Overview of Patent Record Application

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December 2021

Function requirements

- The users should be able to add the patent infromation(metadata like country, year and title and abstract) from the xml files to database.

- The users should be able to read all of the data in the database.

- The users should be able to read only a specific data.

- The users should be able to delete a patent information from the data base.

Non-functional requirements

- The users should not request to add the data from xml to database i.e. /populateDB more than once.

- The system should be able to add the patent information for 10,000 xml files to database.

Discussion on scalability and maintainability

In this solution, I have parsed the xml file to POJO and saved it to the database. If the data proivided is in different format then this code will be rather inefficient to handle the request. In this case, I suggest to use Spring Integration in addition to spring batch which provides various function for Enterprise integration patterns.

However, if the volume of data is very large then we can divide the data in chunks and handle the requests in separate severs. This increases the performance and user experience.