ChemQuest [Mar 16, 2011]

Package Content
- AceticAcid.as
- bg.png
- Cell.as
- ChecBoxRenderer.as
- Ethane.as
- Ethanol.as
- lab.fla
- IQuestion.as
- MenuSelectEvent.as
- Methane.as
- readme.doc (this file)
- Slot.as
- SodiumBiCabonate.as
- Sounds
  - Funk.mp3
  - Submarine.mp3
- textLayout_1.0.0.595.swz
- Water.as
  -

-----------**Change Log**------------
- Added instruction text
- Added sound effect when drop the element in place
- Added back button

========= **Known Bugs** ==========
N/A
==============================

AceticAcid.as
CarbonDioxide.as
Ethane.as
Ethanol.as
Methane.as
MethylAlchohol.as
SodiumBiCabonate.as
SodiumChloride.as
Water.as

There are three main functions:

isLegalDrop(dropObj:MovieClip):Boolean is the function that check weather or not the answer is matched.

function getHitSlot():Slot returns the slot so that the main stage can use x and y coordination to put the symbol in slot.

function clearAnswer():void is the function that clean up after the question is finished

IQuestion.as

Interface class for questions symbol.The purpose is to enforce and provide utility functions.

bg.png
lab's background

Cell.as
Cell.as is a file that contain class definition of each cell. each fields purpose will be described below.

1. *slotNumber* is a variable that keep tracking which slot is it on. [default is 256]
2. freeElectronsNumber is a variable that tell the slot how many electrons should be shown.

lab.fla
lab.fla is a main file of the screen. each modules purpose will be described below.

There are three layers: Action,Tables,bg.png.

• *Tables* layer contains those cells drawing
• bg.png layer contains picture for lab background
• Actions layer contains actionscript that control the behavior of the lab screen which has important fields and functions described below
1. *m_posXBeforeDrag* is a variable that remember the position X of drag object so that If drag is not allow animation can be perform correctly
2. *m_posYBeforeDrag* is a variable that remember the position Y of drag object so that If drag is not allow animation can be perform correctly
3. m_LastDragObject:MovieClip is a variable that remember which instance initiate the drag event. It is used in couple places mainly for perform delete or set alpha back in case illegal drop is made.
4. *function onClickToMakeCopyAndDrag(event:MouseEvent):void* uses for creating a new instance of the element cell
5. *function initDuplicateData (dupObj:MovieClip,posX:int,posY:int,symbl:String,freeElectronNumber:int):void* uses for copying data from the original (from the table) to the new instance
6. function onReleaseToDrop(event:MouseEvent):void uses for controlling drop behavior such that allow to drop only on a slot.

7. *function removeObject(e:TweenEvent):void* uses to remove an instance after an animation ended.
8. *function setBackProperty(e:TweenEvent):void* uses for setting alpha of instance back to normal (alpha = 1) after animation ended.
9. *function onInstanceDraging(event:MouseEvent):void* uses for move Instance around and does not make a copy. [has not been used]
10. *function initCellsBehavior()* uses for registering eventlistenner.
11. *function initCellsData()* use for enter data to each cells

Symbol in Library

- **AceticAcid :** a symbol that contain a question consists of slot symbols.
- **button_Next :** a simple button in which use in navigating to next questions.
- **Cell** : contain a piece that constructs a table. field name "*symbol*" is used to contain name of each cell.
- **Component Assets** : a folder contain default skins for datagrid and button
- **Ethane** : a symbol that contain a question consists of slot symbols.
- **Ethanol :** a symbol that contain a question consists of slot symbols.
- **Menu:** a selecting screen that allow user to pick what compound they want to work on.
- **Methane** : a symbol that contain a question consists of slot symbols.
- **Slot** : symbol contains two elements: Electron and square.
- **SodiumBiCabonate :** a symbol that contain a question consists of slot symbols.
- **Water** : a symbol that contain a question consists of slot symbols.
- **WhiteStrip** : a white background that see behind the questions on lab screen.
- **Helper folder** : contains symbols that use navigating first time user.[not in use]

Slot.as
Slot.as is a class that uses for controlling visibility of electrons

textLayout_1.0.0.595.swz
containing a fonts that use in the project [Helvectica Neue].

MenuSelectEvent.as
Custom event that carry out the index that is chosen by user.

CheckBoxRenderer.as
A checkbox class that implements ICellRenderer so that it can me render in datagrid.
Also it has been altered behavior so that it does not take input from user.