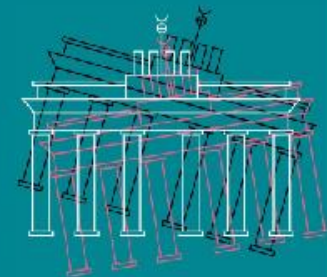Developing software for the long-term

Gabriele Taentzer

Created with Google Gemini

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Software development is a continuous process

Why?

- repair of errors that occur
- new versions of underlying software, changing interfaces
- new requirements by the users

Software updates:

- Software products are regularly updated.
- In-house software is usually not regularly updated.

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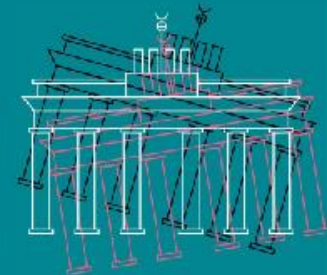
Software ages....

> „Programs, like people, get old. We can't prevent aging, but we can understand its causes, take steps to limit its effects, temporarily reverse some of the damage it has caused, and prepare for the day when the software is no longer viable." [Parnas, 1994]

Why?
- Insufficient evolution of the software
- Modifications make the software less reliable.
- The code is less clean.

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Software quality

Software evolution is easier if the software is of good quality.

For example:
- There is a test suite for the software, at least for its core functionality.
- There is a good documentation not only for users,
  but also for developers.
- The code is well-structured and easy to read.