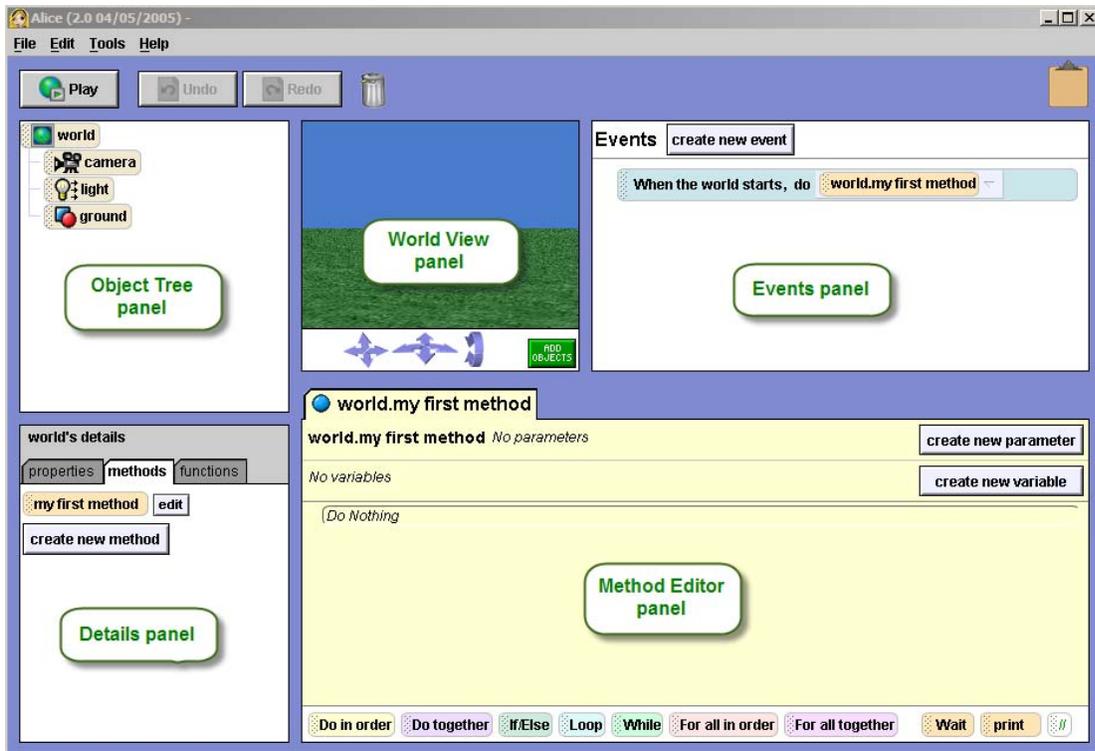


# Fluency with Alice

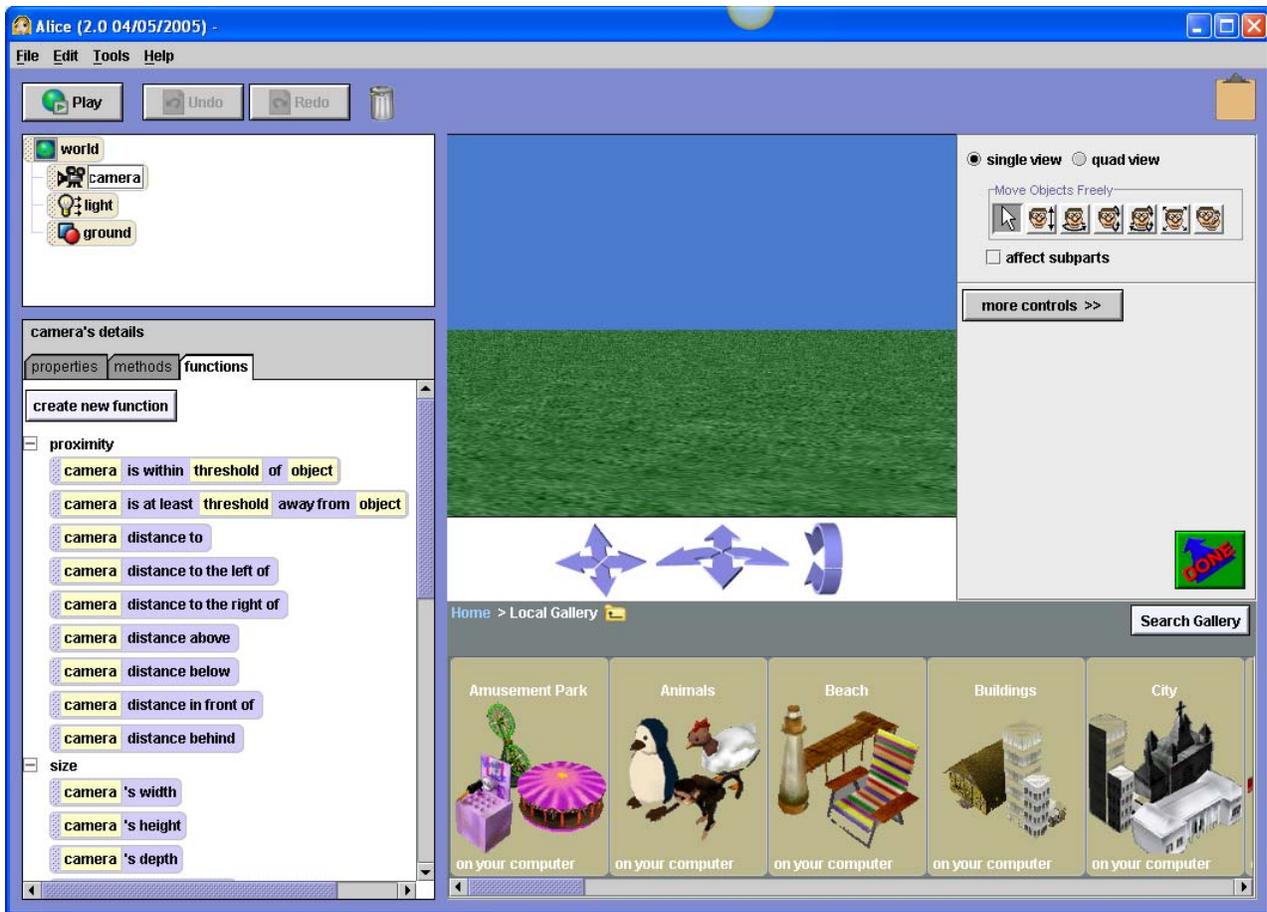
Workbook to Accompany Snyder's *Fluency with Information Technology, 4<sup>th</sup> Edition*

by Robert Seidman, Philip Funk, Jim Isaak, Lundy Lewis

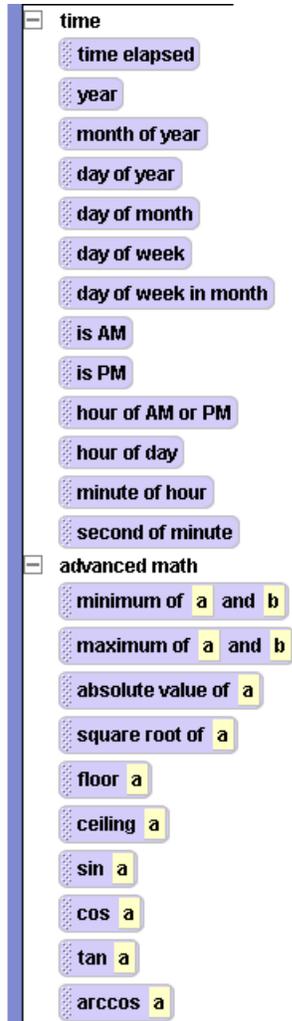
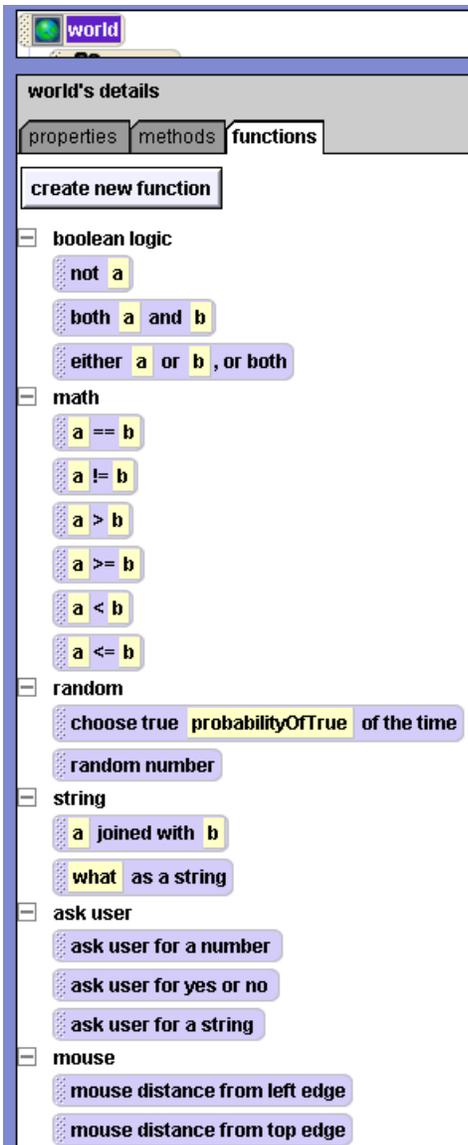
## Alice 2.2 Reference Card



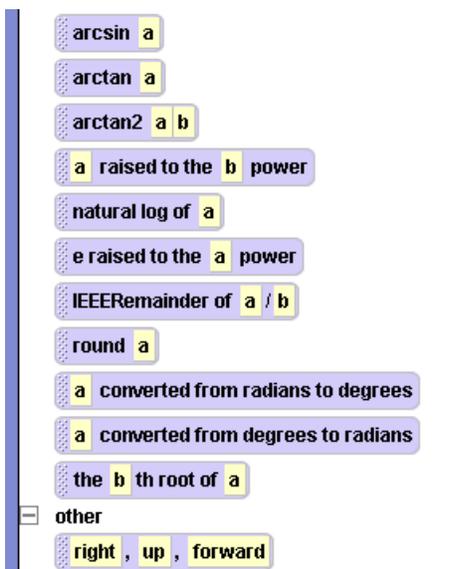
Reference Card Figure 1 Welcome to Alice! window showing all panels.



Reference Card Figure 2 Gallery panel showing.



Reference Card Figure 3 world object functions.



Reference Card Figure 3 world object functions (continued).



Reference Card Figure 4 camera object methods (typical of all objects).

**camera**

camera's details

properties methods **functions**

create new function

**proximity**

- camera is within threshold of object
- camera is at least threshold away from object
- camera distance to
- camera distance to the left of
- camera distance to the right of
- camera distance above
- camera distance below
- camera distance in front of
- camera distance behind

**size**

- camera 's width
- camera 's height
- camera 's depth
- camera is smaller than
- camera is larger than
- camera is narrower than
- camera is wider than
- camera is shorter than
- camera is taller than

**spatial relation**

- camera is to the left of
- camera is to the right of
- camera is above
- camera is below
- camera is in front of
- camera is behind

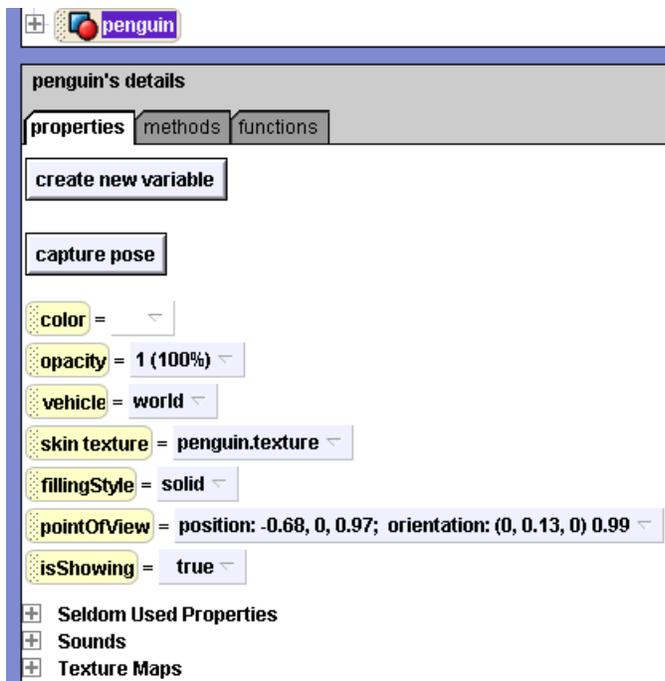
**point of view**

- camera 's point of view
- camera 's position
- camera 's quaternion

**other**

- camera 's current pose
- camera 's part named key
- camera 's variable named variableName of type valueClass

Reference Card Figure 5 camera object functions (typical of all objects).



Reference Card Figure 6 penguin properties (typical of all objects).