Archetype model-driven development framework for EHR web system

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Abstract

The openEHR project has developed clinical model driven architecture for future-proof interoperable electronic health record (EHR) systems. This project provides the specifications to standardize clinical domain model implementations, which the ISO/CEN 13606 standards are based. The reference implementation has been formally described in Eiffel. Moreover C# and Java implementations have been developed as reference. While scripting language had been more popular because of their higher efficiency and faster development in these years, they had not been involved to the openEHR implementations.

From 2007, we have used the Ruby language and Ruby on Rails as an agile development platform to implement EHR systems, which is conformant to the openEHR specifications. Our Ruby implementation covers almost all of the specifications and the Archetype Definition Language parser, and although some problems have emerged, most of them have been resolved. At last, we have provided an agile EHR web framework by Roby on Rails, which can scratch web system from archetype models.

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