

In this thesis, we improve the 2011 homework manager called XML Check. It is a web application used in the course XML Technologies at MFF UK and FEL ČVUT. Students and teachers have identified a number of deficiencies in the system that we are fixing. They have also suggested new functionality that we are implementing. Checking submissions for plagiarism is the most important new feature. This check is now applied to each new submission. We tried several different algorithms for this (Levenshtein distance, Greedy-String-Tiling algorithm and Zhang-Shasha tree edit distance) and we compare these algorithms. We determine their performance based on experiments on student submissions from the past four years. The improved system is now in active use.