THE PUBLIC IS MORE FAMILIAR WITH BAD DESIGN THAN GOOD DESIGN. IT IS, IN EFFECT, CONDITIONED TO PREFER BAD DESIGN, BECAUSE THAT IS WHAT IT LIVES WITH. THE NEW BECOMES THREATENING, THE OLD REASSURING.

PAUL RAND

A DESIGNER KNOWS THAT HE HAS ACHIEVED PERFECTION NOT WHEN THERE IS NOTHING LEFT TO ADD, BUT WHEN THERE IS NOTHING LEFT TO TAKE AWAY.

ANTOINE DE SAINT-EXUPÉRY

. . . THE DESIGNER OF A NEW SYSTEM MUST NOT ONLY BE THE IMPLEMENTOR AND THE FIRST LARGE-SCALE USER; THE DESIGNER SHOULD ALSO WRITE THE FIRST USER MANUAL. . . IF I HAD NOT PARTICIPATED FULLY IN ALL THESE ACTIVITIES, LITERALLY HUNDREDS OF IMPROVEMENTS WOULD NEVER HAVE BEEN MADE, BECAUSE I WOULD NEVER HAVE THOUGHT OF THEM OR PERCEIVED WHY THEY WERE IMPORTANT.

DONALD E. KNUTH

FANG HUIXING

APRICOT USER GUIDER

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Contents

Preliminary Background of Hybrid Systems 15

Apricot: An Object-Oriented Modeling Language for Hybrid Systems 17

XtextApricot: A Modeling Tool for Apricot 19

Formal Verification for Apricot Models 21

Simulation and Analysis for Apricot Models 23

Animation and Visualization for Apricot Models 25

Feedback-Advancement Framework in Apricot 27

Discussions 29

Conclusions 31

Useful Links 33

List of Figures

1 The Architecture of Subway Control System 17

List of Tables

Dedicated to those who appreciate LaTeX

and the work of Edward R. Tufte and Donald E. Knuth.

Introduction

Preliminary Background of Hybrid Systems

Apricot: An Object-Oriented Modeling Language for Hybrid Systems

Case Study: Subway Control Systems

In this section,

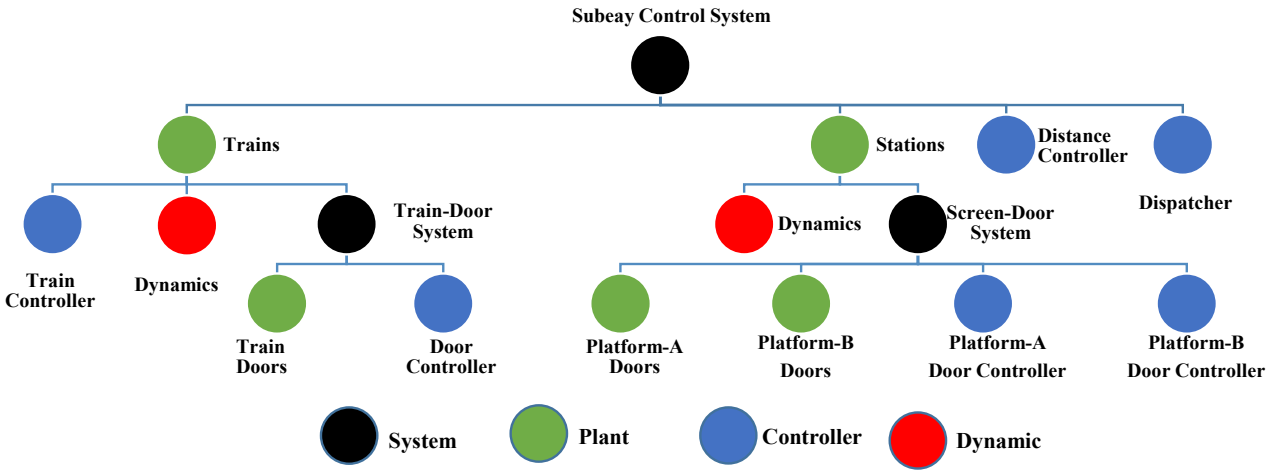

Figure 1: The Architecture of Subway Control System

XtextApricot: A Modeling Tool for Apricot

Formal Verification for Apricot Models

Simulation and Analysis for Apricot Models

Animation and Visualization for Apricot Models

Feedback-Advancement Framework in Apricot

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Conclusions

Useful Links

Apricot Home Page:
  http://www.apricotresearch.com/
XtextApricot Update Site for Eclipse:
  http://xtextapricot.apricotresearch.com/