

# **An attempt to develop a fast and intuitive user interface for searching, identifying and comparing LOINC<sup>®</sup> Codes – The LOST (LOINC Search Tool)**

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## **Abstract and Objective**

*The increasing application of information and communication technology in healthcare delivery makes the utilization of domain specific languages necessary to ensure semantic interoperability between information systems. Although the basics for implementing interoperable systems already exist, there is a lack of simple aiding tools for working with these domain specific languages. The available tools for working with the current version of LOINC do not support efficient and simple functions for browsing or comparing terms. Therefore a simple user interface for searching, identifying and comparing LOINC terms has been developed. After deciding upon the technologies to use, the LOINC Search Tool (LOST) has been implemented as a Java<sup>TM</sup> application. The user interface has been designed using the paper based prototyping approach. The result of the implementation is a simple graphical tool for searching, identifying and comparing terms from the current version of the LOINC nomenclature. The practical value of the application has to be validated by analyzing user feedback, but the LOINC Search Tool has the potential to facilitate development of semantic interoperable communication in healthcare networks.*

## **Keywords:**

Informatics, Software, Logical Observation Identifiers Names and Codes.