

Software Engineering in Puerto Rico

Rock Solid Technologies, Inc.

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VP & General Manager

Rock Solid
technologies

Rock Solid Technologies

www.rocksolid.com

- Software development and implementation firm
- About 30 Colegiales
- Offices
 - San Juan
 - Austin, TX
 - St. Michael, Barbados

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What is software?

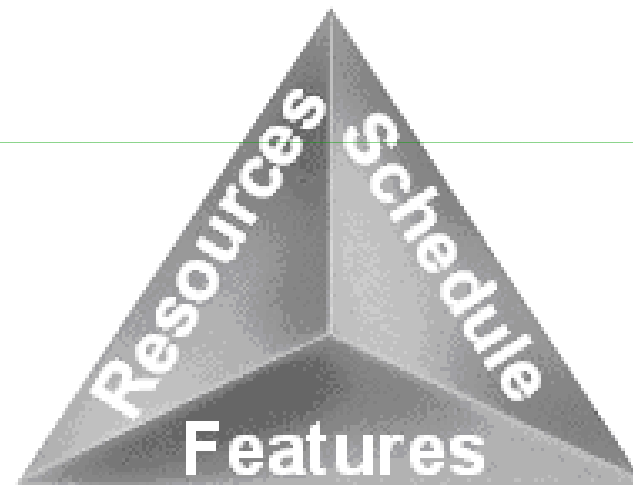
- Programs
- Documentation
- Manuals
- Help files
- Licenses



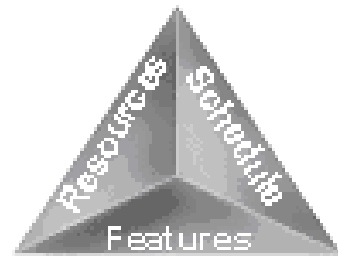
Software engineering definition

- ... is concerned with software systems which are built by teams rather than individual programmers, uses engineering principles in the development of these systems, and is made up of both technical and non-technical aspects...

Trade-offs Triangle



Tradeoff Matrix



| | Fixed | Chosen | Adjustable |
|-----------|-------|--------|------------|
| Resources | ✓ | | |
| Schedule | | ✓ | |
| Features | | | ✓ |

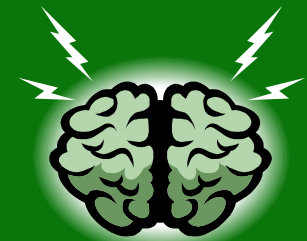
What is software engineering – my version?

- Marketing
- Proposals
- Economic Analysis
 - ROI
 - TCO
- Sales
- Legal – Contracts
- Licensing



- Requirement Definition
- Prototype
- Risk Management

- Design
- Coding
- Testing
- More testing
- Training
- Implement
- On-site Support
- Help Desk
- Maintenance
- Enhancements
- Re-negotiate



Well engineered software

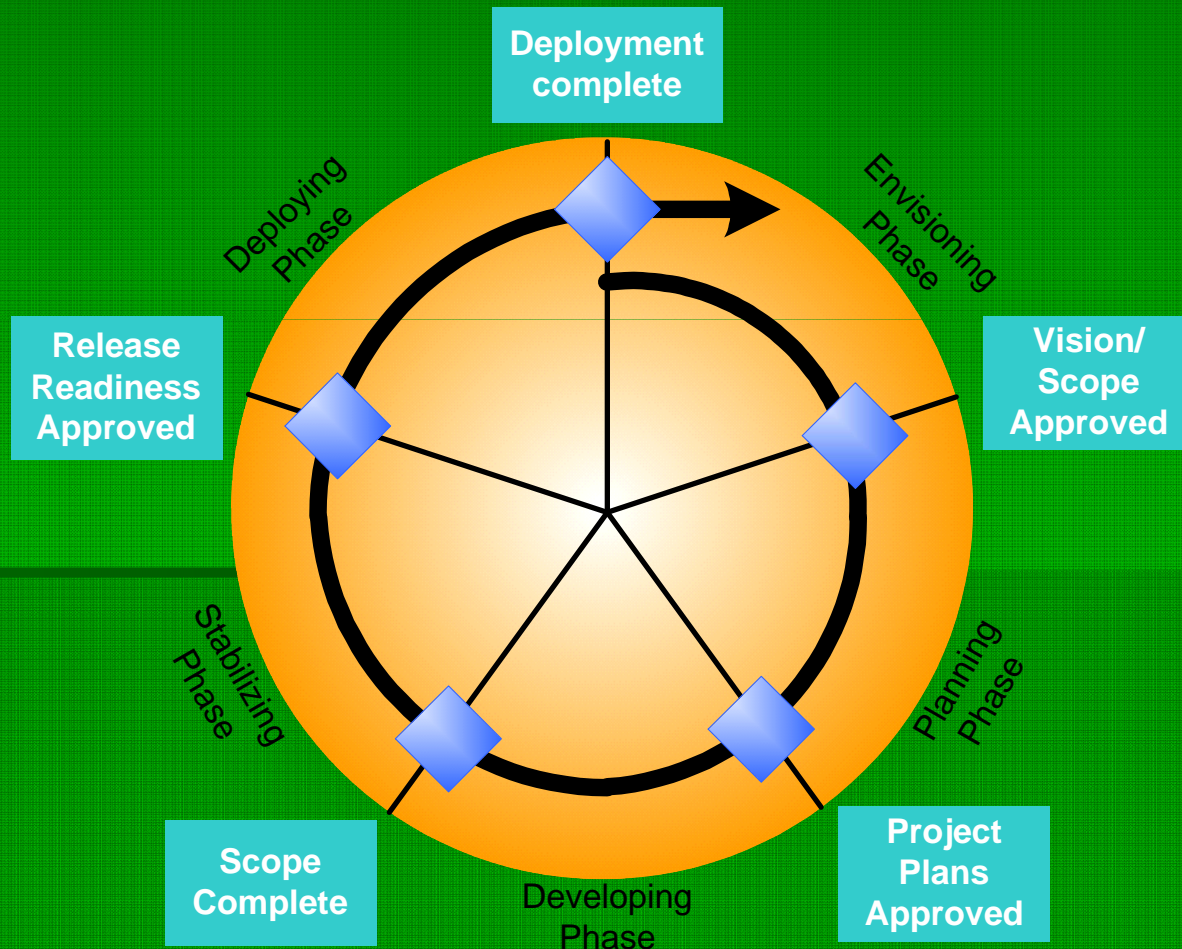
- Functional
- Maintainable
- Reliable
- Efficient
- Appropriate user interface
 - User-friendly
 - Expert-friendly

Software Models

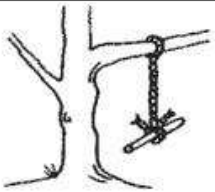
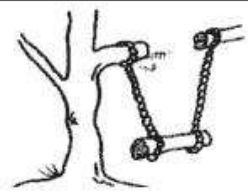
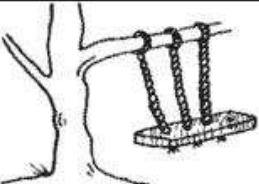
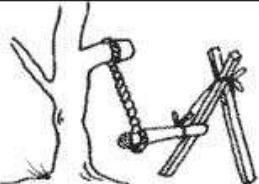
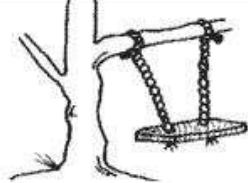
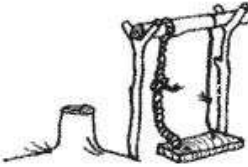
- Waterfall model
- Iterative waterfall model
- Prototyping
 - Works well for us in government
- Others



MSF Process Model

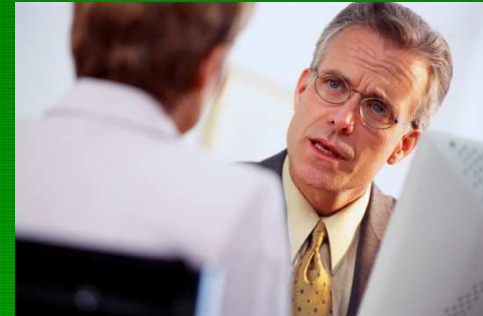


The key to good Software Engineering – Knowing what the customer wants!

| | |
|---|---|
|  |  |
| What the user asked for | How the analyst saw it |
|  |  |
| How the system was designed | As the programmer wrote it |
|  |  |
| What the user really wanted | How it <u>actually works</u> |

How to improve your chances?

- Learn to write
 - Not just software code
 - Spanish and English
- Learn to listen
- Learn to speak
- Networking: Student and Business Orgs
- Focus on learning the business
- Become a well rounded professional
- Give back to your community, \$chool, etc.



Q&A

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