Abstract

In the last few year the number of quality circles in Austria increased noticeably due to higher requirements concerning quality standards in patients treatment. As a consequence there was an extended need for administration. Further each circle had to handle more data and more pieces of information. This thesis' target was the electronic archiving of this data which should ensure an efficient, area-wide trans-sectoral circle work.

Therefore a web-application based on a three-tier software architecture was designed to allow the application's scalability. Java 2 Enterprise Edition (J2EE) as well as Jakarta Struts Framework by The Apache Software Foundation were used for the implementation of this application.

The application can be used through an internet browser without any additional installation on the user's computer. The administration of the specific qualitiy circles and of the circle meetings can be managed comfortably and – due to a clear role assignment – save and the data coming up can be archived and so be prepared for further use.

During the development there was a continuous dialog with the doctors as end-user which lead to a structured and user-friendly application.

As more and more doctors are using the internet, this application is a useful and reasonable infrastructure for area-wide cooperation of a large number of quality circles.

Keywords: medical quality circles, advanced medical education, web-application, J2EE, struts