The Application Architecture of YEROTH–ERP–3.0

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Abstract

This document describes the architecture of our ERP software–system YEROTH–ERP–3.0. This document also explains the reasons for our choice to design and build YEROTH–ERP–3.0 as a thick–client application, as opposed to currently more popular web–browser–based applications.

	Thick–client application	Web–browser–based application
application installation and upgrade	on each computer	only on the web / application server
user interface development	WYSIWYG tool	manual coding
application networked architecture	1–tier architecture	multi–tier architecture
other involved software–systems	at least 1 (DBMS)	at least 2 (DBMS, web / application server)

Table 1: Thick–client application VS Web–browser–based application

1 Introduction

YEROTH–ERP–3.0 is an **Enterprise Resource Planing (ERP)** software that aims 'effectiveness' and 'simplicity', compared to other high ranked ERP software–systems (e.g.: 'Sage Gescom i7', 'SAP Business One', etc.).

We chose to design and implement YEROTH–ERP–3.0 as a thick–client software–system because of the following reasons:

1) the implementation language C++ offers much flexibility (use of macro, etc.)

2) the availability of 'WHAT YOU SEE IS WHAT YOU GET' tools (WYSIWYG) for fast and useful user interface design (e.g.: Qt designer [Com20], miniStudio (vxWorks) [WEI20], etc.)

3) the low number of computers involved with the operation of a thick–client software–system (1–tier architecture), as opposed to a web–browser–based software–system (at least a 2–tier architecture).

2 Thick–Client VS Web–Browser based

Table 1 compares a thick–client application against a web–browser–based application.

3 Conclusion

References

[Com20] The Qt Company. Qt Designer Manual. http://doc.qt.io/qt-5/qtdesigner-manual.html, 2020. Last accessed on September 4, 2020 at 15:20.

[WEI20] Yongming WEI. miniStudio User's Guide. http://www.minigui.net/en/ministudio, 2020. Last accessed on September 4, 2020 at 15:20.