



NASA'S SOFTWARE ENGINEERING HANDBOOK

Supporting the Development of Robust and Safe Software

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PROVIDES

- Guidance on 30 software engineering topics
- Implementation guidance for NASA Procedural Requirements NPR 7150.2A
- Classification tool
- Rationale for NASA requirements
- Links to related lessons learned
- Best-in-class examples and templates
- Tools and checklists
- Approved guidance material ready for use

FEATURES

- Web based
- Guidance material tagged to allow search by topic area
- Requirements can be sorted by class
- Printable as a PDF
- Feedback and information-sharing mechanism on each page
- Guidance material easily updatable

SAMPLE TOPICS

- Maturity of life cycle products at milestone reviews
- Software acquisition
- Flow down of NPR requirements
- Peer review and inspections
- Transitioning to a higher class
- Qualification of flight software
- Architecture development and assessment
- Metrics
- Cost estimation
- Model-based development and autogenerated code
- Static and dynamic testing tools

GENERAL INFORMATION

- Hosted on the NASA Engineering Network
- Beta version currently available for review and feedback
- Final release targeted for March 2012

The image displays a stack of five tablets, each showing a different page from the NASA Software Engineering Handbook website. The top tablet shows a maturity review table with columns for 'Milestone Review Period' and 'Review Status'. The second tablet shows a 'Software Classification Tool - BETA Version' interface. The third tablet shows '1.2 Implementation Notes from Appendix D' and '1.3 Applicability Across Classes'. The fourth tablet shows a table of contents with sections like 'Chapter 1: Introduction', 'Chapter 2: Software Management Requirements', 'Chapter 3: Software Documentation Requirements', and 'Chapter 4: Software Verification'. The fifth tablet shows the main website navigation menu with categories like 'Introduction', 'Requirements', 'Reviews and Tests', and 'Top and Bottom'. The bottom tablet shows the full website homepage with a search bar, navigation menu, and various content sections like 'Call for Papers: Ground Systems Architecture Workshop 2012' and 'WELCOME'.