

**Customer:** University of Vienna

**Location:** Vienna, Austria

**Industry:** Education

**Developed on:** Windows and  
Oracle

**Deployed on:** Windows

**Result:** Over 91,000 students  
served

### About University of Vienna:

Founded by Duke Rudolph IV in 1365. It is the oldest university in the German-speaking world and is the largest teaching and research institution in Austria.

### Business Need:

A robust and fit for purpose management system to address the day to day running of this thriving learning environment.

### Benefits of LiveCode:

At the heart of the system is an augmented version of SQL that ties SQL together with the LiveCode language model. This is essentially a domain-specific language, tailored to fully support the needs of this application.

## Case Study

# University Management System

## Introduction

With 9400 employees attending to 91,000 enrolled students taking 188 courses of which 56 are Bachelor Programmes, 117 Master Programmes, 4 Diploma Programmes and 11 PhD Programmes. The University of Vienna required a robust and fit for purpose management system to address the day to day running of this thriving learning environment.

A solution built on LiveCode is used to achieve this. We spoke to Hartmut Eich, from the software development team at the University about their choice of LiveCode.

### Hartmut Eich: University of Vienna

The LiveCode system includes a module to perform any task necessary for operating a large University. Notable modules include:

- A scheduler for course timetables
- A room allocation system
- The enrolment details for every student
- Staff Payroll

There are half a million lines of LiveCode in 43,000 procedures and functions in the system. These have been built as approximately 1300 fully independent modules, each of which is stored in an Oracle database.

**"The project originated as a system for the creation of a database-based applications. One of the key features of the system is the way that the data and the code is stored in the database itself. The database stores all of its own meta-structure – a description of the table structure, together with the relationships between the tables, along with all the code for the user interface."**

**"LiveCode was an ideal choice for this project for many reasons. At the heart of the system is an augmented version of SQL that ties SQL together with the LiveCode language model. This is essentially a domain-specific language, tailored to fully support the needs of this application."**

**"We upgraded to the latest version of LiveCode to take advantage of the Unicode improvements that have been incorporated over the years. New legislation means that we have to be able to represent a student's name within the system correctly in their native language."**



"Another key benefit is the ability to fully customize the development environment. Our system uses its own customized set of tools, including a Code Editor written for the project. The editor cross-references the code stored in the database, making it easy to navigate the huge code-base contained across all the modules and to make changes. The LiveCode development environment is written in itself and we wanted to integrate the latest version of the LiveCode Integrated Development Environment tools into our system."

Vienna University have multi-user development license for LiveCode. Their in-house team keeps the system up to date and adapts it to the changing requirements of the University.

"The design of the system makes it easy for a team to work on the project. Each module is completely independent and stored in the Oracle database. This makes it straightforward to work on it in parallel."



## About RunRev

Founded in 1997, RunRev is a technology company committed to making scalable software development fun, easy and accessible to everyone. To achieve this RunRev has created LiveCode.



## About LiveCode

LiveCode is an award winning, high level, cross platform, integrated development environment. Its compile free work flow and highly efficient single code base enables Apps to be developed on Windows, Mac and Linux and deployed on all popular platforms including Mobile, Desktop, Cloud and Server. LiveCode is used around the world by organizations of all sizes to solve real world business problems.

**Today millions of people use Apps built using LiveCode.**

**For more information please contact us:**

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# LIVECODE

