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Conference Abstract

An artisan approach to biodiversity software development

Nico Noé ‡

‡ Belgian Biodiversity Platform, Brussels, Belgium

Abstract

In a discipline where interoperability is crucial, funding is limited and reinventing the wheel is frowned upon (and rightfully so), the development of data management tools and biodiversity data portals is generally approached in an industrial way: the same application - whose specifications are often written by a committee - is developed as a complex "one size fits all" tool to be used by various groups in different contexts.

While this approach generally makes sense, for the last 15 years the Belgian Biodiversity Platform has sometimes tried a complementary approach where an artisan-minded software developer is assigned to a specific "customer" and is given a direct communication channel and tons of freedom to develop a simple, made-to-measure application. This empirical experience has shown some unexpected advantages but also, as always, some new challenges. It takes inspiration in things as diverse as the Agile software manifesto and the apprenticeship model of medieval Europe.

This talk will present this unusual approach and reflect on this ongoing experience, hopefully extracting pieces of wisdom that is useful to the broader community. For example, the following questions will be discussed:

- How does this method help mobilize biodiversity data? Can it "convert" scientists to Open Data?
- Has it some effects on the team stability and developer retention?

- Aren't you writing the same code again and again, resulting in an unmaintainable mess?
- Isn't this an example of living in isolation? What about sharing data with global initiatives such as GBIF?

Keywords

portals, development, IT, data, team management, Agile development

Presenting author

Nicolas Noé