

HL7v2 Tools for Modelling and Testing

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Abstract—Abstract of our seminar ...
Index Terms—HL7, ...

I. INTRODUCTION

Being able to send messages in a secure, efficient and reliable way is a crucial topic in the scope of IT for Healthcare since there's a need to keep patients' data private but still be able to send information between healthcare units and systems. Having this in mind, it's of great importance to have a defined standard for communication in healthcare institutions that is widely accepted. HL7 is one of these standards. This report aims better to understand the use of the health message standard HL7v2 and explore tools for modelling and testing HL7V2 messages, stating their advantages and drawbacks.

To better introduce the topic, HL7v2 is explained, then the researched tools that implement this protocol are stated, and its features are explained. After that, the experiments we carried out are described, and the results are shown, leading to the conclusions extracted.

II. HL7 MESSAGING STANDARD

Health Level 7 (HL7)[1] is a standards-setting organization. They have developed communication protocols widely used in the United States that have been recognized and implemented internationally. Its mission is to provide standards for the exchange, management, and integration of data that support clinical patient care and the administration, delivery, and evaluation of healthcare services. [2] Shared reference models of the health care, and technical domains unify the HL7 specifications.

A. HL7v2

Explain HL7v2 and make comparisons to other versions.

III. EXISTING TOOLS

Here, the tools we found will be presented.

A. HAPI

HL7 Application Programming Interface [3]

B. Google Cloud Healthcare API

Google's API that supports HL7 and more [4]

C. NIST Platform

National Institute of Standards and Technology. It has an online portal with some tools [5]

IV. METHODOLOGICAL APPROACH

Here we will explain how we will compare the previously mentioned tools

A. Test messages

And more specifically, the messages that will be traded

V. EXPERIMENTAL RESULTS

Show the results and comparisons made

A. Key Findings

As well as some interesting things to mention

VI. CONCLUSION

Ending with the conclusions of this seminar

REFERENCES

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