Postmortem: Gamevil's *Nom 2*

By Bong Koo Shin

[Gamasutra is proud to present this postmortem for Gamevil's innovative 'one-button' cellphone title Nom 2, part of a series from the Skipping Stone developer which is a significant hit in the company's native South Korea, but not yet well known in the West. The article is a companion piece to a postmortem of the original Nom that appeared in the September 2006 issue of Game Developer magazine.]

Introduction

Nom 2 is the sequel to *Nom*, the well-known casual one-button mobile game. *Nom 2* includes several features, including some not found in the original game such as two different VM (virtual machine) applications, a function to adjust the speed, geographical features, and 12 different stages with two save points found in each stage (the length of each stage in *Nom 2* is four times as long than *Nom*).

The official *Nom 2* website explains the game as follows:

"The revolutionary "rotating" game is back with its sequel, Nom 2! This time Nom travels through the realms of the mind as he runs, leaps, and fights his way through a wide range of obstacles and enemies. Rotate your phone as Nom reaches vertical boundaries at the edge of your screen! Have you ever wanted to write a message to extraterrestrials? Do something you've never done before, transmit messages to outer space via satellite with Nom 2!"

- One button game play - do everything with just one hand and one button.
- Improved "rotation" mechanics - "Rotation" allows Nom to leap onto all four sides of your screen and you rotate your mobile phone as you play.
- Do even more off-the-wall things in this easy and intriguing game for anyone to play.
- Find your rhythm and groove as you master the timing techniques essential to just keep on running!
- Run through all twelve stages in this unique and addictive game that you just can't find anywhere else.
- More-in-depth stages! Each stage is four times as large as the original Nom stages!
- Find out who's the best and upload your high scores to the leaderboard on GAMEVIL LIVE!
- More than just the leaderboard! Transmit messages to outer space via satellite with Nom 2!"

Nom 2 was developed to take advantage of all 4 screen rotation possibilities, and features backdrops that were designed based on a pop art style. Similar to the original game, the girl, dog, and grandma also appear in *Nom 2*, but the events are different from *Nom*. The game features 15 types of obstacles, 13 monsters, 4 bosses, and an unique Out of Body system.

Nom 2 aural accompaniment was also given special treatment, as the game features support for stereo sound, and includes a eclectic soundtrack featuring both techno and Korean-style music. Another feature found in *Nom 2* is what is called the ECG, or External World Contact Game. This is the world's first game to send user messages to outer space.

The success and great user response from *Nom* spawned the initiation of the *Nom 2* project. However, after I started to kick off the *Nom 2* project, I realized that it was much tougher than I thought. Well-known pop artists tend to struggle with their second album. If the second album has the same style of the debut album, fans will complain that there was no change. On the other hand, if the artist puts out a totally newly styled second album, fans will say that the style has changed too much. Therefore, in order to make the *Nom 2* project a success, I decided to get advice from users.

I gathered all the comments and reviews of *Nom* and divided it into good and bad. *Nom 2* had to emphasize the good and complement the

bad, so that the game would provide a better experience than the previous one. I also decided to put an entirely new feature that would fascinate users. This new feature was called ECG (External World Contact Game). If *Nom* was the world's first game to have to rotate the handset to play, *Nom 2* would be the first game to send a message to outer space by playing the game!

So by adding this feature, I wanted *Nom 2* to surpass the original version. *Nom* 2 would maintain the basic features of *Nom* (using 4 rotational angles, one-button feature etc.), but would have new graphics and a new game system that would increase game play time.

Because *Nom* was a big surprise to many users, I wanted the *Nom* series to keep on presenting surprises. This was a burden for the *Nom* series, because each had to overcome *Nom* itself. I am planning to put an amazing new feature in every *Nom* series, but since I've already used the mysterious space concept in *Nom 2*, I'm having a hard time deciding which concept *Nom 3* has to have.

What Went Right

1. Evolved but the Visuals are Still Nom

In *Nom*, the backdrops were plain, and when *Nom* rotated the playfield by jumping, then the color just changed. Also, the surface was expressed as dotted line. The reason why I used dotted lines in *Nom* was because if solid lines were used, it will be difficult to notice that *Nom* was running. Therefore, I used dotted lines so users could notice the screen scroll.

However, I had to realize if I used these dotted lines again in *Nom 2*, it would disappoint users. The challenge faced was that if I used dazzling and splendid graphics, then it wouldn't be *Nom* - it would turn out to be just an ordinary action platform game. I started to think about the type of graphic design that would be much more dense and attractive than *Nom*, but also had to fit *Nom*'s original image concept.

The difference between other typical platform type action games and *Nom* is that *Nom* uses very simple and atypical type graphics. I was having a hard time deciding how to fill the backdrops. Moreover, I also needed to consider the file size of the images. So I looked outside of the game to solve this problem. I walked around the streets and department stores to observe the new type of patterns that were fashion trends. At that time, patterns that were in sequence was the vogue, so I decided to apply this type of pattern to *Nom 2's* backdrops.

When I first applied these new patterns, it looked like cheap wallpapers, so I blurred the boundary lines of the pattern to give a much more natural look. Each stage had its own pattern design and the graphic design was quite abstract. As the stage levels got higher, the design concept also tended to be more mysterious. Each stage only used one 20x20 pixel (it may vary depending on the handset's screen size) sized image, which saved a lot of memory during runtime.

The new part of *Nom 2's* backdrops is that the land has upward and downward slopes, caves, etc. All the new geographical features are in black, and these features affect the game difficulty level. Splendid looking backdrops were scrolling, and coupled with black colored landscapes, gave the look of 20th century pop art. This result satisfied me and it really looked like *NOM* style art. In order to enhance the screen scrolling speed, the entire backdrop was saved on the back buffer.

2. Deal with the Boss with Just One Button

One of the key strengths of *Nom* is that it only uses one button to play the game. However, in *Nom 2* there are various types of bosses, so I also had to figure out how *Nom* could fight these enemies by using only one button. Make the boss approach *Nom* and attack the boss by using one button? That sounded too simple. So I created various attack moves for *Nom*. The first was when *NOM* encountered "Forgetful Brain."

Successful attacking had to be executed by matching the exact hitting point of the pointer in order to make *Nom* attack the boss. *Nom* would have to attack before the boss moves down and hits *Nom*. The second boss, which is the "Tongue that has a Strong Partiality", attacks *Nom* by sticking out its tongue. At that point *Nom* jumps on the tongue which then retracts, and presents an opportunity to kick the boss' nose. I personally liked this the most, and thought of it as a piece of art.

The third boss "NUM (another *Nom*)" comes up to *Nom* and engages in a fist fight. The screen is divided in half, and an arrow moves left and right. Press the key at the right time when the arrow points toward NUM and he will get hit. On the other hand, if the arrow points toward *Nom*, then *Nom* will get hit. The fun part of this is that the arrow has to point *Nom* in order to win the battle. Because the NUM is *Nom's* other self, if *Nom* gets hit, NUM will feel the pain.

People complained about this system saying that it was hard to match the exact timing of the arrow, but this was all calculated before people played the actual game. The reason why I designed it this way was because it is a dilemma to hit one's other self, and this type of mental conflict was implemented into the game system. If you concentrate hard and match the exact timing, it won't be that hard to attack in the right direction.

3. Out of Body System

The theme of *Nom 2* is "Out of Body." The basic hypothesis of this theme is that if the spirit splits from the body, it could move separately. I implemented this theory into an entirely new type of game play by dividing *Nom* into 2 parts: upper side and lower side, which represents the "Out of Body" concept. The user may control the upper *Nom* by using number 1 key and the lower *Nom* by using number 3 key. These two characters move separately and have to defeat different enemies and overcome different obstacles.

By controlling 2 different characters simultaneously, a user's brain has to work separately, and gets a weird feeling from this. It is just as if the two hands are from different people. The "Out of Body" system may be played at a later part in the game.

4. Unique Sound System

In the original *Nom* version, TTS (converting text into voice) was used to make the voice of "*Nom*". I tried to follow *NOM*'s unique tradition by creating the voice of *Nom 2* using a voice recorder. The voice used in *Nom 2* is mine, and after recording I converted it to a robot style voice. The menu music has a TB303 (electronic Instrument that uses basslines) feel, and uses a short loop melody. The background music is a type of Euro-Techno and for addictiveness I maintained a tempo of 137 BPM (to make the game addictive, I matched the beat of the music to a human's elevated heart beat).

The interesting part is that *Nom* is 135BPM and *Nom* 2 is 137BPM. The reason why I gave the games that difference is because within those 2 years (the gap between *Nom* and *Nom 2*), I thought that the patience of ordinary people became shorter than it was in the past. If we look around our everyday lives we could see that we have gotten faster in terms of thinking, making decisions, etc. than we have in the past. I believed that this kind of movement ought to affect game play as well.

Also, in the boss stages I remixed "Kookak (Korean Classical Music)" and "Techno" to give off more tension. If the handset supports stereo sound, then the user will have an even better sound experience better.

5. ECG (External World Contact Game)

The most unique feature in *Nom 2* is the ECG feature. Users can send messages to outer space by playing *Nom 2*. In order to send a message, the user has to clear all the stages and the story of *Nom 2*. After the user clears the last stage the user will see the ending of the game and will meet an existing creature (alien). Following that, there will be a short conversation between the characters about the importance of eternal love, and after that point the user may type in a message that is desired.

The reason why I put this kind of feature in the game is because I wanted to do something beyond the notion of gaming. Nowadays, people can log on to the internet and play online games with other users that live throughout the world. However, I wanted something more special than just a "game," such as reaching outside the world. *NOM2* was not only the first game to do this, but what also made it special is that it was done by "mobile." Users will type in messages into the 16x16 box, where they can arrange dots and write or draw whatever they want. The message is then converted into binary bytes and sent to a server, and stored for months until other messages are ready.

Once ready, these messages will be sent to a NSAU (Ukraine Space Agency) satellite, which is the world's second largest satellite, having a diameter of 70m. The messages will be sent to outer space using this satellite. This will serve the hope of mobile game users by sending their dreams to outer space. Isn't that a great experience? Also, everything is FREE if the user sees the ending of the game.

As of August 26th of last year, we have sent more than 160,000 messages from our users to a galaxy which is 45 light years away from earth. This was the first time in world history to send a huge amount of messages in a short period of time, and it all happened by playing a simple mobile game! It would be a great experience if the aliens would respond to those messages 90 years later.

What Went Wrong

1. Lack of Smoothness

Regardless of everything else, it would have been great if the character's movement was a bit smoother. However, this was not an easy job for us due to file size limitations, so the character's movement had to be simple and straightforward. We had to rely on only 2-3 frames of animations for the completed game.

Regular users will have no idea why *Nom*'s movement is stiff because they do not know about the frame limitations. As the mobile platform evolves I hope that *Nom*'s movement will be smoother and even see his muscles move!

2. Omission

2 years have passed since the launch of *Nom*, but game developers such as me still have to struggle with mobile hardware, because of memory size limitations. As time goes on, people will expect many more features, and new games will also have to compete with innovative games as well. Therefore, I needed to use a lot of memory on more images and sounds.

Less important features had to be omitted based on an importance ranking. This happens in every project, but what makes the difference is that we need to achieve better quality than before. We have to derive a better gaming experience by omitting the less important features and emphasizing the important ones.

3. *Too* Hot?

"Hot" is a good word that expresses the user experience of *Nom*. It really stimulates users with non-stop action, and once the user starts playing the game it becomes irresistible. Some people say that their eyes hurt because the game is so fast. However, this actually was all calculated while I was designing the game.
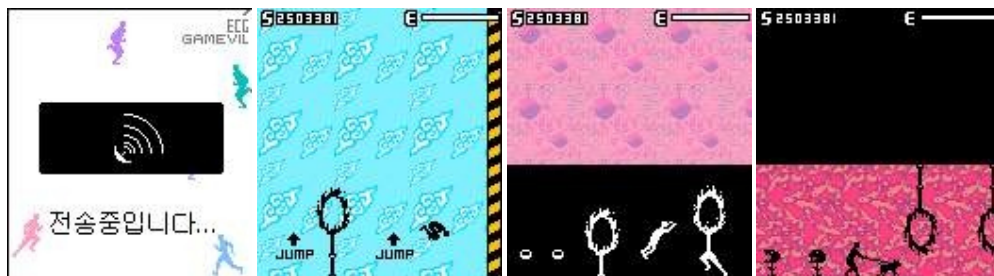
4. Disallowing Two Sounds

Currently, it is difficult to have two sounds play simultaneously in different channels in Korean mobile games. What that means is that the game can only have background music or sound effects play separately, and cannot have them play at the same time. In *Nom*, the background music plays until *Nom* encounters the earthworm and defeats it, the music pauses, the sound effect plays, and then the music is resumed. Since *Nom*'s background music was simple and had short repeated phrases, it dealt with this issue much better.

However, in *Nom* 2 , it was hard to cut the melody in short pieces, so we sacrificed short sound effects and just had the background music loop. Also, one of the reasons why we did it this way was because we had more obstacles and monsters in *Nom* 2 than in *Nom*. If we had the background music and sound effects repeat after one another other it might have been very awkward, and would have sounded like a scratched CD skipping. Despite that, we have maintained important sound effects that occur when *Nom* jumps to change the screen dimension. This was possible because the music changes when the dimension changes.

5. How about Nom 3?

After the success of *Nom*, I put everything that I could imagine into *Nom* 2. The limits of my imagination were space and aliens. In movies, mysterious events always conclude with aliens. This method was also often used in the famous TV show "The X-Files." An unusual incident occurs, and the conclusion is that it was done by aliens. It is obvious that if space and aliens are used, then there are not many subjects that can be used on the next version.

People often ask me, "Since space is used in *Nom* 2, what are you going to have in *Nom* 3?" I have also always asked this same question to myself. I now have the answer and am currently working on the design for *Nom* 3.


Conclusion

I matured while I was producing *Nom 2*. You could easily think *Nom 2* as *Nom 1,* and *Nom 1* as *Nom 0* . If *Nom 1* was started from a simple concept, *Nom 2* supplemented some features that lacked from *Nom 1,* and also reflected the theme of "space and aliens."

I learned a lot throughout this process. *Nom 2* may be a simple mobile game, but it was the game that reached outer space. Furthermore, it had sent over 160,000 messages in a relatively short period of time, showing the popularity of the game in my native South Korea.

Most of teenagers have cellular phones these days throughout the world, and it seems as though mobile games are one of the most relevant gaming platforms to teenagers. I have implemented my philosophy in *Nom* so that teenagers can learn something from the game. The *Nom* series emphasizes the importance of love. After playing *Nom 2*, one user wrote that he had learned how important he was to himself. I hope their dreams will spread throughout the galaxy.

I hope *Nom* 2 will be remembered as an important event in history by communicating peoples' hopes and dreams, as the world's first game to send messages to outer space…
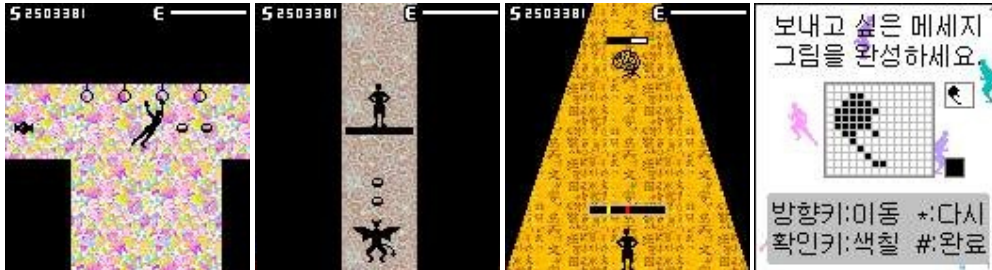
Game Data

Release Date : 2005. May (Republic of Korea)

Publisher : GAMEVIL Inc.

Developer : GAMEVIL Inc.

Platforms : GVM, GNEX, BREW, MIDP, WIPI

Number Of Developers : Producer 1, Programmer 2, Graphic Designer 1

Development Time : 8 months