

# Apps Dreamer

## ABSTRACT

COLLEGE NAME: Bengal Engineering and Science University, Bengal Institute of Technology.

TITLE OF PROJECT: **Atooms to Moolecule.**

TEAM REGISTRATION NUMBER : appsdreamer021

TEAM MEMBERS :

Shubhajit Saha ([bitsits@gmail.com](mailto:bitsits@gmail.com)) +91-9038532644

Maya Agarwal([bitsits2@gmail.com](mailto:bitsits2@gmail.com)) +91-9038532642

Link to video of the game: <http://www.youtube.com/watch?v=F1EuZnheoMQ>

# ABSTRACT

## 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.

## CATEGORY PREFERENCE : **Game Designing**

### OBJECTIVE (up to 30 words):

Very few games are both entertaining and educational, and so children are not allowed to play games for long. But atoms to molecules have both the characteristics, so it make our idea very unique and useful. We always wanted to see atoms coming alive out of my textbook in different behaviour jumping around.

We have always missed my chemistry lab so we decided to add a virtual chemistry laboratory.

### IMPLEMENTATION METHODOLOGY:

#### Tools:

Adobe Illustrator

Microsoft Visual Studio Express Edition 2008

Microsoft Cross-Platform Audio Creation Tool 3 (XACT3)

Microsoft XNA Game Studio 3.1

Erin Catto's Box2D Physics Engine

#### Techniques and Methodology:

Object Oriented Programming, Event Handling, Game Loop, Texture Rendering, Post Processing, Physics and Math Calculation, Loading and Saving Data from XML, Visual Debugging, Distinct Artwork.

**APPLICATION (upto 50 words): (*Size 12 in Times New Roman*)**

- This game introduce the very basic concept of different kind of bonds(single, double,triple), atoms in a very interesting manner.
- It can be used as a brain teasing puzzle.
- The most important application of a game is to have fun and entertainment, which is provided completely in this game.

**JUSTIFY CHOICE OF CATEGORY:**

This is a game designing project because our game provide fun, It has different levels, game objective, score, retry level, attractive graphics, music, sound effects, save score, user friendly UI, challenging levels. It also have sand box section – Lab Setup.

**BASIC EXPLANATION OF THE PROJECT:**

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.

**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/>