# BOMB ZUKA

Created By xCept

Behind the Scenes

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# Behind the Scenes
# of
# Bombzuka

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(A Glimpse Into the Making of...)

Bombuzal ----------------------------> 1988 Imageworks

Bombzuka -----------------------------------> 2006 xCept

ALL BOMBZUKA CONTENT CREATED BY XCEPT

# The
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July 25, 2006

The main title screen of Bombzuka changed quite a bit from the initial draft to the final product.

**Top:** One of the earliest versions of the title
**Bottom:** Final release version of the title

August 22, 2006

I worked on the main player model on-and-off from June 8th to August 1st.

There are actually three different player models used in the main game, two of which are animated.

Higher-quality player models were created and used for the title screen and a few other areas.

Final Low-Poly
(829 Polys)

Final High-Poly
(Loads of Polys)
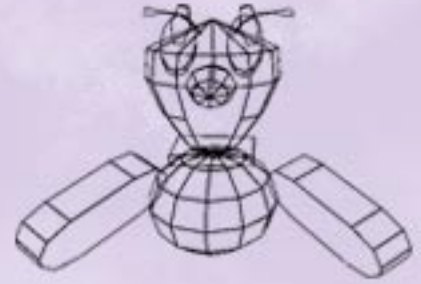
Squeak 1
(238 Polys)

Squeak 2
(558 Polys)

Squeak 3
(600 Polys)

There are two different types of droids within the game, named Squeak and Bubble. Each of these droids will take on three forms during the course of its life (Inactive, Active, Dying).

Bubble 1
(262 Polys)

Bubble 2
(582 Polys)

Bubble 3
(538 Polys)

**Bomb**
**(296 Polys)**
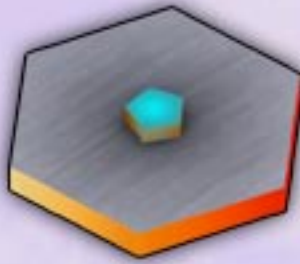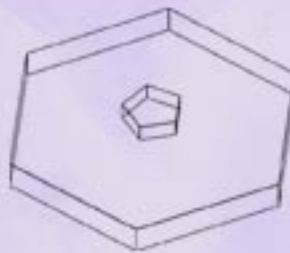
**Mine**
**(33 Polys)**

**A-Bomb**
**(352 Polys)**

Just like virtually all of the other objects and textures used in Bomb-zuka, the bombs and mines were also re-modeled and re-textured multiple times before reaching their final states.

Since explosives play a major role in the game, I had to try my best to keep the polygon counts low while maintaining good quality models.

### IN-GAME EXPLOSION OBJECTS

In the game, there are three different sizes of A-Bombs and Regular Bombs, two different sizes of Mines, and one Swell Bomb that alternates between a small, medium and large Regular Bomb. I only modeled the three base objects and handled the size and type of explosive through the game's code.

The in-game help system sprites for all explosives were created by manually rendering out the required objects at the specified resolutions (three views).
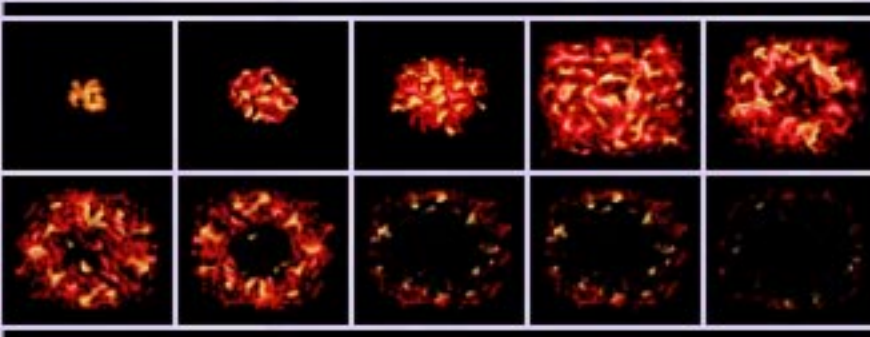
The explosion sprites were not designed for realism, but rather they were de-signed to look and behave much like those of the origi-nal.

I used slightly more vivid colors and also added two frames of animation.

Switch
(38 Polys)

Spinner
(136 Polys)

Dexter
(192 Polys)
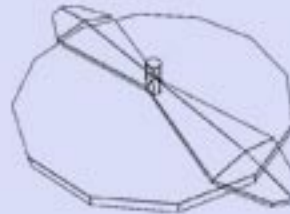
Temple
(250 Polys)
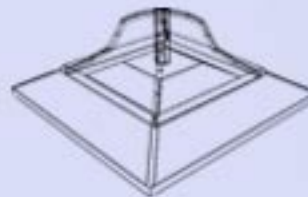
Teleport
(368 Polys)

Sinister
(168 Polys)

## TILE (PLATFORM) TEXTURES

Bombzuka features 10 shades of tile colors along with four special tile types (Ice, Dissolver, Riveted, Slot). All 130 levels were designed to match the same colors as used in most releases of the original.

The Spinner and Teleport objects are the only general objects that have been manually animated. All other objects including both enemy types and the Switch are controlled and animated from within the coding.

# S O U N D  &  M U S I C



The four "key players" used to create the sound and music for Bombzuka

The electronic keyboards displayed above are the ones that I used to generate most of the music and sound effects heard within the game. These keyboards include:

- Casio SA-20
- Casio CA-100
- Casio CTK-150
- RadioShack MD-1160

At the time of this writing, I currently have approximately two dozen different electronic keyboards in my collection. I feel that these relatively cheap devices are a must-have for anyone wishing to produce their own audio for games or other projects.

The music that plays throughout the game is a combination of preset melodies and my own compositions (which are based off of the original Atari ST version's theme song). Unfortunately, time got the best of me and so I was unable to seriously fine-tune any of the music.

## MOST DIFFICULT SOUND EFFECT

For me, the hardest sound effect that I had to produce for Bombzuka would have to be the sound of an explosion.

After days of experimenting, I finally recorded the explosion effect by mixing a Snare Bass note with a few other assorted percussion instruments.

Many of the sound effects that I originally recorded were re-done once or twice before the final relase.



In-Game Audio Menu
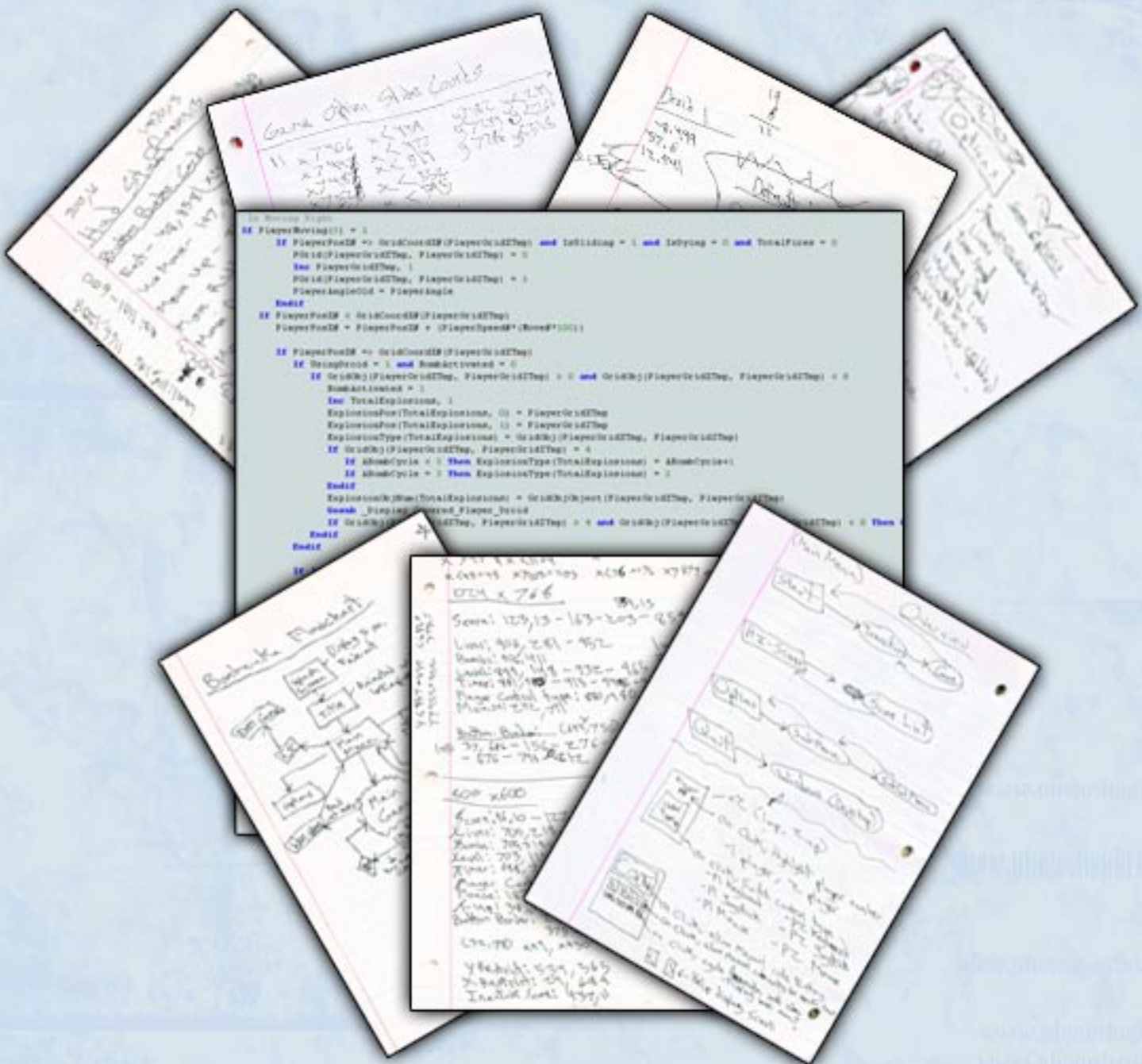
Development-wise, on paper Bombzuka consumed one entire spiral notebook of design documents and notes! Coding-wise, the total line count (including a level designer) comes to a whopping 20,890 lines of code! This means that Bombzuka has more than doubled the line count of my second lengthiest project ("The Little Eggy That Could").

Some of my most difficult challenges while programming Bombzuka include: implementing all of the chain-reaction and explosion types, creating and integrating all of the menu options and making the entire game more accessible to all (mouse-controlled and so forth).
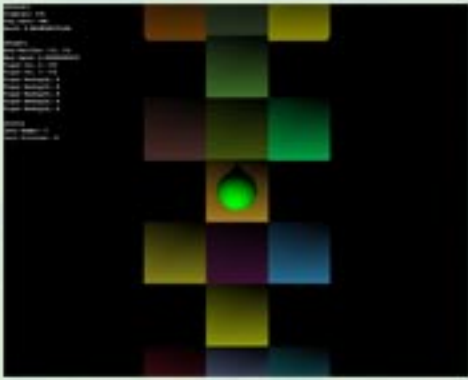
June 09, 2006


June 11, 2006
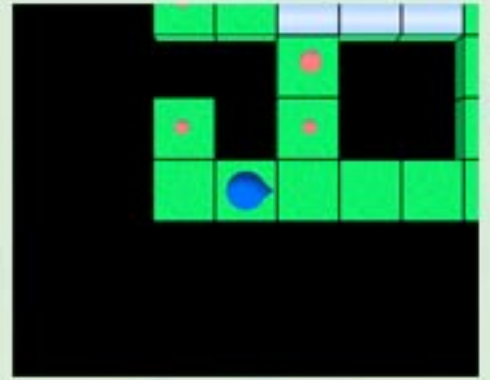

June 13, 2006


June 15, 2006


June 17, 2006


June 18, 2006


June 19, 2006


June 22, 2006


June 24, 2006


June 27, 2006


July 03, 2006


July 05, 2006

July 06, 2006



July 07, 2006



July 13, 2006



July 15, 2006



July 19, 2006



July 25, 2006



July 26, 2006



July 30, 2006



August 08, 2006



August 15, 2006



August 19, 2006



August 27, 2006

# Introduction

I am the sole developer of all games thus far released under the 'xCept' title.  I've been programming and dabbling in t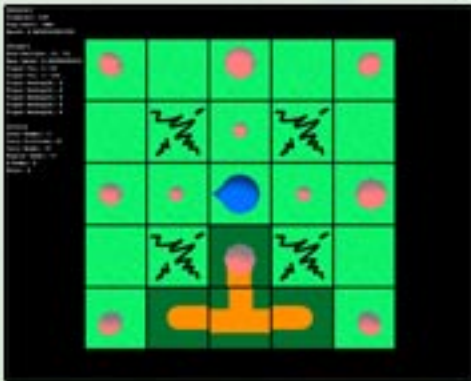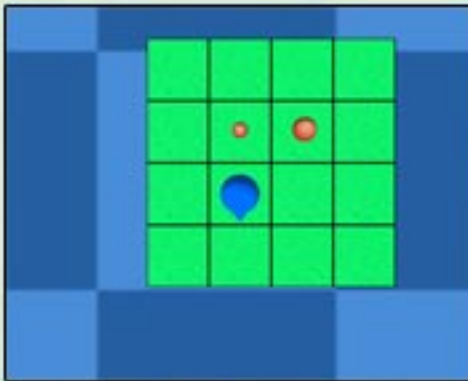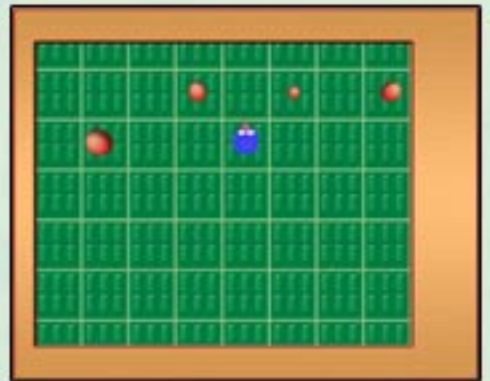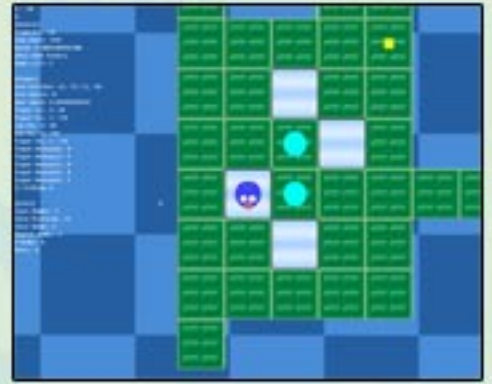he art of game development and remakes for a number of years now, my only complaint is that at the moment I just can't seem to find enough leisure time to really go crazy with this kind of stuff!

When developing any given game, I always strive to produce all elements myself including the coding, graphics, models, sounds and music. While there are obvious drawbacks to such an approach, especially when it is a time-sensitive project and so many high-quality free resources already exist online, I feel that there are just as many positives involved in the process as there are negatives, if not more!

So, the games of mine might be lacking in one department or another (due to lack of time and/or experience in creating such content), but I still feel good just knowing that each player will be greeted with totally fresh and original content upon playing any of my games for the first time.

This year, I have released three full games to the public; The Little Eggy That Could (an Easter-themed game inspired by Marble Madness and Jumping Flash), Packin' Plax (a packaging-related game based off of the arcade hit Klax), and of course, Bombzuka (a remake of Bombuzal) for the Retro Remakes' Big Compo 2006!

I began searching for the perfect game to remake back in mid-May of this year, and the search continued for another full week after the official contest rules were posted.  My main goal was to find a game that could easily support the integration of various accessibility options, as that was a big part of this year's competition.  Furthermore, I wanted a game that offered simple yet addictive gameplay, lots of levels, and some good replay value.

I rejected game after game for a million different reasons.  However, after having a good go at Bombuzal on the Atari ST and thoroughly enjoying the experience (while also recalling that I had played the same game on Super Nintendo years earlier), I concluded that Bombuzal would probably be the perfect game for me to remake for the very reasons I was hoping for. I checked out a number of sites and read all I could about the game including many very positive reviews, and the rest is history!

Development began the evening of June 8th, 2006...

# What Went Right?

**Graphics and Visuals** - In my opinion, the original version of Bombuzal released some 18 years ago had already sported some impressive graphics and art. Thus, I knew from the get-go that trying and faithfully reproduce and update all of the graphic elements whilst maintaining the original visual style, in true 3D on top of it, would be no easy task. Indeed the graphics took a good chunk of time to finish, but in the end I am very pleased with how all of the graphical conversions turned out. In addition, I integrated various screen resolutions and other visual options which can be tweaked to further customize the quality and appearance of the game.

**Levels** - All 130 of the original, mind-bending levels have been reconstructed in 3D. When playing through the original game, I did come across a small handful of levels that I felt were either too difficult for the stage or relied too heavily on perfect timing to succeed. Thus, these levels have been slightly modified, although more faithful originals for the said levels are also included.

**Interface** - The title screen, main menu and in-game HUD have a faithful yet somewhat modernized appearance. All of the original options and interface features are supported, along with additional improvements created for both accessibility and modernization reasons. For example, the game now automatically saves the password for each level reached, so there is generally no need to manually enter any codes. The in-game HUD features a new row of buttons at the bottom which can be used to control all actions of the player with just the mouse -- or you can turn on 'exclusive mouse control' which offers an alternate way to control the character with just a mouse.

**Options** - Originally, Bombuzal had no options other than the few which could be set on the main menu screen. I have added many new options (maybe too many, as some have said) including visual, audio, game and player settings. By default all of the options are set so that they most-closely match the original version, but many difficulty options along with player options and so-forth are adjustable via the Options screen.

**Gameplay** - Those who are familiar with the feeling of the original will (hopefully) not be disappointed with the gameplay that is delivered through my remake. Speed-wise, control-wise, animation-wise and scoring-wise I would like to believe that I came close to matching that of the original. The timer system is a bit different (and can be changed or even disabled via the options) but in the end it still functions much like the original.

# What Went Wrong?

**Underestimating Bombuzal's Complexity** - When I first decided to remake Bombuzal, I had honestly never even reached the half-way point in the original so I wasn't fully sure what to expect or at that point even how many levels there were.  About three weeks into the development process I began playing each level through, which took around 1-2 weeks to complete. It was at around level 70 that I realized the game was far more complex than I had initially anticipated - with all kinds of complex switches and teleports and such. Likewise, the largest map was also about twice the size of what I expected it to be so I had to re-work much of what was already done to accommodate larger levels and more complex features.

**Music** - While I am not too upset with most of the sound effects (and compared to the few sound effects available in the original, I quite enjoy the new ones), I do not feel like the music does much justice compared to the original. Unfortunately, I only had several days to produce and integrate all of the music and I did so while also working hard on other aspects of the game. Luckily, the music can be silenced if someone gets too annoyed with any of the music (there are 8 in-game music files which are randomly shuffled after each death).

**Chain Reactions** - The explosive chain reactions in the game work well in the final version, but that certainly wasn't the case for a good 9 weeks of development. It was difficult enough to accurately integrate the nine different explosion types and functionality, but then there was also the Temple object that sucks up all of the explosions adjacent to it, while minimizing the explosion radius of other large bombs nearby.  It is a very long and dry story, but after days of work and experimenting I finally discovered that even the original ports of the game handled the detonation order and behavior of Temple objects differently, which really threw me off.  In the end, I ended up doing what I felt was 'right' with the explosion effects, and they are still very similar to most versions of the original.

**Final Testing** - Although I had tested the game on three different machines and even played through all of the levels several times to ensure that they were finished and passable, I was unable to do much of any testing after packaging the entire game up and uploading it, just a short while before the deadline. For this reason, I did release a patch the next day to resolve a few bugs I had found after the competition ended - though luckily none of them seemed terribly critical.

# Conclusion

Development ended the evening of August 31st, 2006...

Overall, I am very satisfied with the way Bombzuka turned out.  It was by far the most complex and tedious project I have attempted to date, but the feeling of pure accomplishment at the end, mixed in with the comments and feedback I have since received, have made every living moment of the development process well worth it! Plus, I find that I fully enjoy playing the game myself, and that's always a good thing. :)

In the unlikely event that Tony Crowther would at some point actually discover and play my remake of his original classic, I could only hope that it would not disappoint!
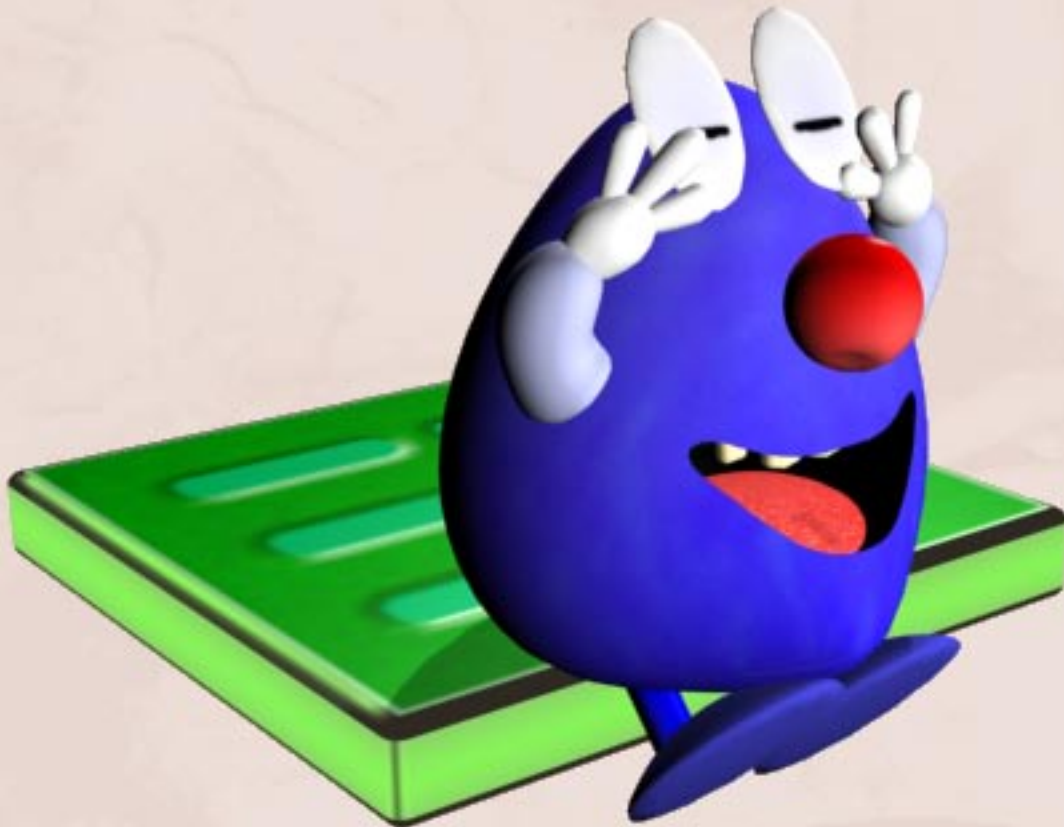
# General Game Info

Bombuzal is an action-puzzle game originally developed by Antony Crowther and released by Imageworks/Mirrorsoft for a variety of platforms starting as early as 1988.  Bombuzal was ported to several of the major home computers of the late 1980's including the Amiga, Atari ST and Commodore 64.  Furthermore, the game was released for MS-DOS in 1989 and was distributed for the SNES console in both Japan and the United States (under the name Kablooey) between 1990 and 1992. After the release on the SNES platform, there were no more official ports of the game that I am aware of.

On the remakes scene, I believe that there have been just a couple other (partial) remakes of Bombuzal.  One version is an online Flash game called "Detonator" produced by MiniClip and released around December 2003. The other is a more obscure remake titled "3D-Bombuzal!" released around February 2004 by a Japan-based developer nicknamed "Blacker" (the official site has been offline for a long time). In reality, both of these games are more-so 'influenced' by Bombuzal than straight-up remakes since neither of them includes many of the original objects or any of the original levels (Detonator even stars a totally different character).



Original          Detonator          3D-Bombuzal!          Bombzuka

As I mentioned in the introduction, I opted to remake Bombuzal (Bombzuka) because I still enjoy playing it today and I feel that such a game allowed me to integrate plenty of difficulty and accessibility options.   In addition, the game is easy enough to get involved with but the levels are challenging enough to hopefully keep you coming back for more.  Also, I feel that the game has great replay value since there are 130 levels and once you beat them all, you'll almost surely have forgotten what many of the older levels even are let alone how to solve them.

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# http://www.m3Dr.com
For more great free games!

## The Little Eggy That Could

A cross between Marble Madness and Jumping Flash!  You star as an egg and must make your way through a multitude of levels whilst collecting all the candies of the land for the Easter Bunny.

Being the egg that you are, you must be careful not to fall too far or you'll crack.  Likewise, avoid all other hazards or you'll be scrambled for sure!

Increasingly difficult levels along with colorful graphics and addicting gameplay make this game one worth checking out!

- 25 levels spread across five different worlds
- 20 varying types of candy to collect
- Numerous hazards and power-ups
- Unlockable progress states and a hi-score board

## Packin' Plax

This game pays tribute to the classic arcade game, Klax!  The objective is to group the various plaques ("Plax") together so that three or more of the same colored plax are connected either horizontally, vertically, or diagonally.  Once this is done, the matching group  will be packaged up and ready for shipment!

Watch out, because if you miss catching too many plax on the loader you'll be fired from the job! It's equally important that you not let the packaging table get too filled or else it's game over.

- Simplistic, yet addictive gameplay
- 10 plaque color variations as you progress
- 12 different power-ups and power-downs
- Increasingly difficult gameplay
- Game options and a hi-score board