

# Session 1-2 Database Development Process

Kyunghee Lee, PhD



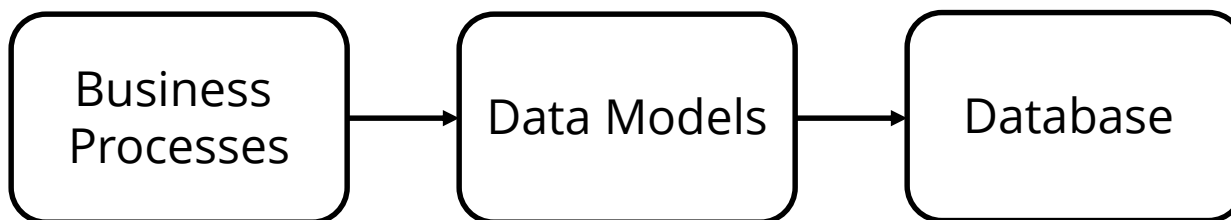
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# Data(base) Modeling

*“... a process used to define and analyze data requirements needed to support the business processes within the scope of corresponding information systems in organizations”*

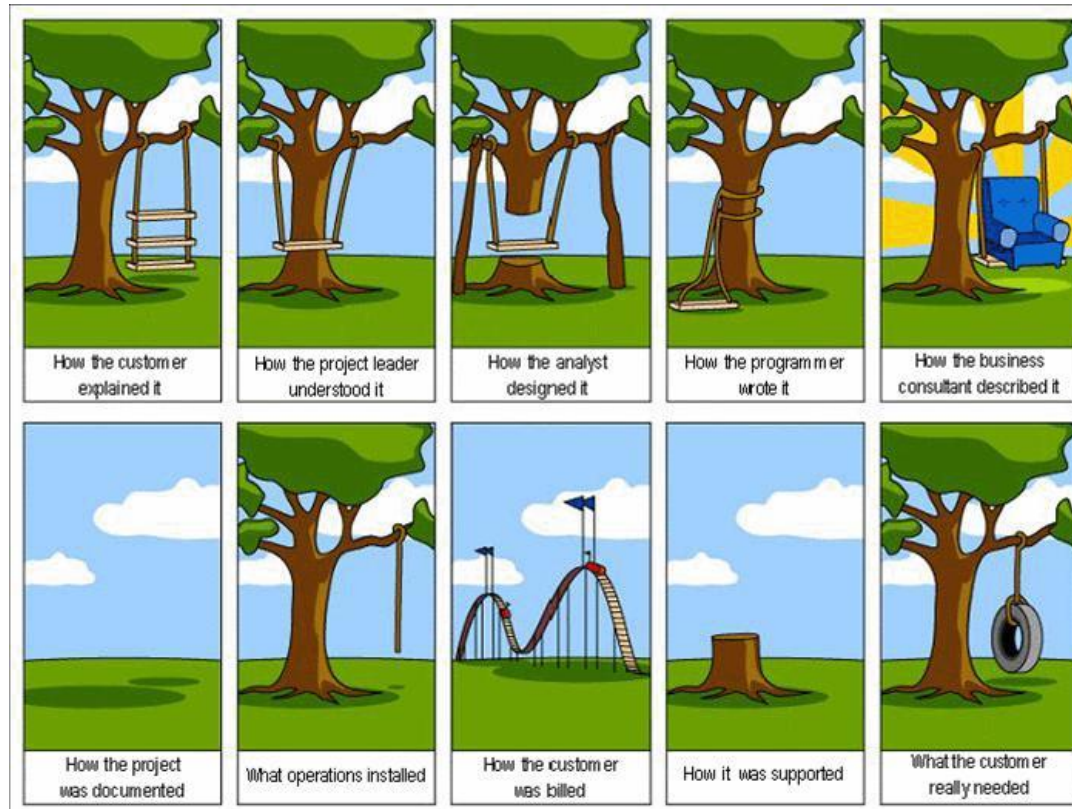
**A conceptual representation of database development**



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# How IS projects could go wrong ...

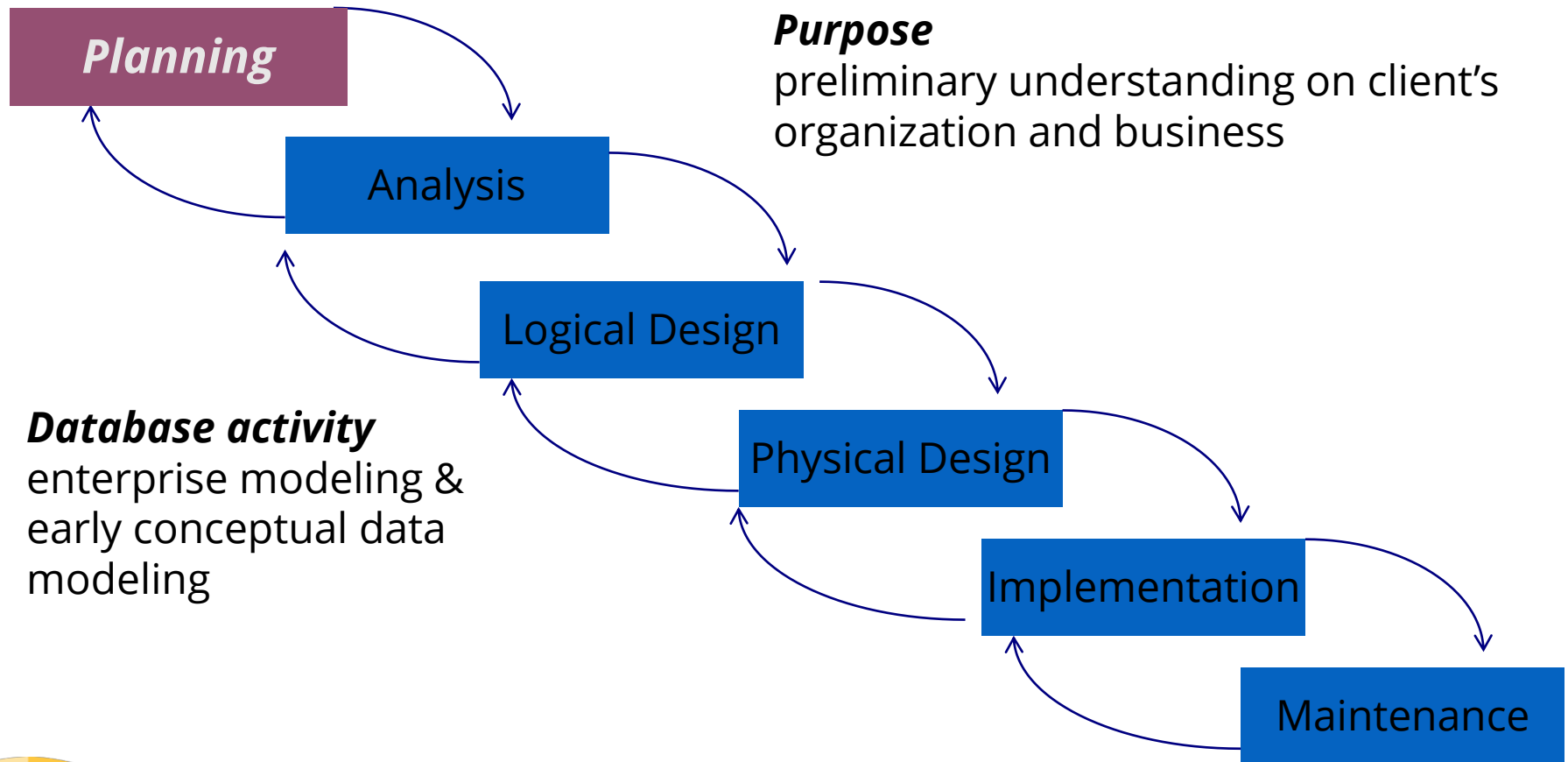


# Two Popular Approaches to IS Development

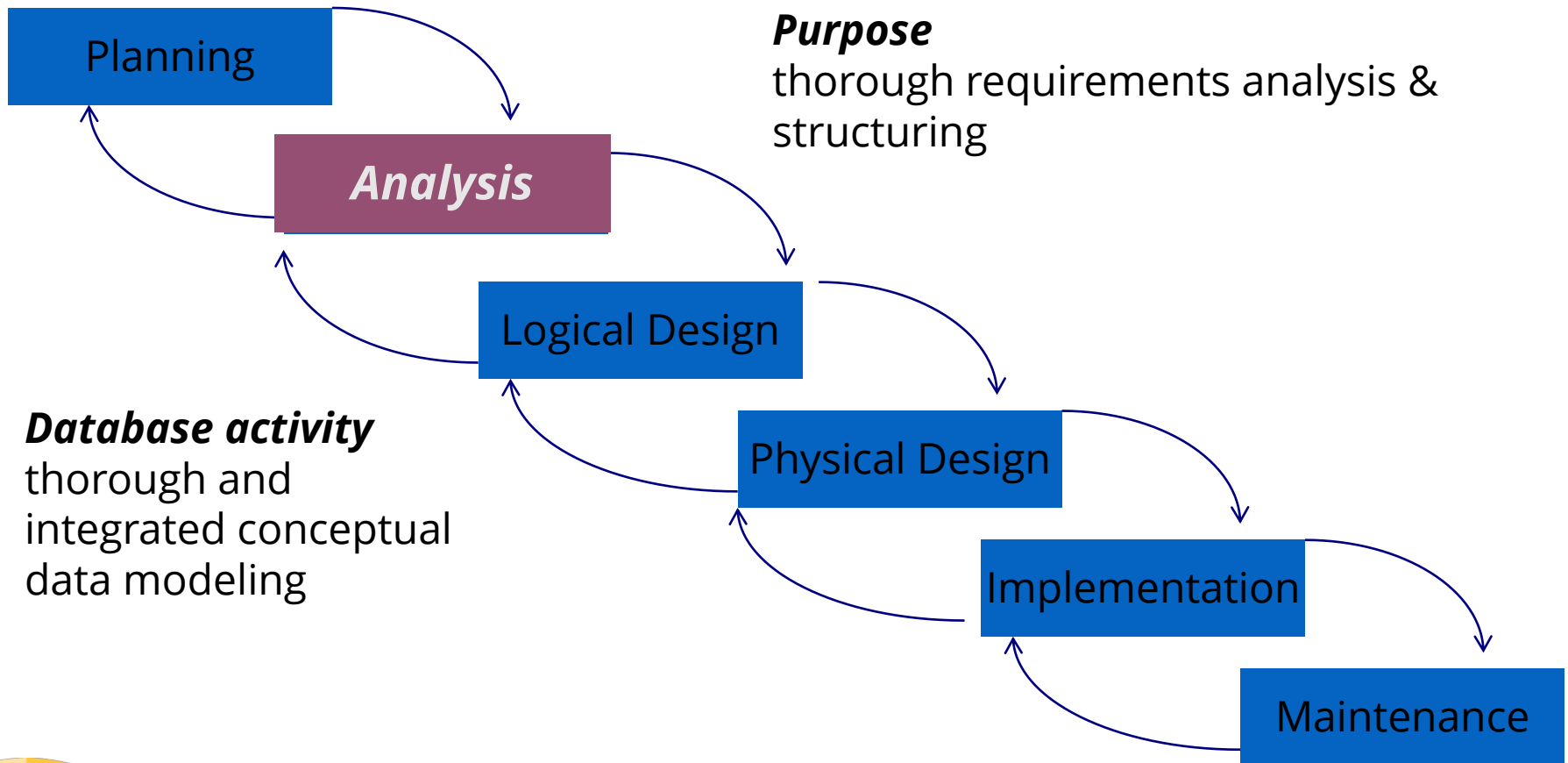
- Systems Development Life Cycle (SDLC)
  - Traditional method
  - Highly structured, detailed, well-planned process
  - Long, time-consuming, but comprehensive
- Prototyping
  - Rapid application development (RAD) method
  - Less emphasis on planning and more on an adaptive process to iteratively build and revise working prototypes



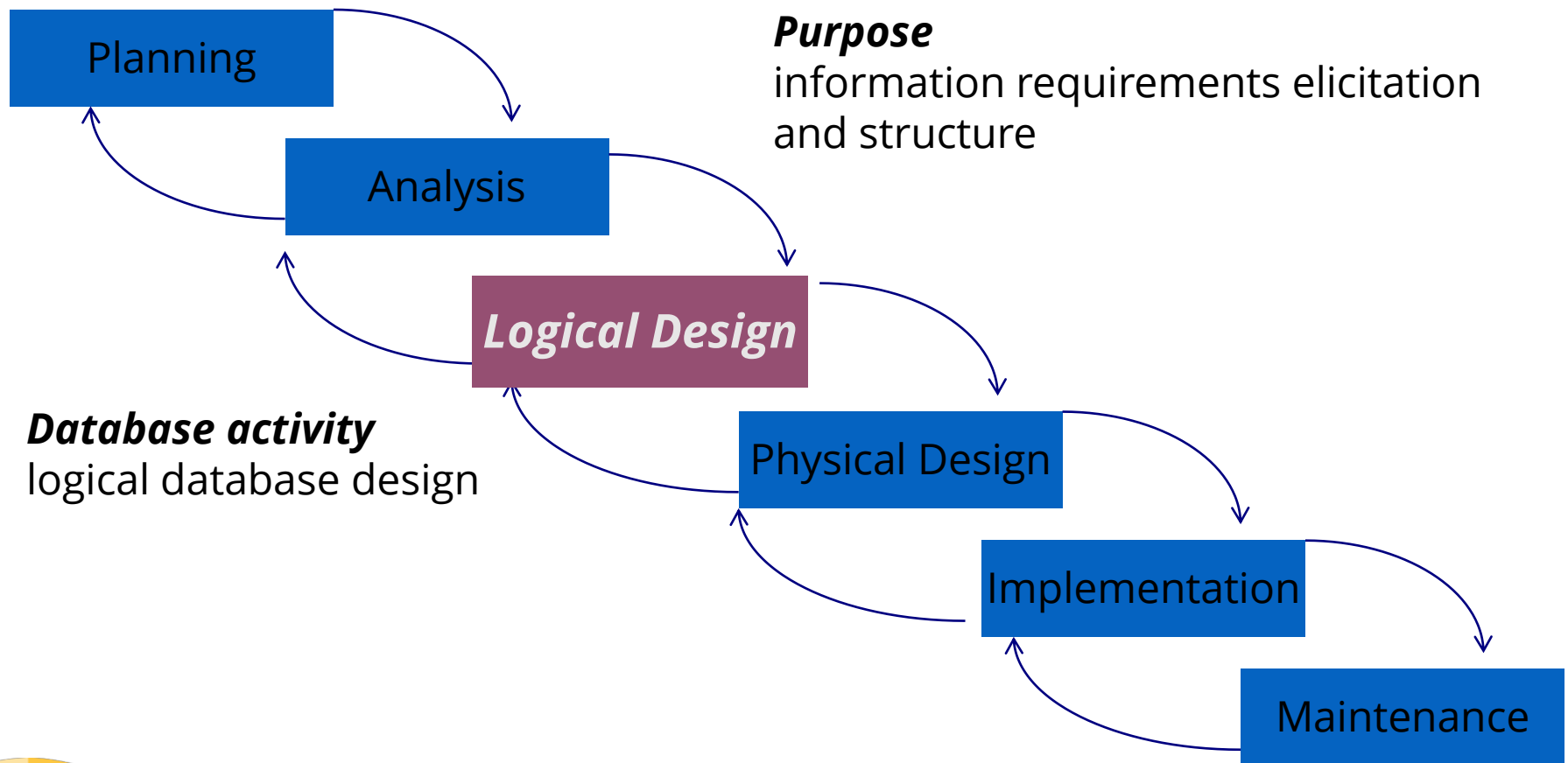
# Systems Development Life Cycle



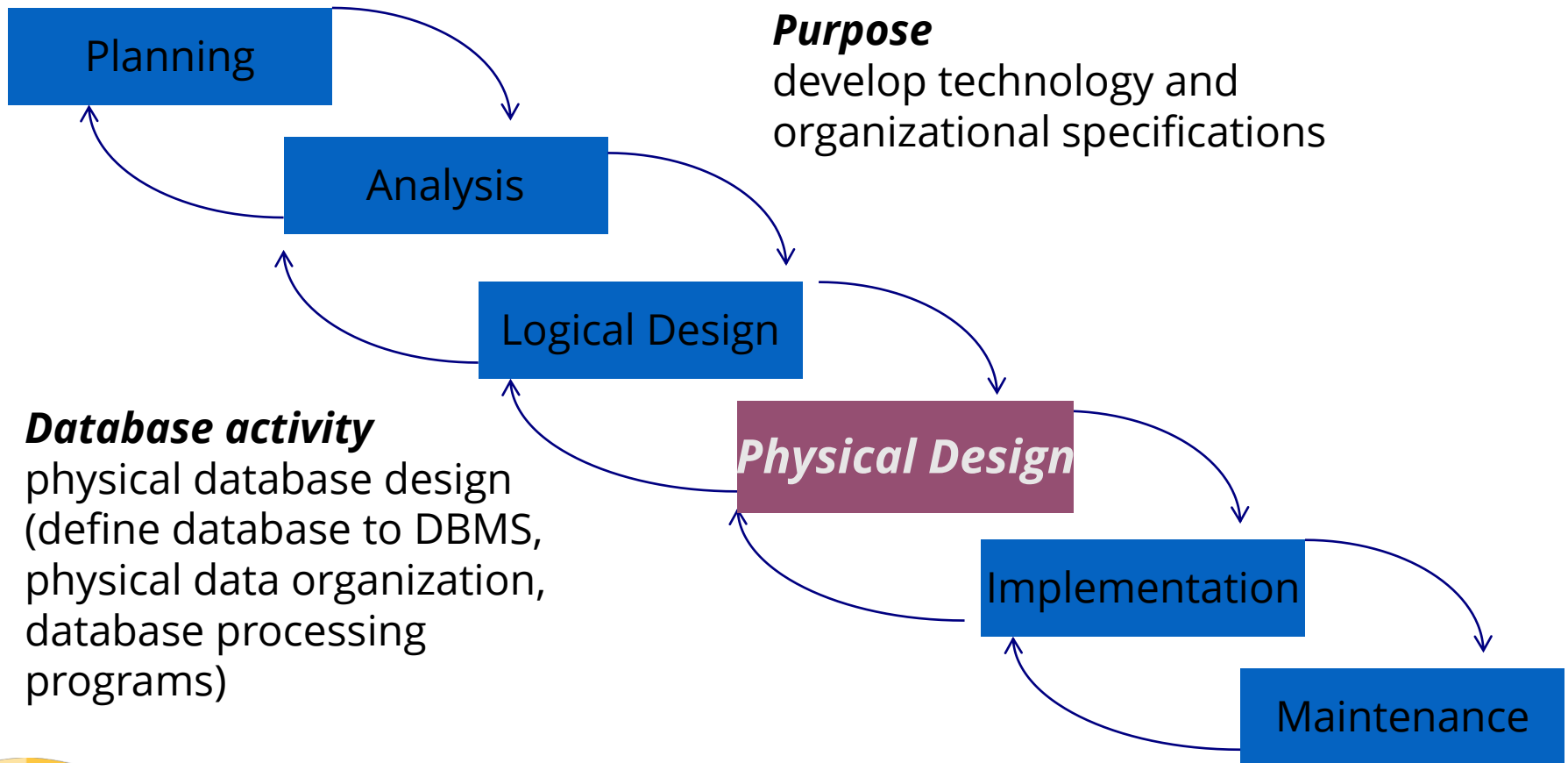
# Systems Development Life Cycle



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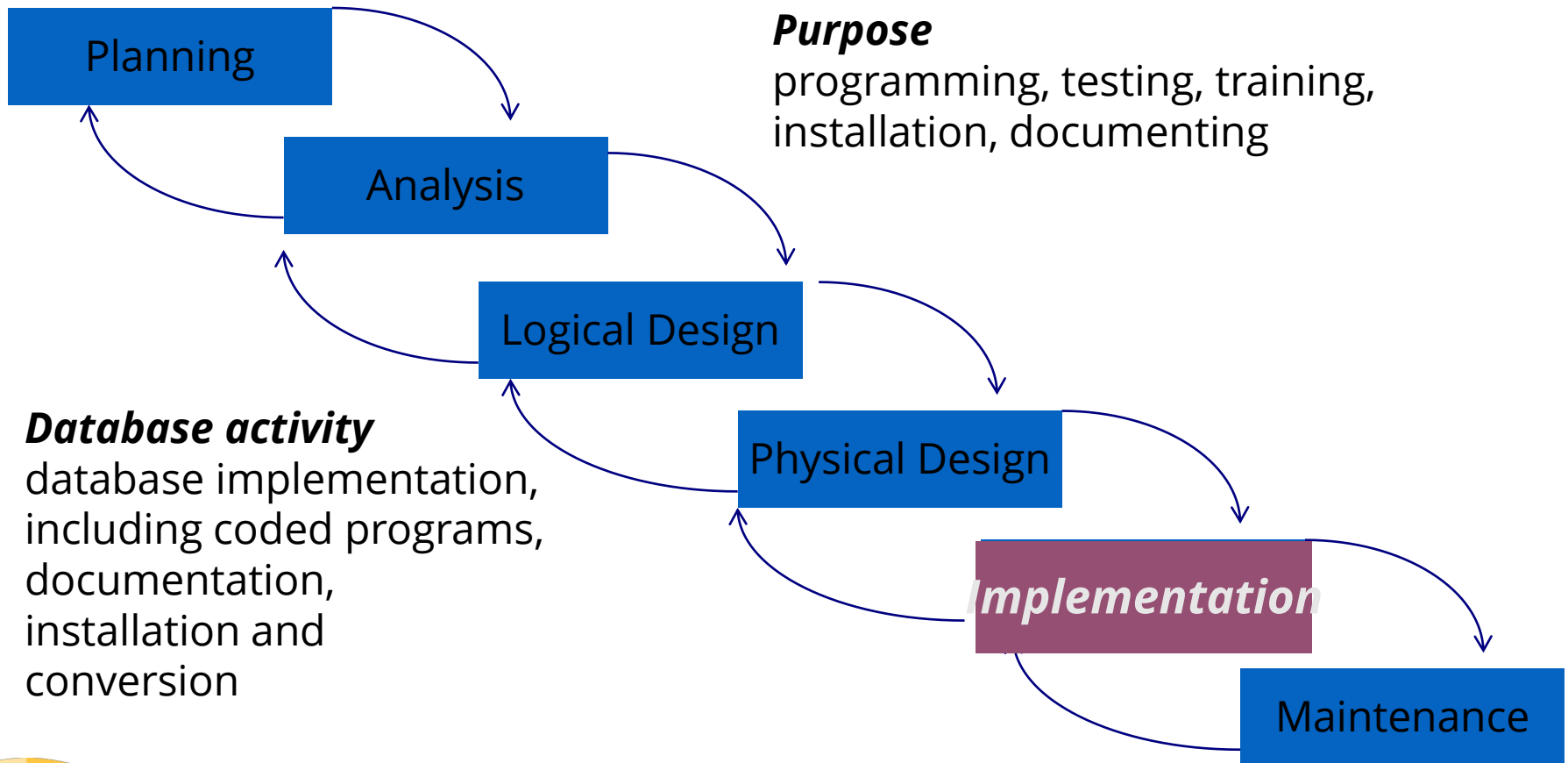


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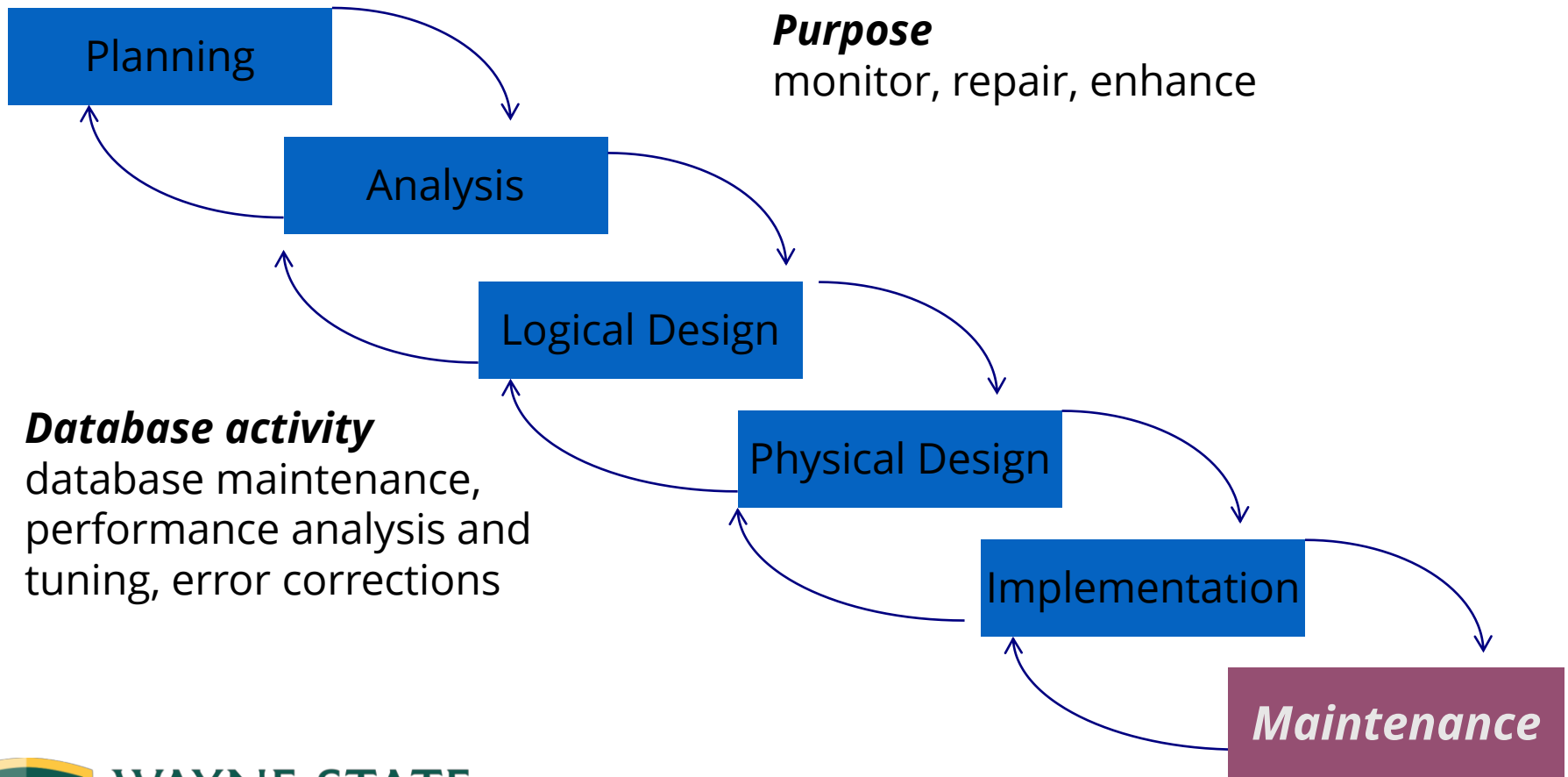
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# Systems Development Life Cycle

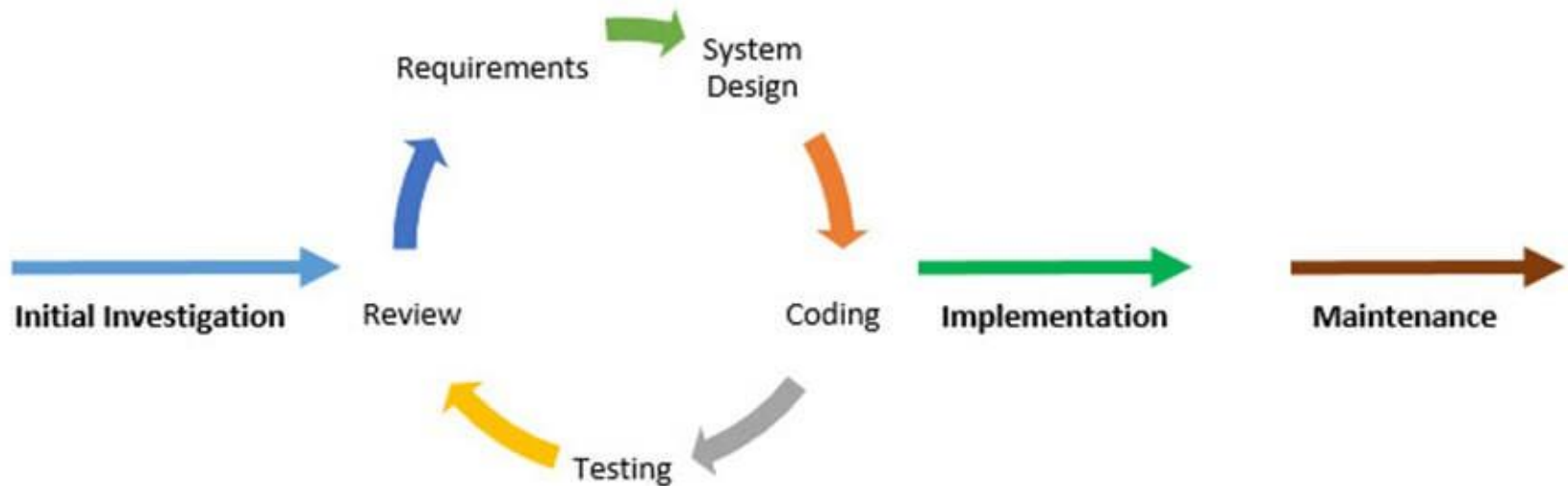


# Systems Development Life Cycle



# Prototyping Method

## Prototyping



# More on IS Development Methodology

- Agile – emphasizes “individuals and interactions over processes and tools, working software over comprehensive documentation, customer collaboration over contract negotiation, and response to change over following a plan.” (The Agile Manifesto)
- Examples of agile programming methodologies
  - eXtreme programming
  - Scrum
  - DSDM Consortium
  - Feature-driven development
- <https://www.youtube.com/watch?v=YYHcauc6BL0>



# Wrap-Up

- Database development process
- IS development methodology

