Atooms
To
Moolecule

"A chemistry based puzzle game. Explore the lab to see how atoms changes into molecule."

Version 2.0
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Developed and published by BitSits Games, Inc.
http://www.bitsits.blogspot.com/
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We hope you enjoy the game!

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SYSTEM REQUIREMENTS

OS*: Windows 2000/XP/Vista/7
Additional Requirements: NET 2.0 Framework, XNA 3.1 support
Processor: 1.2+GHz
Memory (RAM): 1+GB
Free Hard Drive Space: 65+MB
DirectX Version: 9 or later
Sound: DirectX® 9.0c compatible sound card
Video: DirectX® 9.0c compatible video card, Shader Model 2.0 required. 256+MB
Color Quality: 16-bit or 32-bit color mode
Controls: Keyboard and mouse

*You must be an administrator to install and run this game.

HELP

If you require assistance with your game, please visit us here: http://www.bitsits.blogspot.com/
http://www.bitsitsgames.blogspot.com/

PLAYING THE GAME

Goal

Atooms to Moolecule is a game where you are in a Chemistry lab. Your task is to make molecules and solve different puzzles of Chemistry lab. You can arrange atoms to make ring, linear, small or big molecules.

The Basics

Atooms to Moolecule is played in Chemistry lab in different lab equipment. The lab equipments can be test tube, beaker, conical flask and other. The basic goal in each level is to make different kinds of molecules with different objectives. Drag the atoms to make bonds with nearest atom. Make bigger and bigger molecule.

To make a complete molecule all the atoms in the molecule must be sleeping which can be achieved by using all their bonds.

Controls

Drag and drop using LEFT mouse button to connect the atoms. Click the RIGHT mouse button on any atom to break all its bonds. Use Esc to pause the game.

Atoms

Atoms are of five types of different colors:

- **Hydrogen (blue):** make single bond
- **Oxygen (yellow):** makes double bond
- **Nitrogen (Purple):** makes triple bond
- **Carbon (Red):** makes four bond
- **ElementX(Black):** bonus atom can make single, double or triple bonds.

Radium

Green enemy atom tries to break the bonds. Radium atom can be dragged using LEFT mouse button. Keep your molecule away from the Radium.

Electrode

The high voltage electrode splits the bonds. Electrodes are fixed so don't get your molecules too near to it.

Atoomic Energy

Atoomic Energy in the top left side of the screen is the total Atoomic Energy collected in the level. See Atoomic Energy in Scoring section for more details.

GAME MODES

Adventure

Adventure Mode is the primary mode, and it allows you to learn the ways to make molecules. Adventure Mode is divided into 8 stages. The stages are:

- Tutorial
- Ring-O-Ring
- Absolute Zero

- Clear All
- Electro
- pH Scale
- Clipboard
- Radio Active

Lab Setup

Lab Setup is a sand box mode where you can setup a lab of yourself. Lab Setup is divided into:

1. **Equipment mode:** Allows you to add, move, rotate and clamp lab equipments in the lab area.

   Lab Equipments are:

   - **Electrodes:** Gives high volt shock. Keep the Atooms away
   - **Thermometer:** a cute Kelvin scale
   - **pH Scale:** it can set acidity of Atooms
   - **Funnel:** it can filter down the Atooms
   - **Test Tube:** Hold few Atooms but very useful
   - **Conical Flask:** "broad base narrow neck" flask
   - **Measuring Cylinder:** measure cubic centimeters of Atooms
   - **Beaker:** it can hold tons of Atooms
   - **Clipboard:** reaction note pad

   Clamp It: Holds some equipment in its place.

2. **Atoomic Mode:** Click LEFT mouse button to add and RIGHT mouse button to remove atoms.

SCORING

Atoomic Energy

Atoomic energy of a molecule is the sum total of all the atoms Atoomic Energy in it. Atoomic Energy of a atom is the number of atoms it is bonded to. So more you attach atoms more is your score. For Example: A carbon attached to a oxygen and two hydrogen atoms, Atoomic Energy of the molecule = 3 (for carbon) + 1 (oxygen) + 1 (hydrogen) + 1 (hydrogen) = 6.

Ring Bonus

In some levels the more you can form ring in a molecule more is your scour. For Example: If you can make 2 Rings your Atoomic Energy will be multiplied with (2 + 1) = 3 times.

Hydrogen Bonus

In the level pH Scale Hydrogen bonus is the bonus multiplier. Your Atoomic Energy is multiplied with the total number of Hygrogen present in it.

GAMEPLAY TIPS

Basic Tips

1. Try to make bigger molecules.
2. Try to make ringed molecules.
3. Use more of carbons to make big molecules easily.
4. Use bonus atom in the end to make it complete.
5. To make ringed molecules connect the atoms at proper angles.
6. The atoms of specific type are generated randomly.

General Tips

1. To get more Hydrogen bonus use Carbon more.
2. Drag out the Radium Atoms to avoid breaking of bonds.
3. Strike the non bonded atoms with the Radium atoms to deflect.
4. In level Eletcro make ring molecules to stay in the center.

SCREEN SHOTS

Level: Absolute Zero, here we see huge ringed molecule and a cute Kelvin thermometer
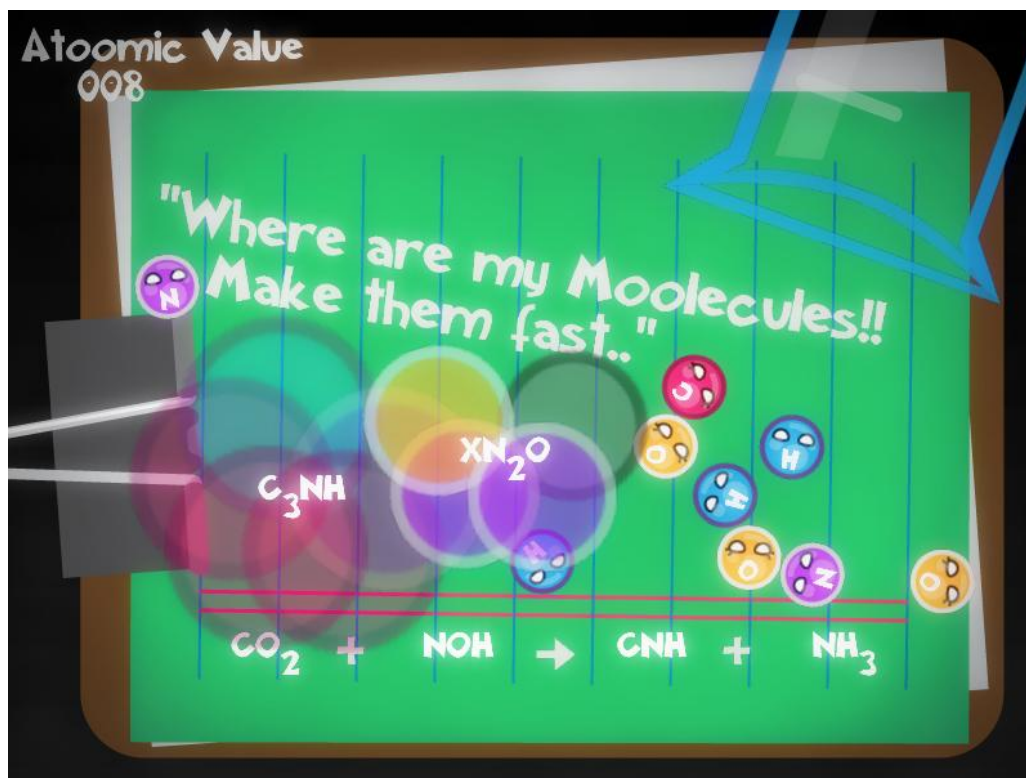
Level: Clipboard, here we can see an equation is written below and some molecule disappearing.

FUTURE PROSPECTES

The initial focus of this project was to develop a small prototype of a game. This project will have a very bright future if the following can be incorporated. Some of the bright areas we are working on are:

- **Network Support:** Networking support can be added, which will let many users to play the game simultaneously from anywhere.
- **Level Editor:** A level editor (also known as a map, campaign or scenario editor) used to design levels, maps, campaigns, etc and virtual worlds for a video game. A level editor can be integrated in this game, which will allow the player to design their own levels and have fun.
- **Dual Mode:** In dual Mode two users can Play chance by chance, which can be implemented to make this game more exciting and interesting.

VERSION HISTORY

2.0 Bug fixes and new features.
1.4 Bug fixes and new levels added.
1.3 Bug fixes and World physics changed.
1.0 Initial Release.

CREDITS

This game was created by BitSits Games, Inc.

Game Design, Sound, Programming and Art: Shubhajit Saha
Game Concept, Level Designing and Writing: Maya Agarwal

Physics Engine: Erin Catto's Box2D physics engine under the MIT License.

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Thanks to all our beta testers and players for their valuable feedback!

LEGAL INFORMATION

REFERENCES

Wikipedia, the free encyclopedia that anyone can edit: http://en.wikipedia.org/

MSDN, Microsoft Development, Subscriptions, Resources, and More: http://msdn.microsoft.com/

App Hub: http://create.msdn.com/

XNAtutorial.com: http://www.xnatutorial.com/

XNA Development: Game Development for the masses http://www.xnadevelopment.com/