
Reference: QSE:SoftwareTrendFramework

Topic: Intelligent Software Trend Framework

LVA-Type: Project in SE and Internet Computing, Bachelor-/Masterthesis

Start: As soon as possible

End: By arrangement

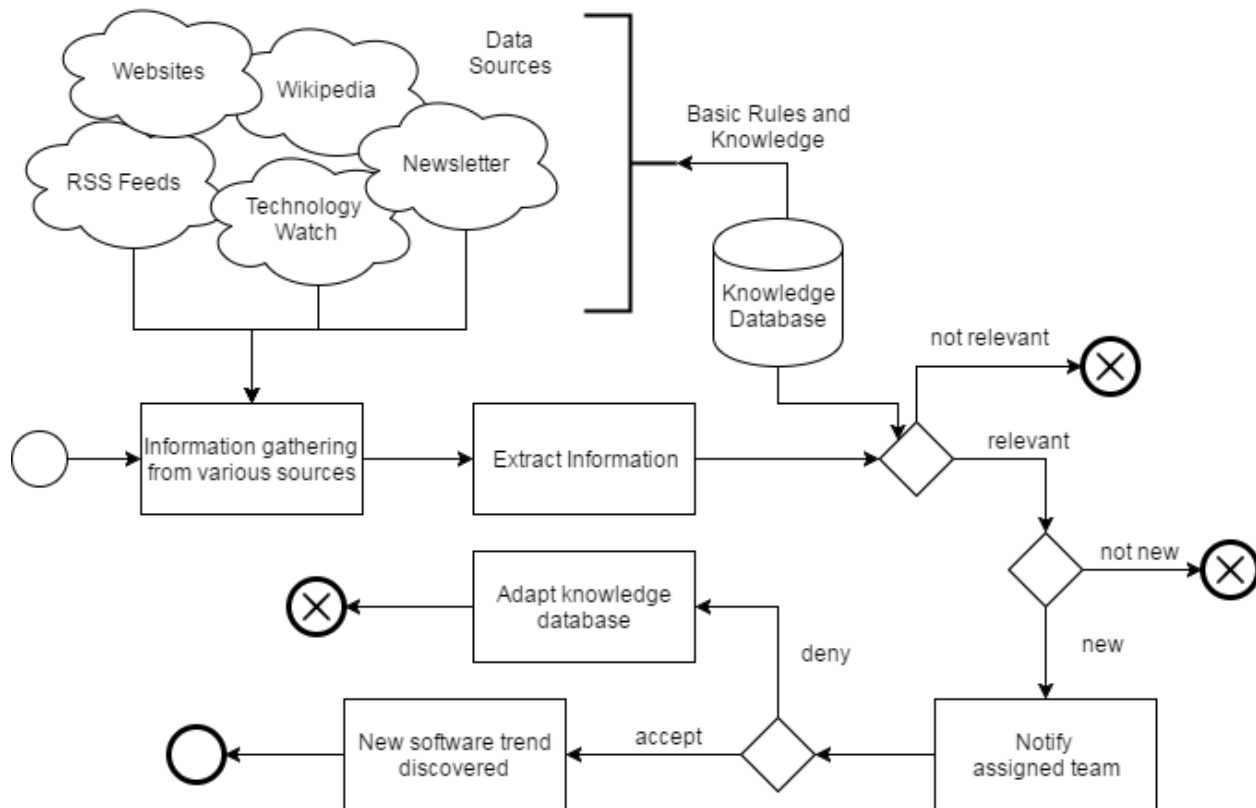
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Background

ISV – Independent Software Vendors – have to make sure that the products in their portfolio do remain compatible with Operating Systems, ERP and Technologies, e.g., Java, SAP, Oracle.

As the delivery cadence increases across the board – that is for Operating Systems, ERPs and technologies – the challenge to keep up with the accelerated pace is always more difficult.

For an ISV the customer base is using a very large number of hardware platforms, operating systems, databases, applications, technologies – including different releases of its own software.



The number of possible combinations is virtually unlimited and the environments are constantly evolving and on the other hand the amount of resources that may be assigned to compatibility assessment is limited. In addition a backlog of upcoming releases for planning has to be maintained.

Still customers need the information, will the software I did buy – and I'm still paying maintenance for – be functioning with the upcoming operating system? ISVs need to make sure they have this information in order to secure maintenance revenue.

Most ISVs are using the below principles to limit the investment and provide information:

- Rely on Operating system editors for compatibility
- Make the most of the customers known usage

Compatibility assessments are a huge challenge for ISVs, because they are facing different challenges:

- There is no reliable source for upcoming releases for relevant platforms (e.g. Operating Systems, ERP, Technologies, etc.), i.e. information has to be collected from various sources (Newsletters, Homepages, Release Notes, etc.)
- Missed releases can cause unexpected efforts and issues on customer side

Tasks

The goal of this project focus on defining a cost and resource effective – if possible automated and unattended way – to gather, store and display information about current and upcoming Operating Systems, ERP and Technologies, e.g., Java, SAP, Oracle.

Main tasks include:

- Identify relevant and secure online information sources. Websites, newsletter, RSS feeds, Wikipedia, search trends or any other relevant one.
- Elaboration of solutions allowing the automated retrieval, proper storage classification and display of the information obtained above.
- Elaboration of solutions allowing data storage, data filtering, data updates and display.
- Prototype: Prototype implementation, evaluation and demonstration. Discussions with key stakeholders.

Depending on the course type and individual research interest, subset of tasks can be defined and negotiated.

Expertise and skills needed

Based on different tasks, required expertise and skills may vary. With respect to the overall project, the following skill set is recommended.

- Databases concepts and basic experience
- Interest in operating systems
- Interest in tools development