

Software Development Activities:

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Various technical activities under seven major categories. These categories relate to overarching, ubiquitous, client interface, design, realization, planning and evaluation activities.

Planning activities relate to project and risk planning. The design related activities encompass diverse design activities at various stages and multiple levels. The design activities are followed by realization activities. Realization refers to the class of activities that relate to implementation and maintenance. Evaluation activities relate to selection and evaluation of tools, technology, products and process. Many activities require intense interfacing with the client. These client interface activities relate to requirements and support.

Some activities are embedded within almost every function. These ubiquitous activities include process support activities that apply across all phases of a project. The activities in above mentioned six categories need the support of certain overarching activities that are applied companywide across the projects.

Overarching Activities

- Technology Entrepreneurship.
- Program Management.
- Infrastructure management and maintenance (operation management)
- Contract Management.
- Partnership/outsourcing/vendor development.
- Procurement.
- Process QA and QC.

Ubiquitous Activities:

- Measurement.
- Technical documentation and presentation.
- Innovation.
- Research.
- Presenting ideas & insights.
- Configuration Management.
- Product QA & QC.
- Knowledge Management.
- Training & talent development.
- Group work, people management and leadership.
- Idea convergence.

Client Interface:

- Technical marketing.
- Consulting.
- Feasibility study.
- Work flow/Process study and modeling.

- Production/Requirement definition and specification.

- Business technology alignments.
- Deployment and roll out.
- User acceptance and usability analysis.
- User interface design.
- End user documentation.
- Customer support.
- Infrastructure planning.

4- Design:

- Prototyping.
- Component and interface design.
- Component selection.
- Algorithm/computational procedure^{design}.
- Architecting.
- Application design.
- Service design.
- Product design.
- System design.
- Network design.
- Process design.
- Infrastructure design.
- Security architecture design.
- Process tailoring.
- Test design.
- Content design.
- Standardization.
- Restructuring.
- Intellectual property Management.

5- Realization:

- Application customization.
- Application development.
- Component development.
- Product development.
- Service development.

- Build and release management.
- Validation and verification (Testing)
- Maintenance, Enhancement, upgradation, porting.
- Data migration.
- Technology migration.
- Performance tuning.
- System administration.
- Database administration.
- Network administration.
- Security administration.
- Standards & regulatory compliance.
- Program comprehension and redocumentation.
- Reconstruction.
- Code Archaeology.
- Disaster recovery.
- Production support.

7- Evaluation:

- Application audit.
- Process audit.
- Technology audit.
- Tools and technology selection & evaluation.
- Architecture evaluation.
- Impact analysis.
- Value analysis.
- Usability analysis.

6- Planning:

- Time to market planning.
- Estimation and costing.
- Resource planning & management.
- Project scheduling.
- Risk planning & Mitigation and Uncertainty management.
- Staffing & team development.
- Project monitoring and control.