

SqueakCMI Notebook: Projects, Tools, and Techniques

Introduction

Welcome to eToys/Squeak: an object-oriented programming language. This notebook was written to introduce Squeak to curious beginners with step-by-step descriptions of projects and how they were done.

Advice is freely given in the hope that the path you take to learning eToys/Squeak is quick and smooth. The Squeak community will be generous with their time, their knowledge, and their willingness to help newcomers. The Office for Mathematics, Science, and Technology Education at the University of Illinois Urbana-Champaign invites you to use these materials to the benefit of students everywhere.

These projects can be explored on the computer by opening them from www.Squeakcmi.org. This dynamic experience of projects on the computer in conjunction with the written materials should give you a range of ideas and possibilities to combine in many ways and for many purposes.

Section I

This section contains two easy projects designed to help you get started with Squeak. They are followed by an extensive description of the rich resources, tools, icons, supplies, and conventions that make Squeak what it is.

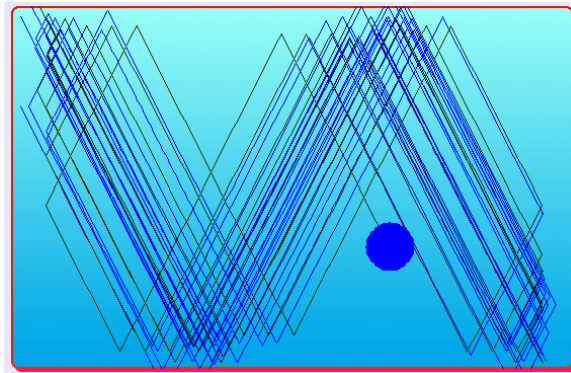
Section II

This section explains more complicated projects. They are in alphabetical order by the name of a Squeak tool used predominantly in that project. The projects are not in sequential order by level of difficulty. The project's name can be used to locate that project at www.Squeakcmi.org. So, if you wonder, "What is a scale factor and how could it be used in a Squeak project?" you can find out.

www.Squeakcmi.org

The Office for Mathematics, Science, and Technology Education
University of Illinois Urbana-Champaign





www.SqueakCMI.org

Resources, projects, tutorials, and standards-based lessons applying Squeak in math, science, language arts, social science, and art. Additional projects and essays can be found on the website. Tutorials developed by math specialists show the myriad ways Squeak enriches the study of geometry and trigonometry. The SqueakCMI community can answer questions, share ideas, and schedule workshops.



www.squeakland.org

The origin of Squeak: software, tutorials, and example projects. Get the most current versions of the software at Squeakland. The site includes interesting essays about the nature of learning, about programming and thinking.

www.squeak.org

Technical information for experienced programmers and developers

Kathleen Harness

squeakcmi@uiuc.edu

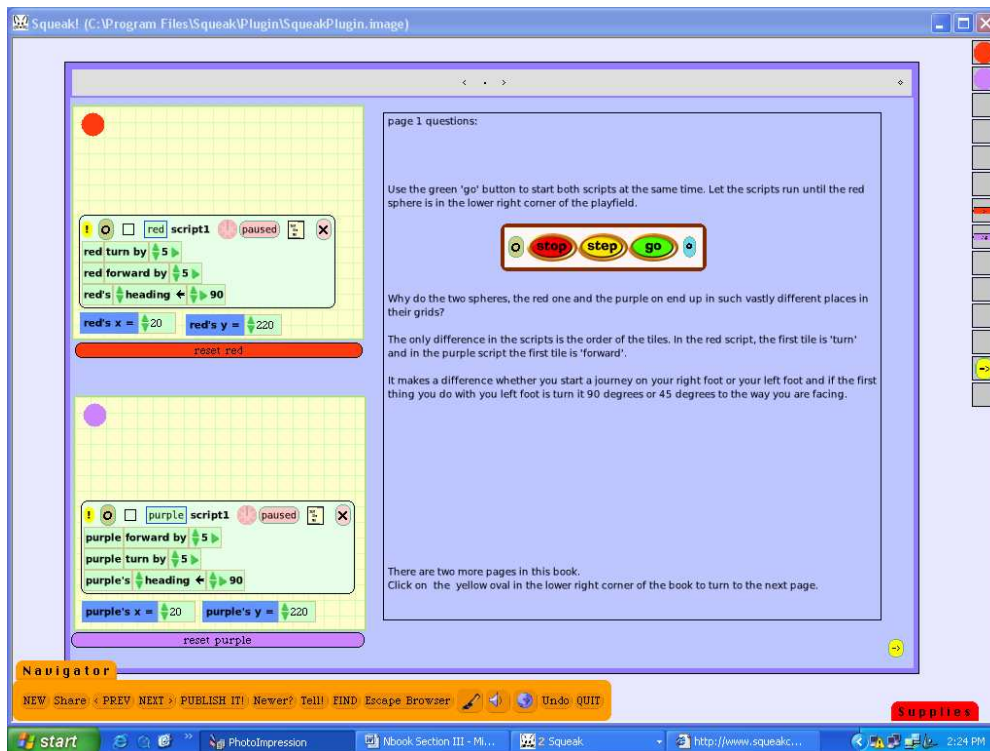
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Heading: headingexperimentsnb

This is one of a few projects in this notebook that is not explained in detail. It is better to try this one using the actual project on your computer because it is a set of experiments that are much more fun to try than to read someone else's results.



You can find it on www.squeakcmi.org. Click on Projects then on top then on search. Type the name of the project (headingexperimentsnb) into the search box and click on Search button. Then open the project on your computer. It will not work if Squeak is not installed.

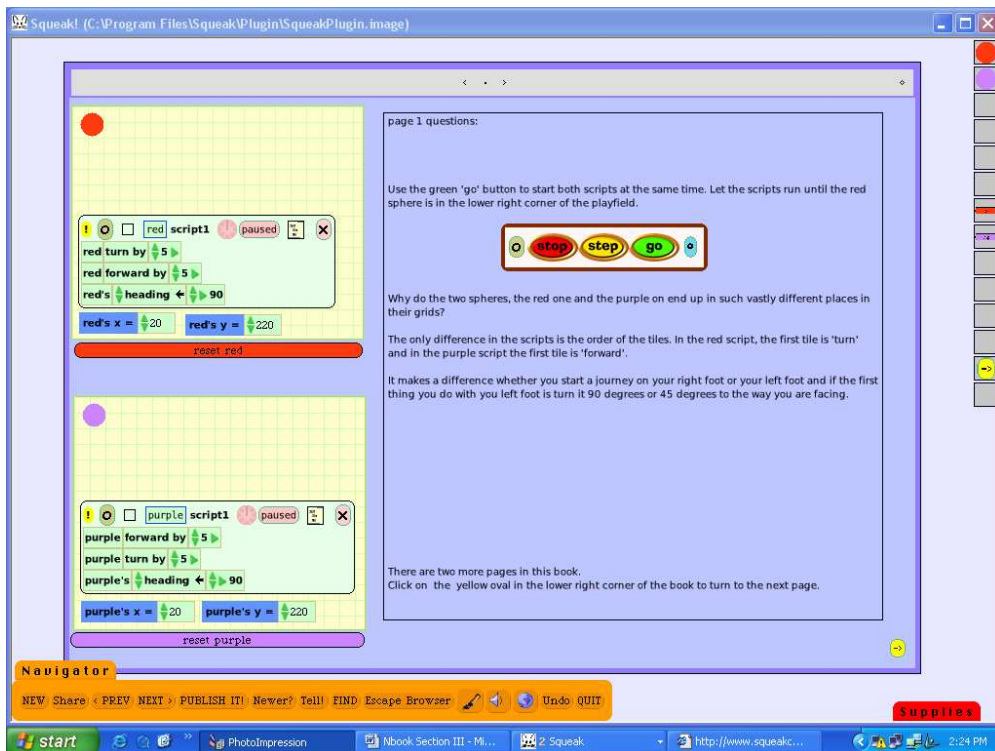
Here is a list of the information and scripts needed to make a similar project. This project shows a series of experiment with combinations of forward, turn, and heading. There are three pages. The text poses questions about what is going on when a script is running. There are reset buttons so the scripts can run over and over again with exactly the same start.

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This is page 1 of the book.



The color of the books outline was changed. The color of the book's pages was changed. A page turn button from Supplies was placed in location using the x and y co-ordinates in the basic viewer panel.

The text was written using a text with border style of adding words that is found in the Text tab of the Object Catalog.

A start-step-go button was dragged from Supplies so that several scripts could start at one time.

There are Detailed watchers for the x and y co-ordinates of each object.

A reset script was written so that the experiments could be tried over and again.

