

A Mac OS X EiffelVision port based on a generated Cocoa wrapper

BACHELOR THESIS PROJECT PLAN

Project period: 01.10.2011 – 01.02.2012
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1. PROJECT DESCRIPTION

Overview

EiffelVision is an object-oriented framework for developing Graphical User Interfaces (GUIs). It currently runs natively under Windows and all major versions of Unix, while a native version for Mac OS X has not been implemented yet.

Scope of the work

The goal of this project is to implement the EiffelVision framework for Mac OS X in order to provide a native version – i.e. without using the Unix window system X11 – of EiffelStudio for the Macintosh.

Intended results

The intended result is a final implementation of the EiffelVision framework for Mac OS X that is ready for development in the software industry.

2. BACKGROUND MATERIAL

Reading list

- Eiffel Verification Environment, <http://eve.origo.ethz.ch/>
- Objective-C Frameworks to Eiffel Converter, Matteo Cortonesi, 2010
- EiffelVision for Mac OS X, Daniel Furrer, 2009
- Bertrand Meyer: *Object-Oriented Software Construction, 2nd edition*, PrenticeHall, 1997

3. PROJECT MANAGEMENT

Objectives and priorities

The minimum goal is to implement the part of the EiffelVision framework used to build EiffelStudio: the achievement of this objective would make it possible to run EiffelStudio natively on the Macintosh. The ideal goal is to completely port the EiffelVision framework to allow developers to work on and develop native software for Mac OS X.

Criteria for success

The criterion for the success of this project is implementing the system described by the minimum goal.

Method of work

The method of work is described and illustrated in the *Plan with milestones* section.

Quality management

Documentation

The project report will describe the decisions adopted to map the EiffelVision widgets and elements to their respective representatives in Mac OS X. A user guide is most likely not needed since developers do not directly interact with the Mac OS X implementation of EiffelVision.

Validation

The validation test will mainly consist of using EiffelStudio with the Mac OS X version of EiffelVision. The EiffelVision examples provided with the framework will also be tested using the native Macintosh implementation.

4. PLAN WITH MILESTONES

Project steps

1. Compile EVE and install the generated Cocoa wrapper
2. Get familiar with EiffelVision and prioritize the classes to be ported
3. Implement the EiffelVision framework for Mac OS X
4. Manual testing
5. Write project report

Deadline

The deadline for the project is 01.02.2012

Tentative schedule

Step / Week	October				November				December				January			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1.	■															
2.		■	■	■	■											
3.				■	■	■	■	■	■	■	■	■				
4.					■	■	■	■	■	■	■	■	■			
5.												■	■	■	■	■

REFERENCES

- [1] Chair of Software Engineering: *Semester-/Diplomarbeiten*; Online at: <http://se.inf.ethz.ch/projects/index.html>, consulted in October 2002.
- [2] Bertrand Meyer: *Object-Oriented Software Construction, 2nd edition*, Prentice Hall, 1997.