ENTERPRISE APPLICATION:

- S/W application
- Consume business & functionality
- Accelerate the growth of organisation.

CATEGORIES:

- Based on placement of enterprise application.
- Based on visibility.

1. Front end application (or) upstream.
2. Backend application (or) downstream.
3. Business enabled.

Enterprise application can be also be categorised

1. Based on Business functionality.
2. Based on parameter like nature of processing they perform.
3. Host centric (or) distributed application.
   - Online Transaction Processing.
   - Online Analytical Processing.

CHALLENGES:

1. Business process automation.
   - Process of managing information, data and process to reduce cost, resource, investment.
2. Data hormization.

- Interpret existing characteristic of data.
- Based on action taken

3. Application Integration :

- Integration is one of the key challenges.

4. Application Securities :

5. Internationalization :

- Enterprise application reach out across geographical area.

6. Transaction management :

- ACID properties.

7. Rich USB Experience :

8. Duality of Service :

1. Scalability
2. Reliability
3. Security
4. Maintainability
5. Availability

} - 'ilities'

9. Technology Selection :

- Right set of technology Used to build enterprise application.

10. Goverenance and Team productivity :

- Strong goverence required.
- Team have to develop right skill set and ensure effective reuse.

S/W Engineering methodologies :

Methodologies
- develop
- manage
- maintain

Methodologies focus
- S/W quality.
- S/W requirement.
- S/W design.
- S/W development.
- S/W testing.
- S/W configuration management.

Methodology
- Iterative.
- Waterfall.
- Agile methodology.

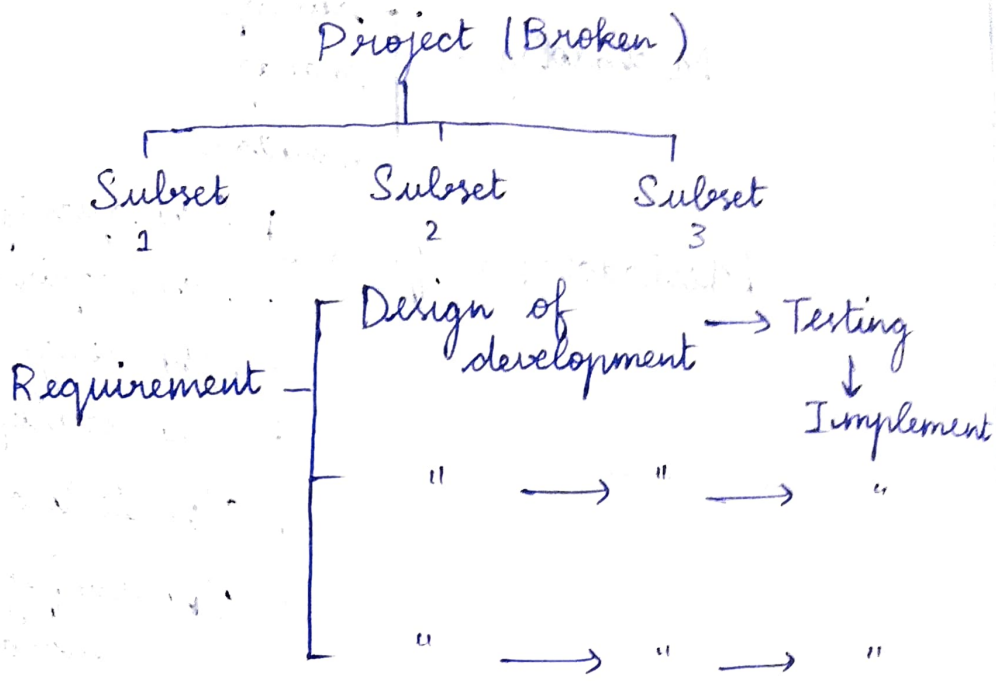
1. Waterfall methodologies :

↳ sequence of phases

1. requirement.
2. analysis.
3. design.
4. build.
5. testing.

- O/P for each phase is I/P for next phase
- More time to take develop a product
- Business value realised end of S/W development.

Iterative methodologies :



* Each subset associated with requirement, design, coding and testing.

IBM Rational Unified Process (RUP):

- iterative S/W development process.
- RUP assembled the iteration in four phase (Inception, Elaboration, Construction, Transaction)
- Each iteration unit of work is divided into nine discipline.

* Business
* Requirement
* Analysis
* Design
* Implement
* Test

} Engineering discipline

* Configuration
* Change management
* Project management

} Supporting discipline.

Agile methodologies : < Extreme program.
Scrum.

- Building quick fashion with light weight process.
- Project duration smaller
- Feedback loop to accommodate changes.

Life Cycle of raising Enterprise application :

1. Incepting.
2. Architecture and Designing.
3. Constructing.
4. Testing.

Incepting :

* Elicitation requirement and analysis
* Requirement Validation (Usecase diagram).
* Planning and Estimation.

→ to ensure feasibility with various factors
Business requirement,
Budget, Technology.

Architecture and Designing :

* Define overall business architecture
  - Define data architecture
  - " application "
  - " & technology "
* Construction carried out by programmer.

Testing :

- Performance testing.
- Interface testing.
- Globalisation testing.
- Compatibility testing.
- Usability testing.
- Penetration testing.
- User acceptance testing.

Three key Determinant of successful enterprise application :

1. Business case readiness
   - organizational objective.
   - vision strategy.
2. Strategy to execute
   - comprehensive plan.
   - manifest.
   - resource.
   - timeline.
   - subject matter.
   - expert in consistent manner.
3. Excellence in execution
   1. Business alignment
      - quantifiable goals, align with organizational strategy.
   2. People performance
      - right skill in the right jobs, doing right things.

Skill areas required by team engaged in raising enterprise application :

1. Knowledge of organizational dynamics.
   - Strengthening resource.
   - Enhance Employee Performance.
2. Domain Knowledge
   - Process, Data and information management.
3. Business Analysis Skill
   - Domain knowledge
   - Technical knowledge
4. Programming management Skill (Planning, Estimation, Budget, Talent management, Change management).

Programming Management Skill :

1. Planning.
2. Estimation.
3. Budget.
4. Talent Management.
5. Change Management.
6. Positive Management.

Architecture and Designing skill

Programming Skill
- IDE, static and dynamic code analysis
- programming best practice
- code review
- knowledge of unit test

- Configuration management

Testing Skill

Knowledge of Tools

Measure success of Enterprise Application:

- Effectiveness of solution.
- Quality of enterprise application.
- Time to production.
- Cost effectiveness.
- Budget and Schedule Adhere.
- Productivity