CASE Tools

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What is CASE?

- In general, CASE can be counted as an abstraction based methodology, which heavily based on diagrams (pictures), to develop a software.
- CASE stands for Computer Aided Software Engineering.
- It can be used to model any software system.
- But with more detail, the definition is
- “Computer Aided Software Engineering (CASE) are the software tools that provide automated support for some portion of the systems development process” (Hoffer,1999)
- All future lectures will be devoted to learning this modelling technique.

Purpose of CASE

- To provide automated tools that assist the software engineer in his/her job.
- To make the work of software development and maintenance easier and more reliable.
- Improve quality of software.
- Increase speed of software development.
- Improve testing process through automatic checking.
- Integrate development activities.
- Improve team work and communication.

Benefits of using CASE

- Sharing software development tasks across the team members in a single development platform (SVM).
- Communicating team members with each other through documentation.
- Support activities occurring across several phases of the software development lifecycle.
- Easy way to create diagrams, forms & reports.
- Facilitate analysis, reporting and code generation.
- Data can be shared and integrated across and between tools and team members remotely.
- Rapid development, reduction in defects, and improve quality.

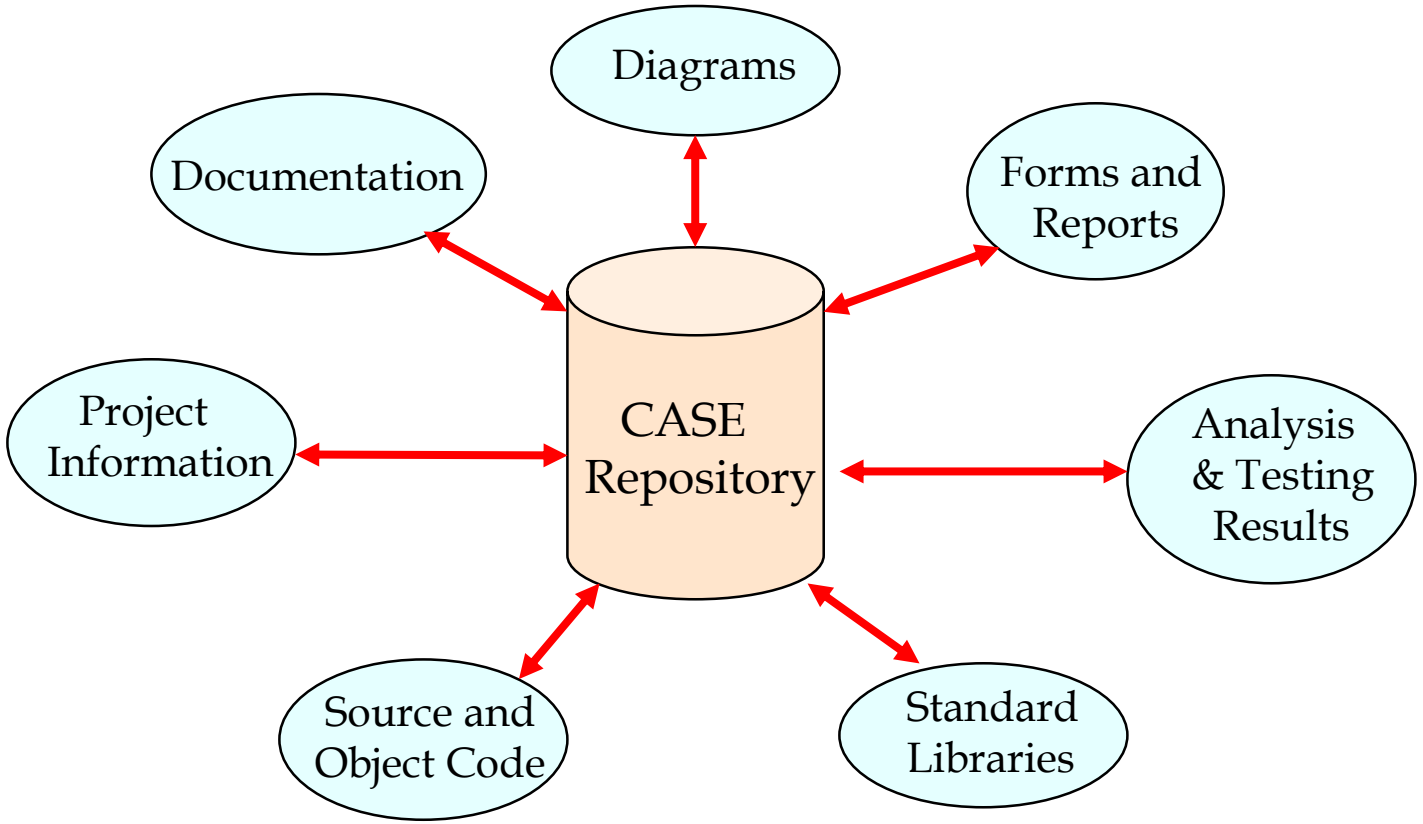
Phases that CASE can be used in

- **Project identification and selection**
- **project initiation and planning**
- **Analysis**
- **Design**
- **Implementation**
- **Testing and maintenance**

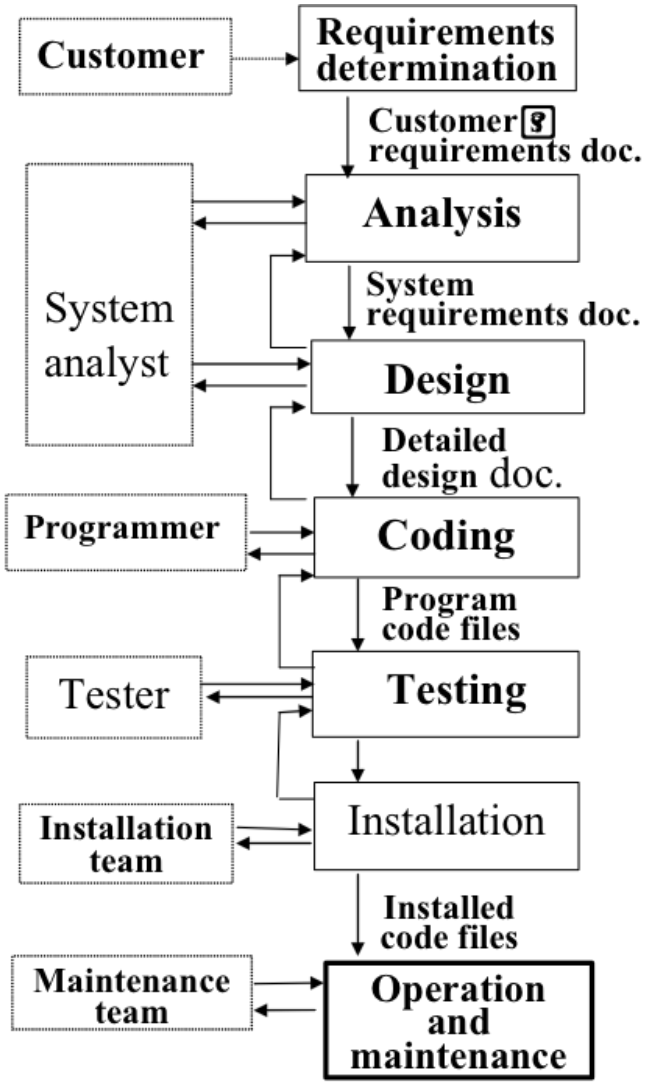
What a CASE tool can provide?

- Diagramming facilities
- Means of describing/defining functional and data objects
- Means of identifying relationships between system components
- Central repository of system information
- Error checking facilities
- Consistency and completeness checks
- User interface generators
- Database specification
- Code generators
- Project management aids
- Documentation generators
- Group working, version control
- Reverse engineering (re-engineering) support

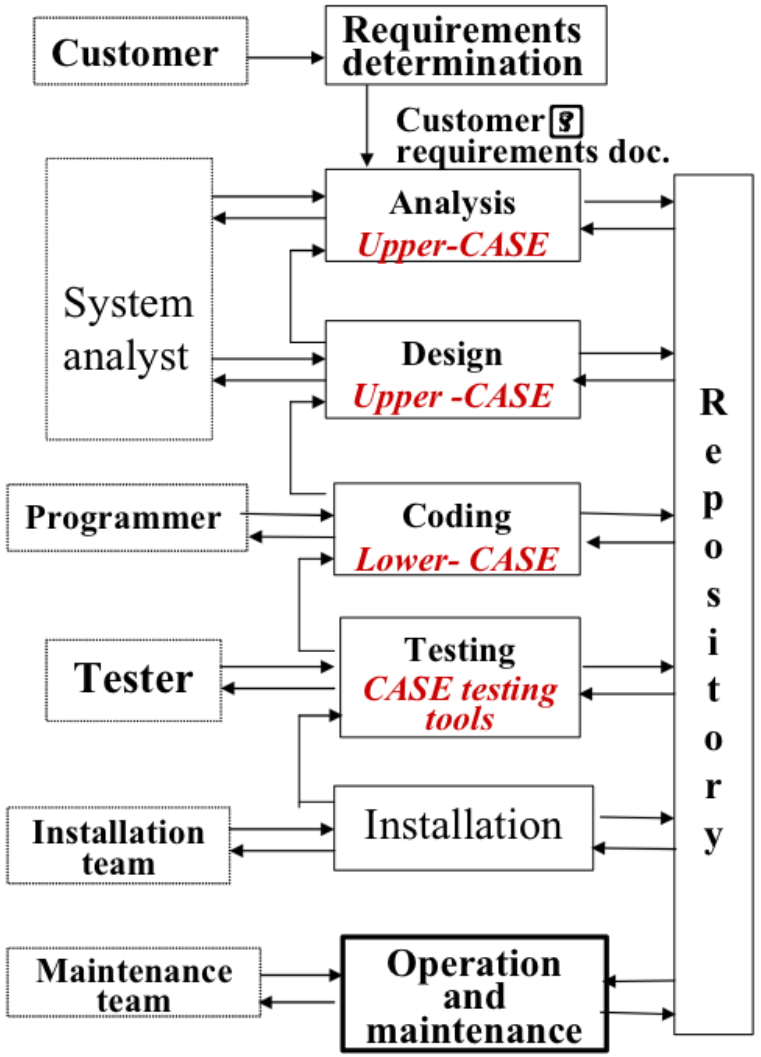
CASE repository



Categorise of CASE



Traditional development life cycle



Real CASE tool-supported development life cycle

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