

* Design Patterns

* $OOP \neq OOD$

\Rightarrow Write an OOP program is easy but writing the program in a way in follows design principles is "HARD".

* We have learnt OOP concepts and SOLID principles to understand how to design classes and how to convert a real world problem into classes and objects

* Need of Design Patterns

- * There are some well known patterns that are tried and tested over years.
- * Each patterns solves a specific software problem.
- * Any software can be designed by using these common patterns without reinventing the solution.

Design pattern types

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graph TD; A["Design pattern types"] --> B["Creational"]; A --> C["Structural"]; A --> D["Behavioural"]
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Creational Structural Behavioural