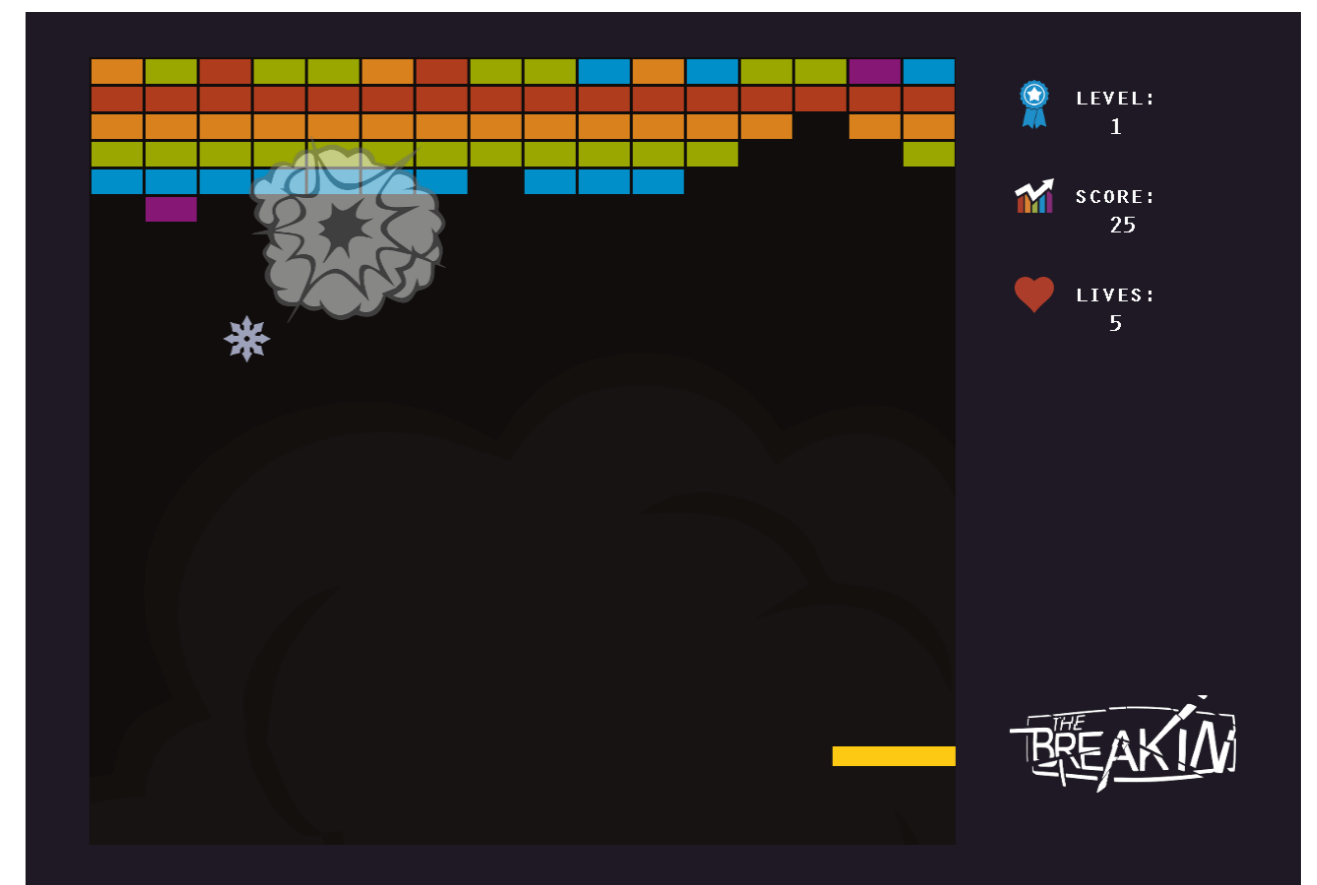


THE BREAKING



What is *break in*?

The deliverable is the game 'BreakIn'. The game is based on a story where your two best friends are kidnapped. The two friends and their dog are held in a compound and to save them you have to break through walls. The compound consists of three walls and a tower. One of the friends lost her shoe just behind the first wall of the compound. Your first goal is to break through that wall and there you'll find the shoe. After you found the shoe there are some complications, the dog of the friends is held behind the second wall, concerning the dogs need for food and water your time will be limited. When you saved the dog there is only one thing in between you and your friends, OK maybe two, besides the third wall there are also the enemies that will throw whatever they can find at you. When you finally save your friends you can destroy the tower, just for the sake of it.



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Program your Breakout
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Storyline

When you start level 1 <https://youtu.be/km0eFXnWWKM>

When you go to level 2 <https://youtu.be/xlwyXZy6NSM>

When you go to level 3 <https://youtu.be/U1v4hqwC9Xc>

When you go to level 4 <https://youtu.be/seYQbo9U2B4>

How it works on two levels

How it is visualized

Before each level an animation video will be shown to draw you into the story, elements from the animation are matched in the game itself.

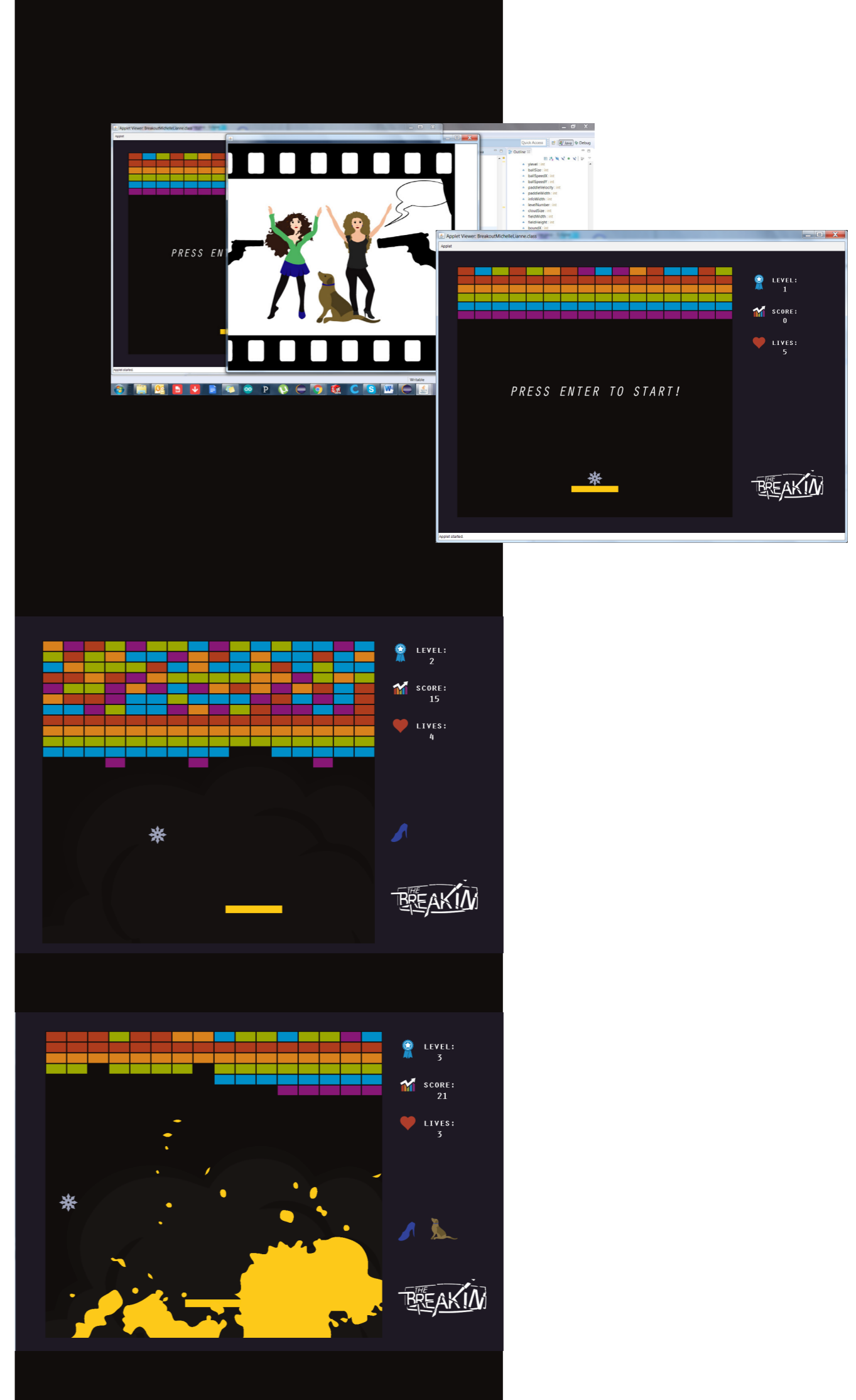
In level one you get to throw your awesome ninjastar (ball) at colourful blocks, you start this by pressing enter. Those colourful blocks visualize the wall of the compound. When your ninjastar hits a block a randomly chosen explosion sound, a screenshake and explosion cloud are the result. Besides that the block (from now on called bricks) isn't drawn anymore; which means it is not visible anymore. The ninjastar is very special because it can bounce from the walls of the game, your paddle and the bricks (right before it destroys the brick). You can throw an effect star by moving your paddle at the same time the ninjastar hits it. The paddle changes the x and y speed of the star (taking a maximum change into account) so it looks like a change in angle. To bounce the ball you of course have to move the paddle to right position with the arrow keys. To make the constant movement of the ninjastar possible, it is a thread.

Every brick that is destroyed will add a point to your score. The score is shown in numbers next to the playing field of the game. Next to your score your level and the amount of lives you have left to complete this level are shown here too. This location is the info bar, it also contains the logo 'break in'. If you destroyed all of the bricks you move on to level two.

In level two all the features of level one still exist but there is a new difficulty that you encounter, the time pressure. This time pressure is visualized by adding a row of bricks roughly every minute (because of a timer that runs with the ball thread). The maximum amount of bricks you have to destroy is twice the amount of level 1. If you destroyed all bricks that are visible at the screen at that moment you pass on to the next level. In the info bar there will also be a shoe icon drawn; this is the thing that you already collected in level one.

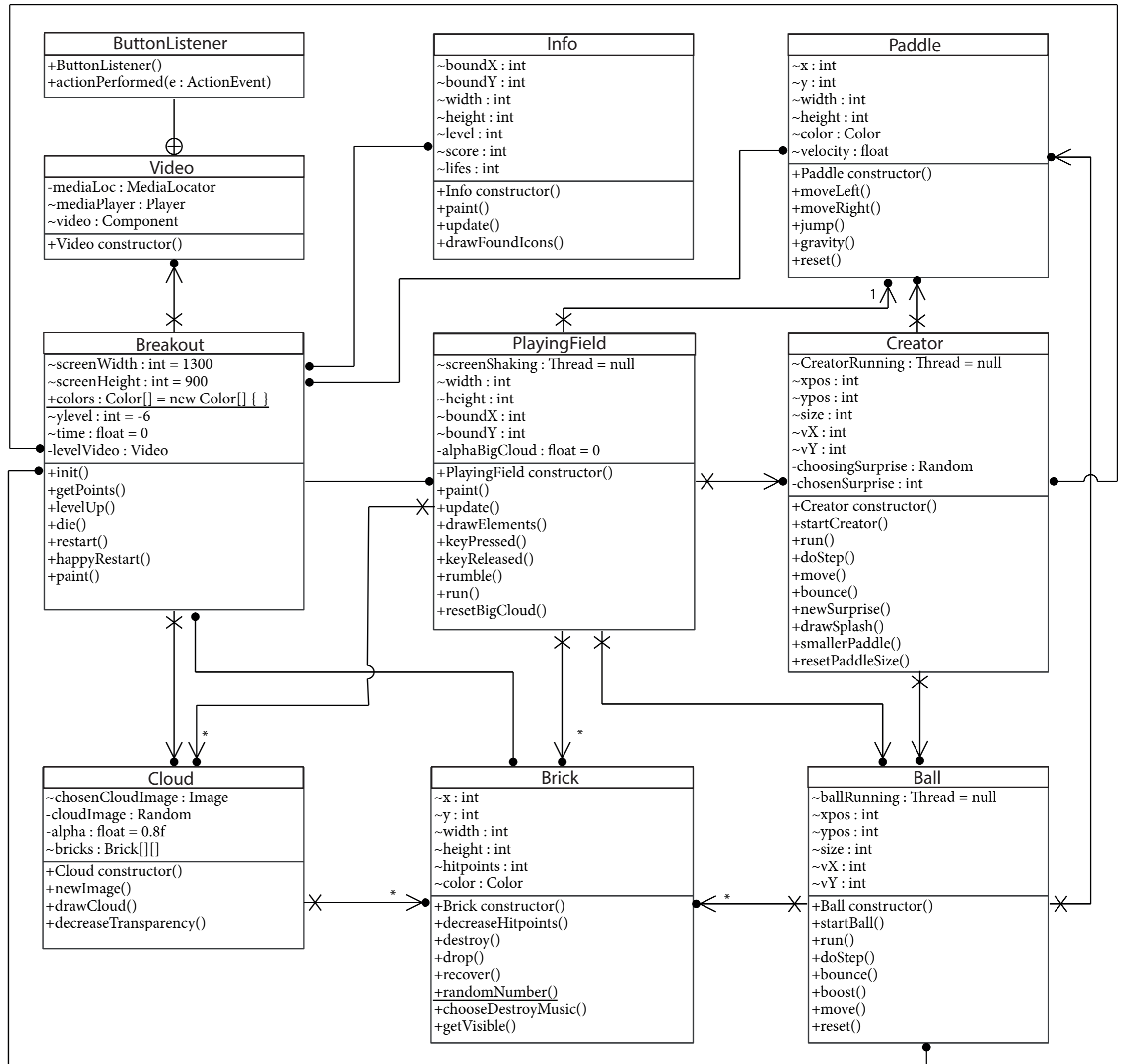
Level three doesn't have the time pressure; instead it has enemies that are trying to keep you out of the compound. This is 'the creator' in the game, the creator creates surprises, these surprises are meant to keep you out of the compound. A surprise is created roughly every thirty seconds. It is 'wrapped up in paper' and thrown out of the compound. The surprise moves around and bounces in the same way the ninjastar does. When the ninjastar hits the surprise this has effect on you. You can get a screen splash that partially blocks your view for a short while, or your paddle can be resized to a smaller version for a while. To be precise, this effect lasts until you hit a brick (because it is 'called back' in the thread of the playing field that causes the screen shake). The info screen now also shows the dog, you collected him in level two.

Level four is actually the same as level one. The only difference is that the info bar also shows the icon of your two friends. You are just destroying bricks for the sake of it. If you finished level four (you destroyed all bricks) the game closes itself (ancestor window visibility is changed).



What reacts to what

In the appendix a complete UML class diagram of our 'Break In' game can be found. This diagram shows the relations between all our classes. Furthermore all variables and methods are given per class. Since the full diagram is quite hard to read and understand, a simplified version is created. This UML class diagram only shows the important variables and methods. When possible methods are summarized into one method, for instance: bounceLeft(), bounceRight(), bounceDown(), bounceUp() is summarized to bounce() (in the class Ball).



Why it is fun in theory

Self determination

The game explores a few different areas. The first one is the storyline; the storyline gives meaning to the interaction. It makes the silly game of trying to hit a block with a ball more fun because of the metaphor. The blocks are not just blocks, they are bricks and part of a compound and you need to destroy them to get to your friends.

The animations of the storyline are made fun by sometimes waiting too long (I lost..... my shoe) which makes you wonder what she lost. But also by simply using stereotypes and street talk that is currently used a lot we make it more fun (ok ok chill, OMG, shoes and women etc.).

You can relate yourself to the game by using these stereotypes, the difficulties that are thrown at you during your life but also during this game. But most of all through the storyline, after all it's YOUR two best friends that have been kidnapped.

The ball itself (the ninjastar) is funny which draws attention and makes you want to play the game. The sounds also make it fun, because they are exaggerated or weird. If you laugh you have fun, if you have fun you want to play the game more. To make you laugh we use something that might be a bit out of place or a bit too much.

Lastly, in this game you are a ninja, or at least you are using the tools of a ninja. This is appealing to your fantasy which is something people search for when playing games.

The storyline also creates a few opportunities for us to incorporate a nice flow channel. Level two is the most difficult, level three is still pretty difficult and level 4 is easy because it is just like level one. Because of this build up you first become competent and later on become a bit bored. According to the flow theory you need and make the game a bit harder according to the qualities of the person playing it. Later on you give them a feeling of competence and make it a bit boring according to the self-determination theory.

You can get better at the game because you can create effect balls by hitting the ninjastar with the paddle (change the angle) when you move while hitting the ninjastar; this can improve your tactics. You can really control the game and you have effect on it besides just being in the right place with your paddle at the right time. If you are good at aiming the ball you can destroy more bricks at once. This gives you a feeling of autonomy. There is also a surprise option (jump) that you can find out when you are a regular game player, it makes you feel special (like the secret menu at macDonalds, you can order it but there is no where you can find it).



Why it is fun in theory

Game feel

And besides incorporating the self-determination theory to make the game fun we also added game feel to make the game more fun. The natural mapping of the input to the screen, for instance; the angle the ball takes when bouncing is logical, you can only change it by giving it an effect (basing it on location would be illogical and not natural). What you do with the paddle therefore has a lot of effect on the movement of the ball.

You have long term goals (rules) that encourage you to go on with the game and make you want to achieve them.

To make you feel like you achieved something we exaggerate the wins (but also the losses). We do this for instance by means of sound. When the bricks are destroyed there are big explosions. The explosion sounds are random to not make you bored by the sound. The explosions also have effect clouds that exaggerate the effect even more, these are also random for the same reason (they keep surprising you).

Slowly a big cloud appears to show you your lasting effect on the wall of the compound, this encourages you to continue. The icons that are shown every level of what you collect (the shoe, the dog, your friends) also have this effect. They also are there to strengthen the connection of the game to the storyline.

The screen shake polishes your game, in combination with the sound, the disappearing explosion clouds and the overall look of the game, icons and animations the game feels complete and gives sensory cues of interaction.

More fun?

Although we just explained that the game is fun according to theory we also believe that there is a lot that can be done to make the game even more fun. An example would be the response time of the paddle, the paddle is not too smooth nor is it always responding very fast. The collision detection can also be improved. These improvements are about the response of the game which adds to the game feel.

From the animations you go to a kind of clean screen, the animations could be incorporated more within the game. It would be awesome if the animations would also react to what you do in the game. This creates a greater feeling of autonomy and stimulates the imagination.

Something very concrete we can change immediately would be adding more surprises to create a greater variety of annoying effects and keep you interested and curious. This is something we would change overall. The game feels very slow, you have a long time to do the same thing. With "faster play" (more boosts, a lot of interactions) you can keep the attention.

The last thing that we really want to do differently is state a target group. When we can take a target group into account we can better design a game that is funny and relatable. Not fun, but funny and relatable; which makes it fun again. If the game is funny and relatable people get more engaged with the play. If it relates to something they do every day or makes fun of something they do with real life 'quotes' people are likely to be more enthusiastic.

GAME OVER
PRESS ENTER TO STARTOVER THIS LEVEL..



Appendix

