

¹ This page is unintentionally blank but I can't figure out why or what is going on

DRAFT
March 15, 2009 -- 23:15

! LaTeX Error: Something's wrong—perhaps a missing \item?



DRAFT! -- DRAFT! -- DRAFT! -- DRAFT! -- DRAFT! --

DRAFT! -- DRAFT! -- DRAFT! -- DRAFT! -- DRAFT! -- DRAFT! -- DRAFT! --

How to teach the kids logical frameworks with video arcade

Tom Murphy VII George Frankly Kate Monday[†]

The year of our lord March 15, 2009

Negative feedback helps the kids to learn.

Negative feedba

1 Introduction

Fact: *LF is dying. In order to attract more students to the study of logical frameworks, we must approach to them at younger and younger ages. This work, which funded by the Public Broadcasting Service and Canadian

*but no thanks

[†]Names changed to protect the innocent

Illuminati television production company YTV, seeks to capture the highly sought-after 6–11 year old demographic.

The pitch is simple: A video game so enthralling, that the kids while their lives away playing it in the videos arcade, all that time conditioning their mind or minds to reflexively accept dependent typing; Twelf concrete syntax; the pattern fragment; to use destination passing style in their everyday language, e.g. to the mother or mothers: “Mother, I want X . eq X candy;” to literally *not see* the names of bound variable or variables, just as I can often not remember the eye-color of the eye or eyes in a girlfriend’s face eye holes; to submit to unification into %totalitarian regimes; to only find true satisfaction in the pale amber glow of a terminal reading %% SERVER OK %%. Imagine such a world! But this is no pitch, no hypothesis, no hyperbole, no hyperkind. This game is real or real-seeming. The future is soon or *now*.

```
\section{LFMan, a video arcade for teaching dependent lambda calculus}
```

LFMan is a game for a single ripe impressionable player or players. The player plays the game, with the object being to win. A screen-picture is in Figure Citation 'screenshot' on page 2 undefined on input line 80. When the user [?] or users presses the joystick, the LF Man moves in the maze [fig.3] to find dots. The maze is trivial to solve. The screen and sound presents an extra challenge: It implores the LF Man, controlled by the player or players [?], to evaluate the well-typedness of LF signatures expressed in Twelf notation strewn roughshod throughout the maze. A new LF signature awaits the child or childs at every turn. The child or children must evaluate the signature with lightnings-quick reflex, to adjust the emacs status bar adorning the LF Man’s banner message. The bar can be as in Figure 2. The user or users selects the status bar with the key that has been painted

! LaTeX Error: Something’s wrong—perhaps a missing \item?

—♡—

DRAFT! -- DRAFT! -- DRAFT! -- DRAFT! -- DRAFT! -- DRAFT! --

DRAFT

March 15, 2009

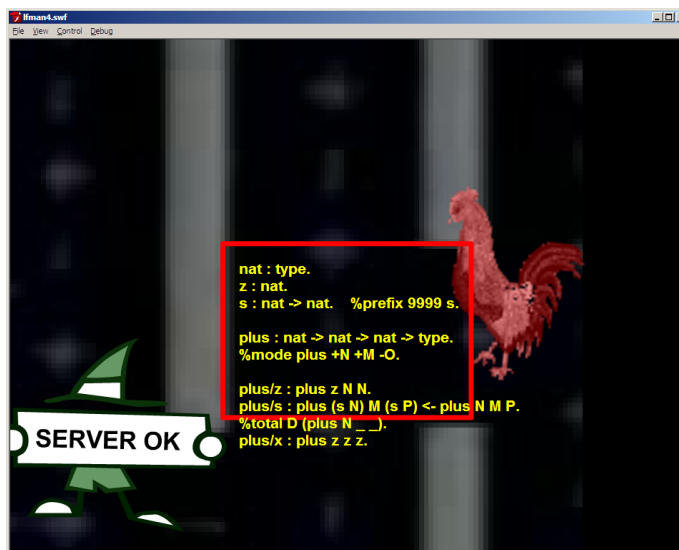


Figure 1: The LF Man is faced with a signature. How shall his emacs react?

with the 1 or 2 digits. If there are 2 digits then this is ABORTS. The LF Man drives additionally with the arrows (*downarrow*, \leftarrow , \Rightarrow) painted buttons. When the LF Man comes lightning-quick to a LF signature, (Figure 1) his emacs bar must accord with the type-correctness of the LF signature. I.E. if the signature is ill-type, then his emacs bar says “ABORTS” but if the signature is well-type, then his emacs bar says ‘ ‘ OK SERVER ’ ’. When the player’s bar accords, the screen and sounds rewards his or her lightning reflex or reflexes with a Positive Feedback. When discord arises, then there is Negative Feedback.

! LaTeX Error: Something’s wrong—perhaps a missing \item?



DRAFT! -- DRAFT! -- DRAFT! -- DRAFT! -- DRAFT! -- DRAFT! --

DRAFT

March 15, 2009

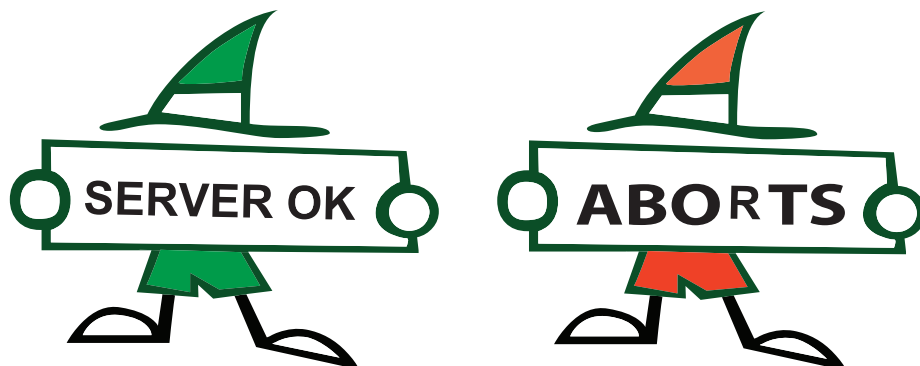


Figure 2: The bar can be as in Figure 2.

2 Negative Feedback

When there is Negative Feedback, the mascot of the Coq theorem prover comes to get the LF Man . This is a chicken. Most of the time the chicken is spinning and grumbling about H.O.A.S.. But when there is Negative Feedback the chicken comes to get the LF Man. If he touches the LF Man then LF Man starts spinning and fading into the maze or mazes.

The LF Man can keep running and standing on Signatures or eating dots but he cannot exorcise the

! LaTeX Error: Something's wrong—perhaps a missing \item?



DRAFT! -- DRAFT! -- DRAFT! -- DRAFT! -- DRAFT! -- DRAFT! -- DRAFT! --

DRAFT! -- DRAFT! -- DRAFT! -- DRAFT! -- DRAFT! -- DRAFT! -- DRAFT! --

March 15, 2009 13:13

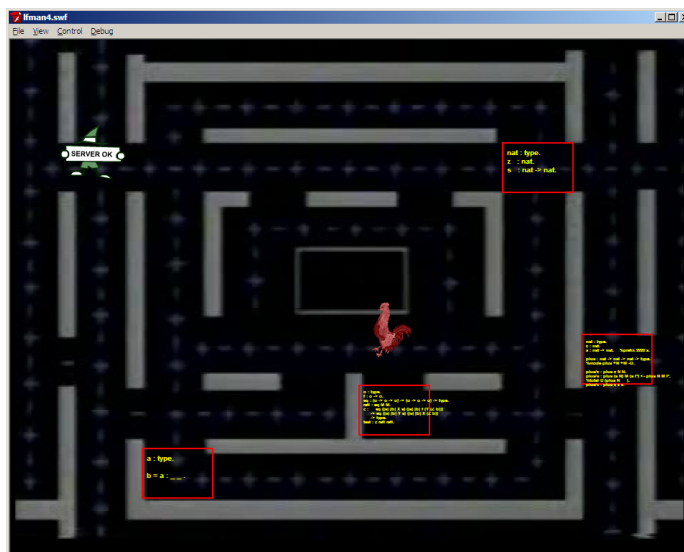


Figure 3: This is a picture of the phosphor in the video screen.

chicken

Negative feedback helps the kids to learn.

3 Implementation and acknowledgements

The LF Man game is implemented in ActionScript with Flash VideoSystem. The source code or codes is shown in (FIGURE 4.) The authors are particularly grateful to the Internet People for their help in

! LaTeX Error: Something's wrong—perhaps a missing \item?



DRAFT! -- DRAFT! -- DRAFT! -- DRAFT! -- DRAFT! -- DRAFT! -- DRAFT! --

DRAFT

March 15, 2009 -- 23:53

learning ActionScript semantics. The best resource was “steves tutes”, which can be found at http://video-animation.com/flash_16.php. Here we learned about inheritance:

When you use Inheritance you save time , because the base attributes and methods already exists, And Reduce errors , because the base class , Shape has already been used and tested. And You already know how the base class works. Using the same method name to implement different code in subclasses is called PolyMorphism.

polymorphism does work. .. Try out all the other methods . Try and bust it.. bend it.. shake it..

We used inheritance in our VideoSystem application, where the Chicken class is a subclass of the Man class, and the LFMan class is also a subclass of the Man class, and the Man class has the implementation of MovingInTheMazeOrMazes and other shared functionals. Unfortunately: we observed repeated degenerate behavior where the Chicken behaves as an LF Man, mimicking his movements and warp-motion to his locale. We tried using code from *steves tutes* to help us

Here is a clas my good friend Lithium wrote as an example.

```

:
var poop = _root.createEmptyMovieClip(name, level);
poop.lineStyle(2, 0x000000, 100);
:

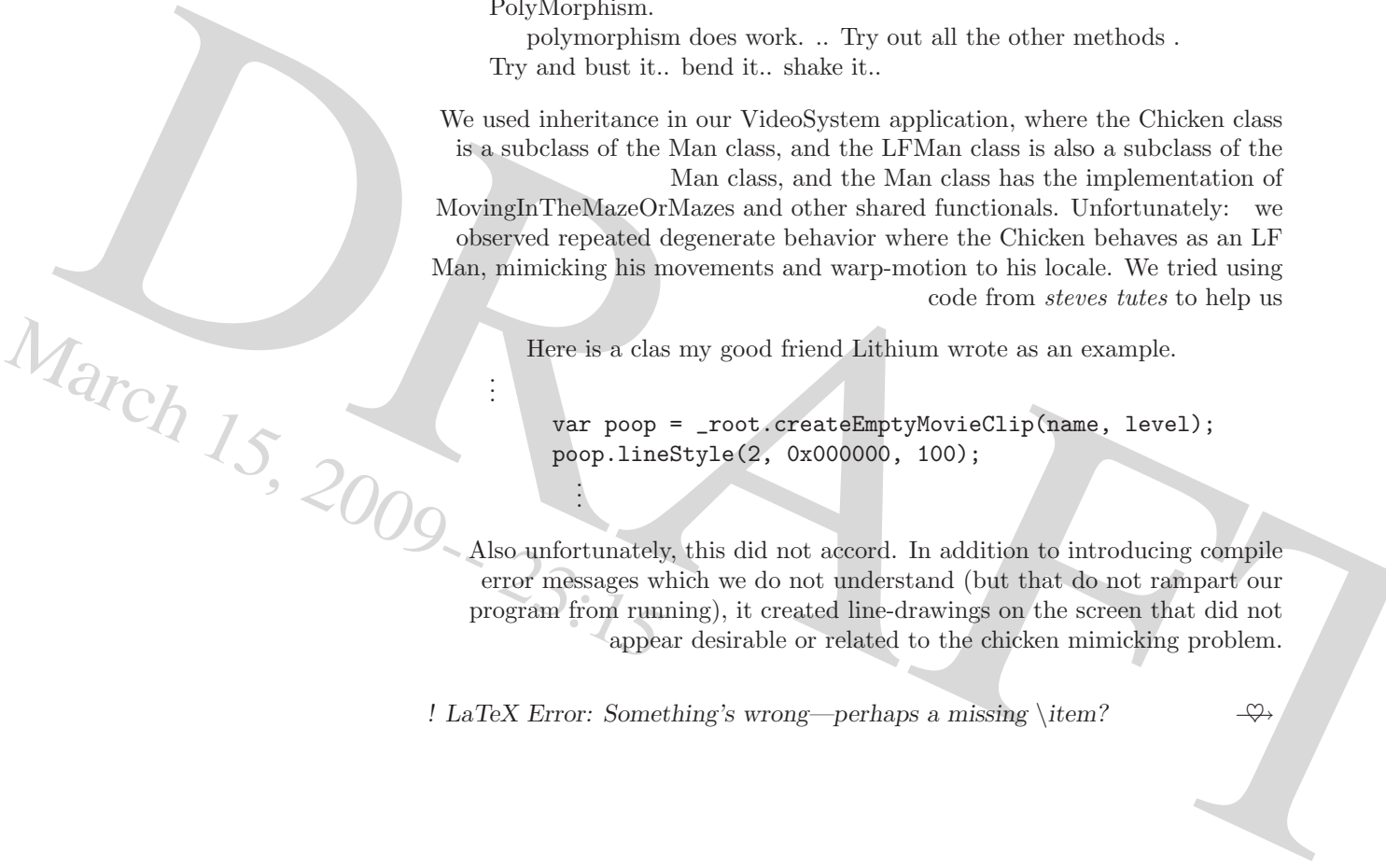
```

Also unfortunately, this did not accord. In addition to introducing compile error messages which we do not understand (but that do not rampart our program from running), it created line-drawings on the screen that did not appear desirable or related to the chicken mimicking problem.

! LaTeX Error: Something’s wrong—perhaps a missing \item?



DRAFT! -- DRAFT! -- DRAFT! -- DRAFT! -- DRAFT! --



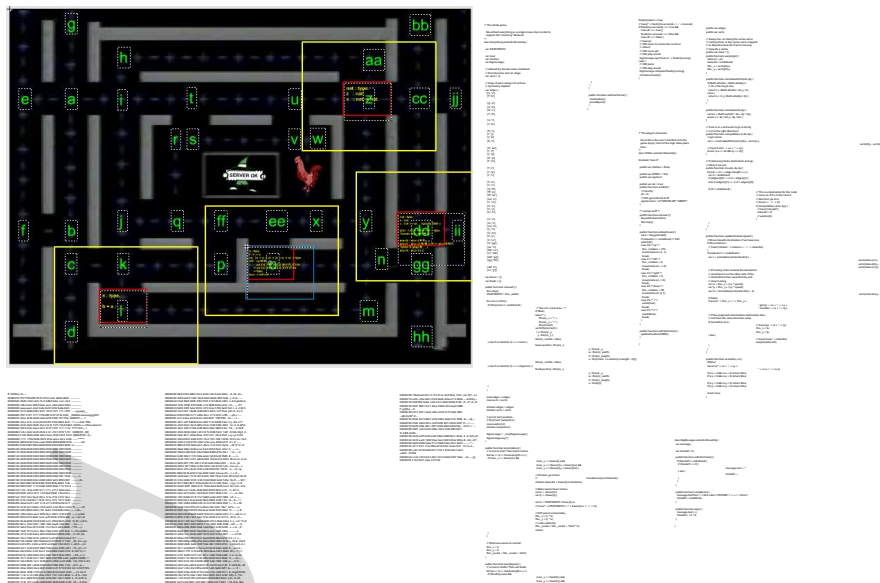


Figure 4: All source code. Source is © 2009

Instead we developed a new technique of inheritance which we call *includeitance*. Instead of using the `extends` keyword to create a subclass or subclasses, we use the `#include` keyword at the head of the class so that LfMan and Chicken can have the same maze motion but the Chicken does not think he is also a LfMan.

Did you want to explore a maze with a chicken? If you have access to children and the children have access to web browser, put them to this URL: <http://spacebar.org/lfman/>

! LaTeX Error: Something's wrong—perhaps a missing \item?



DRAFT! -- DRAFT! -- DRAFT! -- DRAFT! -- DRAFT! -- DRAFT! --

DRAFT

March 15, 2009

4 Conclusion... or is it?

NetCraft confirms it. *LF is dying. I believe children are our future or futures.

DRAFT
March 15, 2009 -- 23:15

! LaTeX Error: Something's wrong—perhaps a missing \item?



DRAFT! -- DRAFT! -- DRAFT! -- DRAFT! -- DRAFT! --