Interface Implementation Conventions (IIC)

SFWR ENG 2B03 2003 Robert L. Baber

2003 January – April

SFWR ENG 2B03 – Slides 12

Purposes of IIC

add certain information to interface specifications

- not in MIS or MID
- clarify detailed questions arising during design and implementation

In short,

• appendix, supplement to MIS or MID

Content of IIC

Typically

- specific implementation considerations
- common aspects of interfaces
- oriented to specific programming language system(s) used to implement the system
- oriented to operating system
- oriented to computer configuration
- technical details

Examples of Content of IIC

- specific types of parameters passed to and from routines when only classes of types specified in the MIS and automatic conversion not provided by the programming language system
- e.g. "16 bit signed integer" when MIS states only "integer" or "number"
- required behaviour and output when input is outside the domain

Examples of Content of IIC

- how to indicate the length or end of a sequence being passed to or from a routine as a parameter
- naming conventions, e.g.for
 - submodules, subsidiary procedures, etc. when these structures not explicitly provided by the programming language system
 - internal files, etc.

Examples of Content of IIC

- instructions standardizing the use of header files in C
- instructions, restrictions on using certain features and aspects of the target programming language system(s)
- instructions on file names, structures, formats, etc. for submitting components for system integration



An IIC

• contains any information

- needed by designer of a routine or of a call to a routine
- but not in the MIS or MID
- supplements MISs, MIDs
- is oriented to the specific implementation

• typically contains implementation technicalities