Pearfect - A Modern Interpreted Programming Language Which Efficiently Unites Functional and Object-Oriented Programming

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In today’s world, nearly everything is based on information technology. Thus, developed systems become more complex as they focus on many duties at a given time and it is more difficult to maintain them. The same instance can be observed in modern enterprises. A method used over the years that solves this issue in business is known as task delegation. Therefore, an adoption of a similar model in programming will lead to rationalization of the whole system resulting in better scalability. A perfect solution to this problem would be a new programming language that unifies functional and object-oriented programming and proposes a model of task delegation. This model has to eliminate any unnecessary global state and data mutability. Taking advantage of both paradigms can lead to the simplification of object manipulation making the code more concise and testable. Pearfect is such a programming language. It introduces extensible program-code-templates called “units”. “Units” can be seen as black-boxes focused on one responsibility having a set of rules that define their exact behavior. The only way to communicate with “units” is through requests which are processed one at a time. Each “unit” has its internal state which is changed in the process of synchronization. Described design leads developed applications to better maintainability and scalability. The model of “units” solves issues regarding data encapsulation, concurrent and parallel execution, and testability of produced codebase.

Awards Won:
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