



welcome to

GAMELET DESIGN

for education

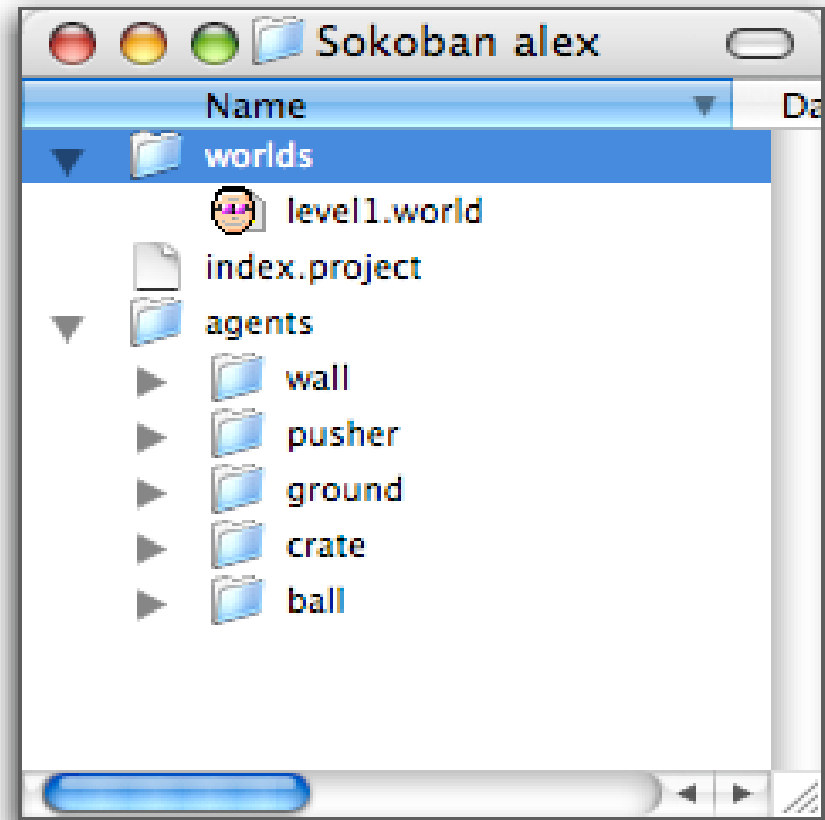
Objectives

- ◆ A tour through an AgenCubes project



Project folder

- ◆ Worlds
- ◆ Project file
- ◆ agents



<http://www.cs.colorado.edu/~ralex/courses/gamelet2006/calendar/projects/Sokoban/>
<http://www.cs.colorado.edu/~ralex/courses/gamelet2006/calendar/projects/Sokoban.zip>

world

<http://www.cs.colorado.edu/~raleX/courses/gamelet2006/calendar/projects/Sokoban/worlds/level1.world>

```
- <world-root window-x="285" window-y="151" window-width="785" window-height="602" default-window-type=
  <camera eye-x="10.144598107034435" eye-y="-0.5504296388647374" eye-z="14.45932870654023" center-x="10
  center-z="0.0" up-x="0.0012694841556784853" up-y="15.868477888737889" up-z="0.12694418392578832" fovy
  aspect="1.3321799307958477" near="0.004999999888241291" far="2000.0" azimuth="0.009999999999999875" :
- <light-source x="10.0" y="10.4" z="10.0">
  <ambient red="0.0" green="0.0" blue="0.0"/>
  <diffuse red="1.0" green="1.0" blue="1.0"/>
  <specular red="1.0" green="1.0" blue="1.0"/>
</light-source>
<ad3d-sky-dome name="The World around me" pitch="-90.0" heading="-50.0"/>
- <agent-matrix name="AGENT-MATRIX11508" rows="20" columns="20" layers="1" is-grid-visible="false">
  <wall_agent col="4" shape-name="brick"/>
  <wall_agent col="5" shape-name="brick"/>
  <wall_agent col="6" shape-name="brick"/>
  <wall_agent col="7" shape-name="brick"/>
  <wall_agent col="8" shape-name="brick"/>
  <wall_agent col="9" shape-name="brick"/>
  <wall_agent col="10" shape-name="brick"/>
  <wall_agent row="1" col="4" shape-name="brick"/>
  <ground_agent row="1" col="5" shape-name="floor_tile"/>
  <ground_agent row="1" col="6" shape-name="floor_tile"/>
  <ground_agent row="1" col="7" shape-name="floor_tile"/>
```





World <camera>

- ◆ `<camera eye-x="10.144598107034435" eye-y="-0.5504296388647374" eye-z="14.45932870654023" center-x="10.0" center-y="7.499999999999999" center-z="0.0" up-x="0.0012694841556784853" up-y="15.868477888737889" up-z="0.12694418392578832" fovy="60.0" aspect="1.3321799307958477" near="0.004999999888241291" far="2000.0" azimuth="0.0099999999999999875" zenith="-0.50800000000000001"/>`
- ◆ Don't usually set that manually: will be set when world is saved



World `<light-source>`

- ◆ Up to 7 light sources

- ◆ `> 1` can be slow on old graphics hardware
- ◆ Component values `0..1.0`

```
<light-source x="10.0" y="10.4" z="10.0">
```

```
<ambient red="0.0" green="0.0" blue="0.0"/>
```

```
<diffuse red="1.0" green="1.0" blue="1.0"/>
```

```
<specular red="1.0" green="1.0" blue="1.0"/>
```

```
</light-source>
```



World <agent-matrix>

- ◆ Usually only have one matrix
- ◆ Control size and visibility

```
<agent-matrix name="AGENT-  
MATRIX11508" rows="20" columns="20"  
layers="1" is-grid-visible="false">
```