

Architectural Design

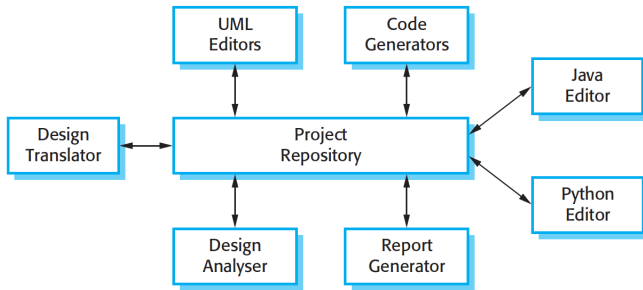
Repository Architecture Pattern

Indranil Saha

Department of Computer Science and Engineering
Indian Institute of Technology Kanpur



Repository Architecture



- **When Used:**

- In a system in which large volumes of information are generated that has to be stored for a long time
- In data-driven systems where the inclusion of data in the repository triggers an action or tool

- **Advantages:**

- Components can be independent — they do not need to know of the existence of other components
- Changes made by one component can be propagated to all components
- All data can be managed consistently (e.g., backups done at the same time) as it is all in one place

- **Disadvantages:**

- The repository is a single point of failure
- Inefficiencies in organizing all communication through the repository
- Distributing the repository across several computers may be difficult

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