

Simulation-Based Applications: Financial Simulator



INTEGRATED MEDIA SYSTEMS CENTER
A National Science Foundation
Engineering Research Center at the
UNIVERSITY OF SOUTHERN CALIFORNIA

PRINCIPAL INVESTIGATOR

Victor LaCour, Creative Director, IMSC
(213) 740-2447
vlacour@imsc.usc.edu

OTHER USC RESEARCHERS

Dr. Ulrich Newman (IMSC Director)
Dr. J. Kimball Dietrich (Assoc. Prof
Marshall School of Business)
Gary J. Perez (President, CEO
USC Credit Union)
Gregory R. Day (VP of Human Res.,
USC Credit Union)

USC STUDENTS (EXPECTED DEGREES):

Dhruv Pandey (MS), Tracy Wilson (BS)



BRIEF DESCRIPTION OF TECHNOLOGY DEMONSTRATION

This collaborative project between IMSC, the Marshall School of Business, and the USC Credit Union explores how interactive multimedia technologies can be brought to bear on a novel application domain of financial services and products. We address this idea by providing a “simfinance” marketing tool that allows people to model their finances and perform “what if” tests to see the impact of the financial products on their net worth over time. This project entails the construction of a simulator that shows the impact and benefits of various life events and bank services to the user’s monetary quality of life.

UNIQUE OR DISTINGUISHING CHARACTERISTICS RELATIVE TO STATE-OF-THE-ART

- This is a collaborative effort which aims to bring out a visually rich user interface with a proper financial simulation running it
- This game will, for the first time, allow people to see how decisions regarding bank schemes affect their lives and what a combination of fateful life events could make of their economic panorama.

APPLICATIONS

- Primarily educational, where the game helps users in visualizing how decisions involving major expenditures or long-term investments affect their monetary well being.
- A means for banks and financial organizations to promote financial schemes in a novel and comprehensive way.

RECENT HIGHLIGHTS, LEVEL OF DEVELOPMENT, UPCOMING MILESTONES

- Workable prototype (May 2004)
- Implementation of a working GUI
- Partial implementation of the Financial Engine where one of the financial event icons is now working in the application.
- A combination of attractive and compelling interface design and development written for front-end development in Flash MX
- An understanding of the application domain and candidate products worked out within members of IMSC, the USC Credit Union, and the USC Marshall Business School.
- A storyboard development of how the simulation is to be controlled and presented to the user.

UNDERLYING TECHNOLOGIES

- Conceptualization of the project as a two component system: a GUI and a Financial Engine
- The Financial Engine is structured to use statistical averages to carry out the simulation
- The GUI shall have icons representing financial decisions and events which will modify the net worth graph when dropped onto it

LIST OF PUBLICATIONS, REFERENCES, URLs

- <http://imsc.usc.edu/research/project/financesim/>

For additional information, please contact the Principal Investigator listed above via email, or contact

Isaac Maya, Ph.D., P.E.
Director, Industry and Technology Transfer Programs

213-740-2592
imaya@imsc.usc.edu

Integrated Media Systems Center
3740 McClintock Avenue, Suite 131
Los Angeles, CA 90089-2561
213-740-8931 (fax)

For additional information on the Integrated Media Systems Center (IMSC), please visit our Web site at <http://imsc.usc.edu>