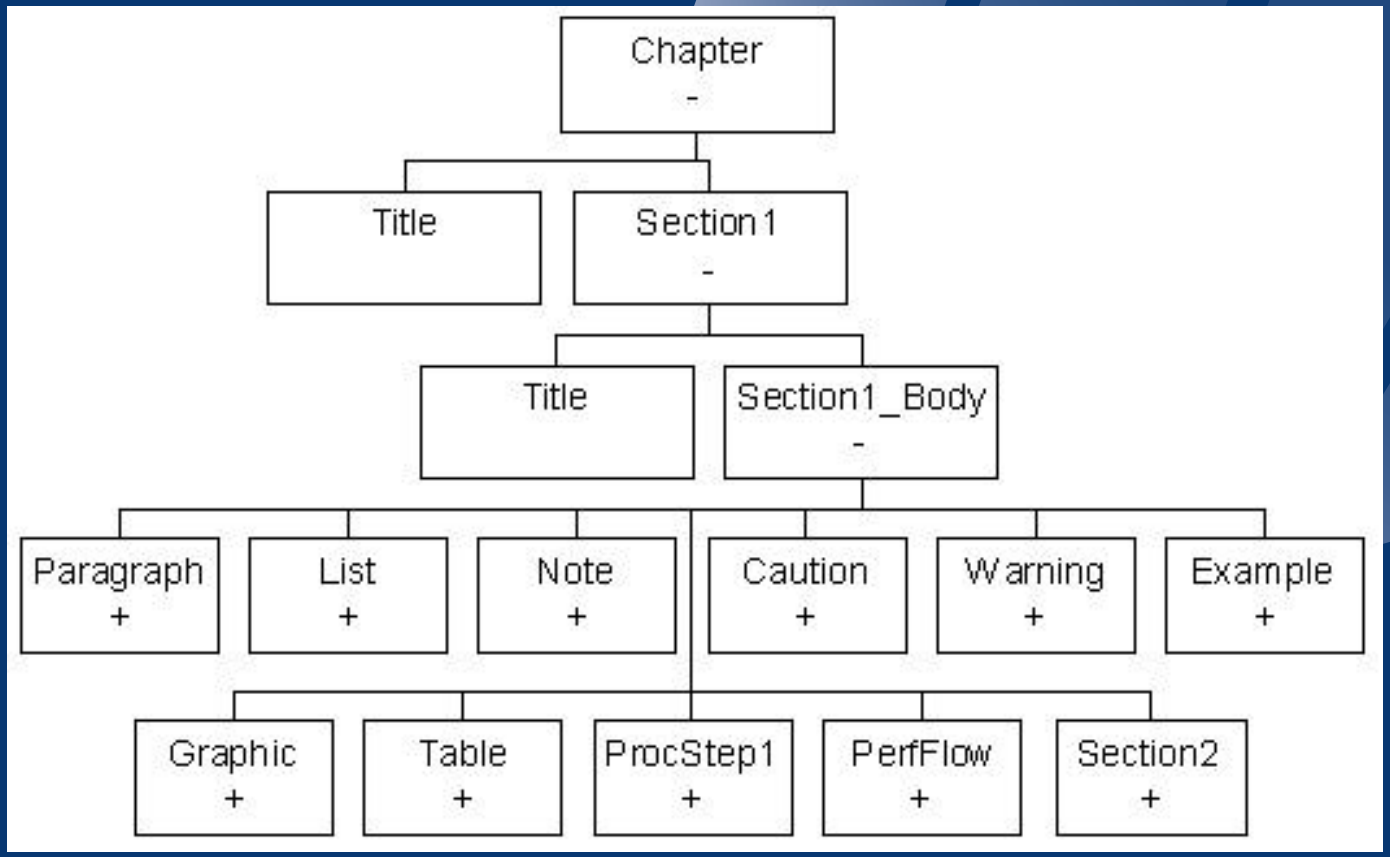
- Clearly mapped workflow
- Measurably effective
- Well-designed tools and task checklists
- Data maps to appropriate stakeholders
- Clearly defined roles and responsibilities
- Sufficient training and technical support

Structure Rules

- Structure diagram and hierarchies based on intuitive outline concepts
- A place for everything, and everything in its place
- Manageable number of clearly defined elements, attributes, and links
- Consistent contextual relationships between elements ; “parent-child”

Structure Diagrams

—Identify valid options



Proper Element Location

—Helps identify correct sequencing of information and missing titles or content

Clearly Defined Elements and Attributes

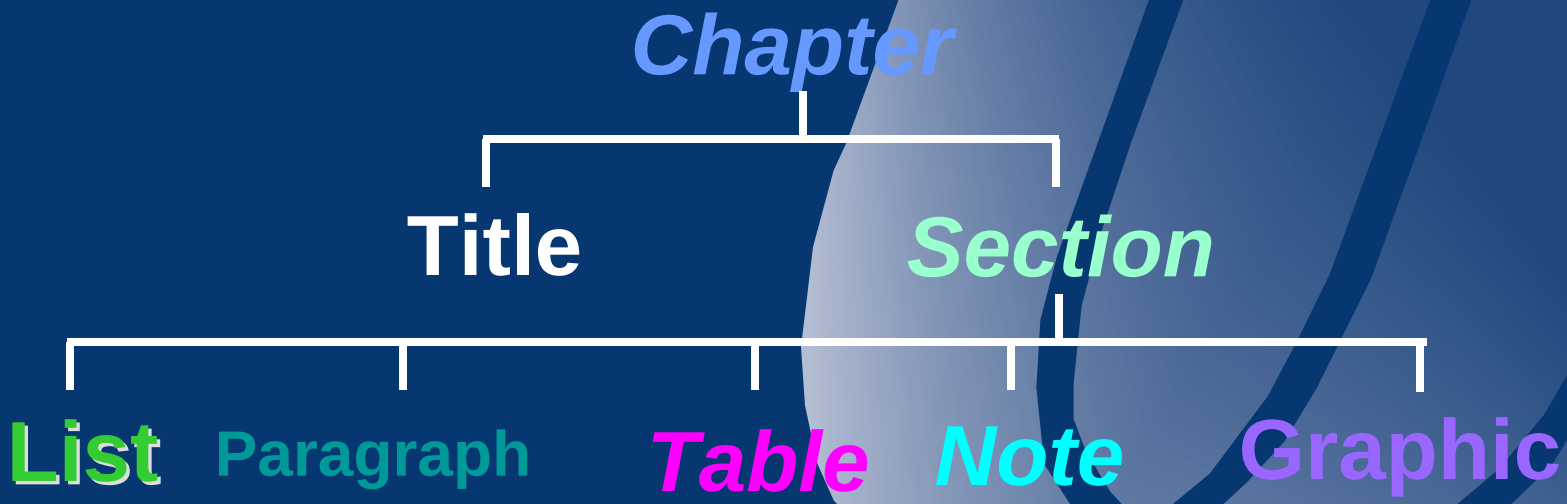
—Aid author in writing using appropriate elements

Element: **EmergencyProc**
Use: This element is used in the both EICAS and Non EICAS Procedure elements
Description: Container for an Emergency Procedure which is continued from the QRC.

Attribute: **EICAS**
Description: This attribute is used to identify if a procedure is EICAS or non-EICAS. A choice of 'yes' or 'no' is required

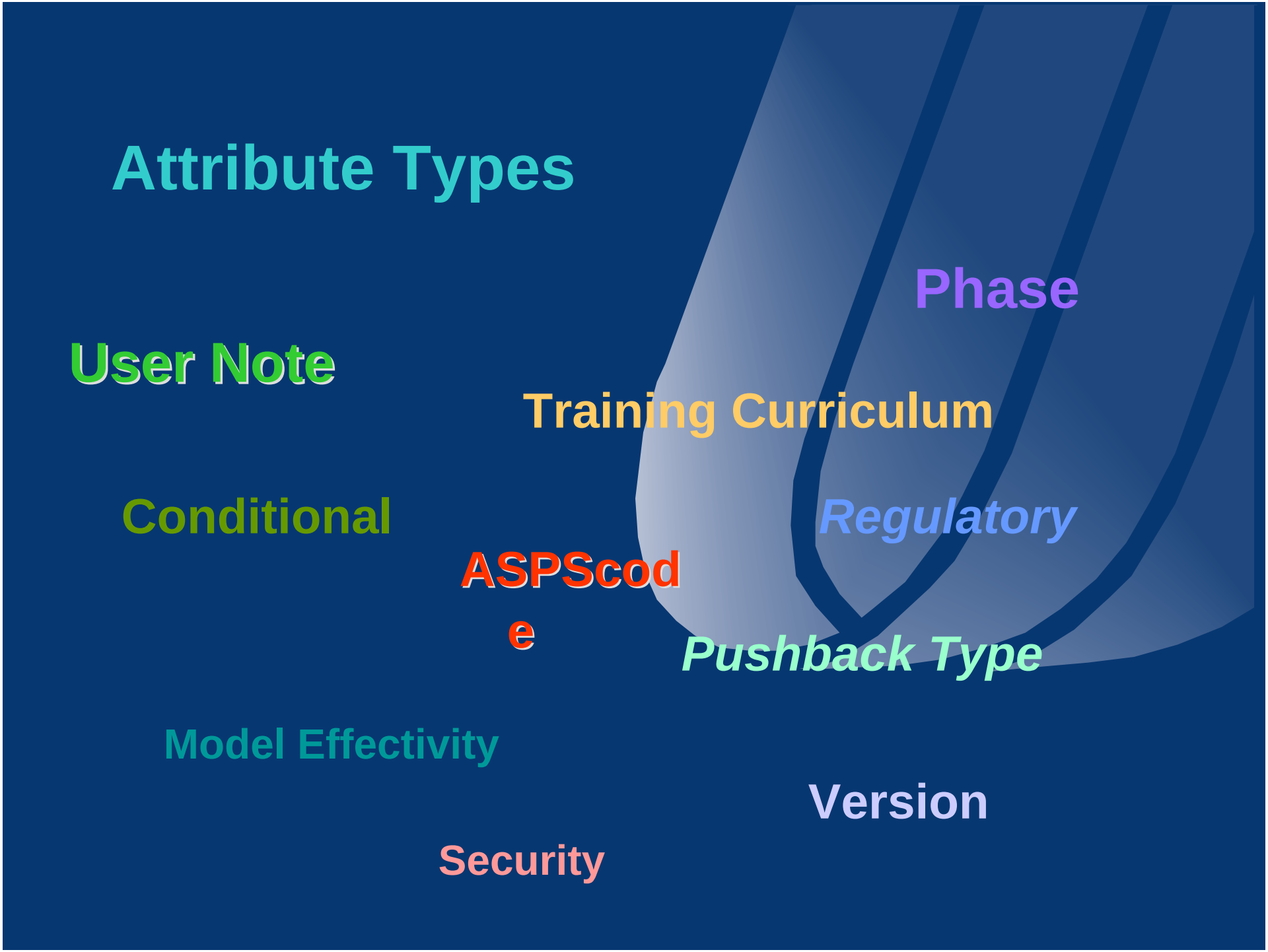

Elements
Chapter
Note
PerfFlow
Lis
t
Condition
ListItem
Procedure
Table
Challenge
Graphic
System
Adjustment
RefLink
Warning
Pushback

Elements



Attributes

- Supplementary information about elements
- Consider potential opportunities
- Use judiciously – only when true value is added – to avoid wasted metadata storage


Attribute Types
Phase
User Note
Training Curriculum
Conditional
Regulatory
ASPScod
e
Pushback Type
Model Effectivity
Version
Security

Links

—Directional/Cross-reference

see Hydraulics Chapter

FAA

See MEL

FAR 121.589

Ops Specs

See B777 Flight Manual

Tech Writer Resistance?

- As previously illustrated, implementation curve is steep, involves substantial investment of time and effort at the start
- When benefits of maintaining and revising structured documents are known, authors generally embrace the technology

Summary

- It is worthwhile to invest in building useful and usable tools for the author to work effectively in a structured environment
- The payoff is efficient authors producing timely, quality, reusable, and easily managed information to their customers