Software Engineering

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Quick Survey

- Programming languages
- Continue studying programming/software
- Know what git is?
- Know what CI(Jenkins, Travis) is?
- Will do a Diploma?

Marks

- 2-3 тестове
- Изненадващи контролни
- Участие в час
- Доклад
- Дипломна работа

Course Goals

What is Software Engineering and why we study it?

SE is almost entirely based on practice

What is quality software?

Jim McCall Quality Model (1977)

Operational

- Correctness
- Usability
- Efficiency
- Reliability
- Security
- Safety
- Budget
- Testability

Transitional

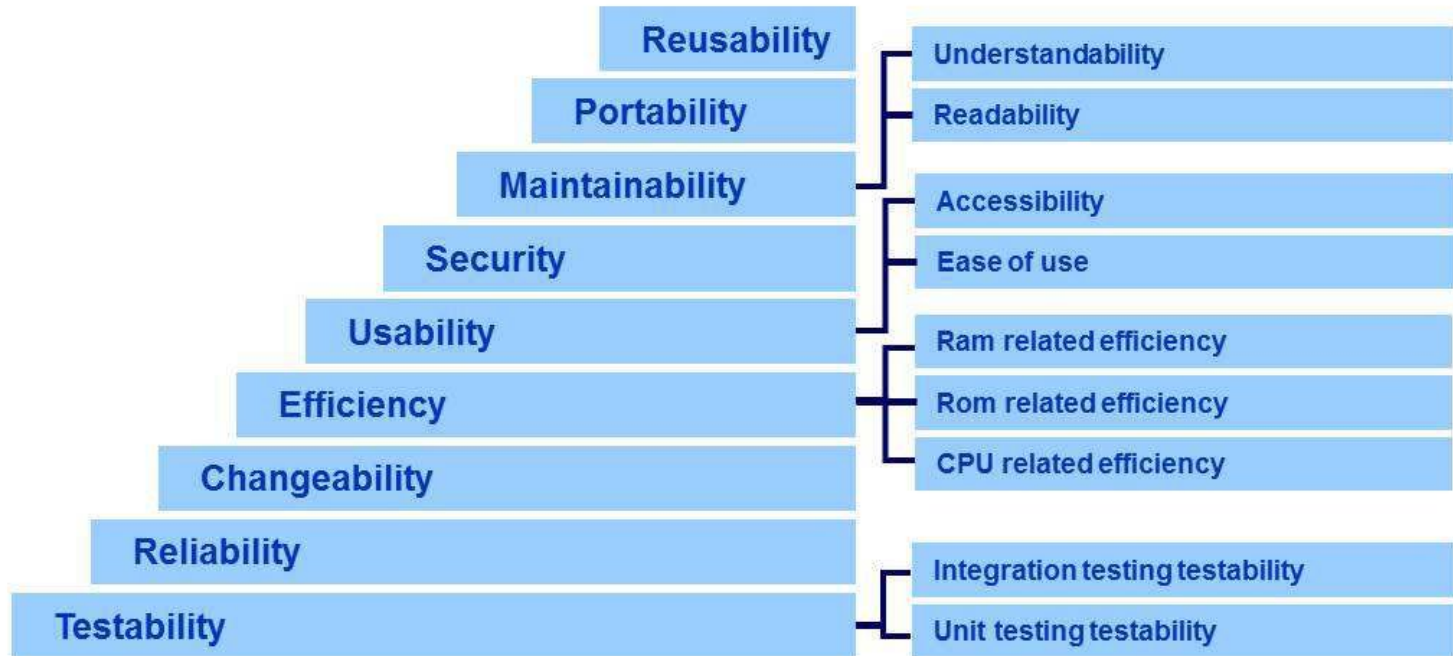- Portability
- Reusability
- Interoperability

Maintenance

- Modularity
- Maintainability
- Flexibility
- Scalability

SQALE Quality Model

Reusability

Portability

Maintainability

Security

Usability

Efficiency

Changeability

Reliability

Testability

SQALE Quality Model Subcharecteristics

Software is difficult

It's normal to find it difficult and challenging

Mistakes will be made

You Only Lose When You Fail To Learn

Historical Notes

- Stanislav Petrov
- Ariane 5 (1996)
- Therac-25 medical radiation therapy device (at leat 3 dead) (1985-87)
- Mars Climate Orbiter