Alexandria

*Summary document*

\*The information in this document concerns the intent and features of the Alexandria database project.

*Alexandria: an introduction*

When looking for a topic for our database we were looking for something that could be useful, something that could be used later to solve real world problems. After doing some research we decided to make an interdisciplinary database that gathered information from different areas of medicine and technology, focusing on the procedures and devices used for treating diseases. All of this supported by a collection of clinical images and scientific papers to serve as a guide for future users.

To sum up, we can say this database is made to help especially biomedical engineers and other professionals found in the same fieldwork such as doctors, engineers, physicists, chemists, biologists…

*Features*

- Object insertion, view, modification and deletion.

- Establishment of relations between objects.

- Related searches.

- Console and GUI interfaces.

- Conversion to and from XML.

- HTML preview.

The user can interact with the database through a console interface or a GUI one. Both allow him to make the same operations.

The user can select between seven different types of objects (medical procedures, devices, treatments, clinical images, etc.) and introduce them in the database. Depending on the type of object chosen, the interface will ask the user for different information. Complementing the addition, the interface supports the deleting, modifying and the view of the specifics of each object in the database.

One special characteristic of Alexandria, is that it allows to stablish and view relationships between the different objects. These relationships are made during the insertions and modifications. At any moment, the user can select an object and go through the related ones, choosing one and viewing its information. The process can be then repeated. This way, Alexandria can offer complete view of a certain topic the user is interested in.

*Extra features*

Alexandria allows the conversion of java objects into XML files. The object to be converted and the location of the file are asked to the user. Likewise, a XML file can be transformed into a Java one. \*

The user can also view an example of a HTML representation of objects and their related ones. \*\*

\*This feature is only available for author-type objects.

\*\*This feature is only available for paper-like objects.