

Abstract

Title: Development of web platform for visualization and sharing of medical algorithms

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Visualization has become a very important aspect in modern science. Medicine, like all other branches of science, is rapidly progressing and the amount of information that needs to be analysed in order to maintain a stable and productive environment is increasing day by day.

Visualization of medical algorithms can be very useful for speeding up the decision making process of diagnosing and treating patients. It also helps doctors and other end-users to better understand the complex processes that the algorithms represent. The goal of this thesis was to develop a visualization tool that would allow for a simple way of building visualizations of medical algorithms and to develop a web-based platform that would support the sharing of these visualizations amongst scientists, researchers and the general public.

The platform is designed upon a MVC model, where the back end was created using the PHP language and the MySQL database. The front end is executed by technologies such as HTML5, CSS, JavaScript and AJAX. This thesis is a continuation of the work done on the project Genetic diagnosis of blood disorders, funded by Študentski inovativni projekt za družbeno korist (ŠIPK), and is an upgrade of the already tested functionalities. It presents a first attempt of forming a web community for creating and sharing visualisations of medical algorithms.