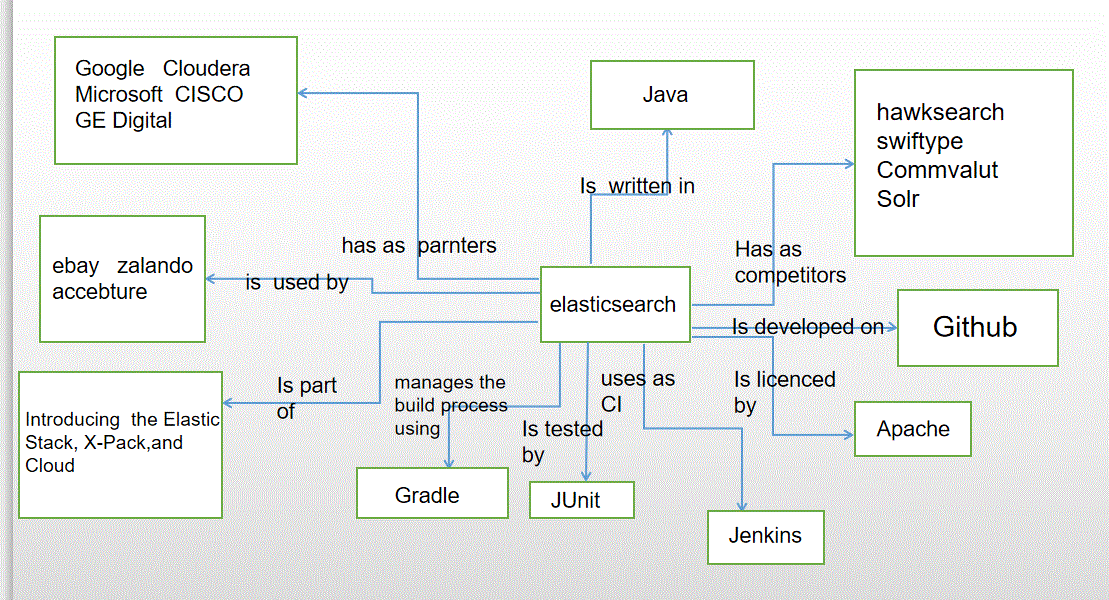
### **Context View**

The following figure shows the relationship between the project and external entities. There are a few categories that we highlight here, the first one being the "Writers and Developers" category.It can be seen from the figure that the project is built on the basis of Java language as the entity language. At first, the project was written in Java language, and then the open-source project was published on GitHub. With the increasing number of users, the number of team members gradually increased, the project gradually improved on GitHub, and evolved into the now familiar search project.



Furthermore, there is the "Competitors" category.For the competitors of the project, as a well-known search project, they have become the actual competitors of the project, such as hawksearch, swiftype, commvalut, Solr and a series of projects. As a search item, the final result is obtained by processing the filter words submitted by users a little bit, and it has a good effect on eliminating noise and other interference factors. For example, swiftype can provide built-in search engine services for websites and mobile apps. Its deployment is very simple. It only needs to enter the URL address platform to perform the capture of the user's website, and insert JavaScript code into the website to complete the creation of the search engine. Swiftype also provides an analysis service for websites to search and analyze users' search behaviors and preferences. Swiftype also supports customization for sorting search results. Another example is Solr, which is a high-performance full-text search server developed in Java and based on Lucene. At the same time, we extend it to provide a richer query language than Lucene, realize configurable, extensible and optimize query performance, and provide a perfect function management interface, which is a very excellent full-text search engine. In the continuous competition, we will gradually improve our search function and expand related applications, and finally get the current released projects.

The final category we highlight here is small, but contains one important entity. This one entity, [Apache's Lucene project](https://lucene.apache.org/core" \t "https://delftswa.gitbooks.io/desosa2018/content/elasticsearch/_blank), is the main project on which Elasticsearch is built. This makes it a technology suitable for nearly any application that requires full-text search , especially cross-platform applications.

Elastic search is built on Lucene, which uses API to index and search data. Because these characteristics are the core of elasticsearch, Lucene is an important external entity. Based on the role of this entity, we can monitor elasticsearch, and ultimately ensure the core function of data indexing and searching.