Kitty World
Design Document

High Concept

You are a cat infiltrated in someone's house full of dogs. Your agility lets you move faster than them but eventually more dogs get together in an attempt to catch you. As a cat, you start with 9 lives but sooner or later you'll run out of lives trying to get out of the house.

Experience

Sensation

Art Style: The artistic style of the game is slightly inspired in cel shaded styles, as objects in the game look as if they were drawn by hand but at the same time they have some level of detail in their color and textures. This style is similar to background objects seen in platformer games such as Earthworm Jim and was chosen to represent the easy to learn mechanics of the game. There is no attempt at representing a realistic world.

Enemies: We wanted the dog enemies to be hardly avoidable, therefore they are larger in size than avatar. Size and dark colours of dogs make them feel like a threat to the player. Their movement is intended to make the player feel he has no way of avoiding them and also indicates threat. Although, they move in their own direction and do not deliberately interact with the player unless collision occurs. One life is taken off the player if they collide with a dog.

Track: Track visually looks like a carpet in the house. It textured in neutral grey colour, so it is easy on eyes and does not attract a lot of players' attention yet adds to the aesthetics goals of the game.

Avatar: It is represented by the playfully animated mesh of the cat, that is textured in light beige colours in contrast to the enemies. It gives players the feeling of a "good" cat fighting "bad" dogs. We went with the design principal, that dictates most people that light/white stands for good and dark/black stands for bad.

Balls: Their visual design catches the eye and intuitively makes the player want to collect them. Balls are coloured in light blue and white which supports the idea of safe object players should aim on collecting.

Donuts: Attracts player's attention and creates positive "safe" to collect feeling. Their size is exaggerated on purpose to make collection effortless. The colour is yellow and red to support the idea of a "good" to collect game entity.

Audio: The audio in the game is very limited. There are two sounds:
- A 'bling' sound which indicates that a donut has been picked up.
- A cat sound which indicates damage to the cat caused by hitting a dog.

Furthermore, there is a calm background music, that lets the player concentrate on the game. Since we wanted to avoid making players feel trapped, the music is relaxing and low. We believe there is already enough stress and tension in the game, and adding loud and fast music would make it overwhelming.

Challenge

Physical: This game targets on challenging player's physical reaction. The faster player's reaction is the more successful they will be and higher score they can achieve. It is expected for players to achieve higher scores the more they play the game. Player is required to quickly react to escape attacking dogs and collect balls that give points and donuts that provide extra lives. The game doesn't leave player enough time to do tactical planning and test their intellectual skills. Game objects such as dogs, donuts and balls appear at random at different parts of the screen, therefore there is no opportunity for players to develop specific strategy, other than to react as fast as they can.

Drama
The main source of drama in the game is losing lives when dog attack happens (collision), which leads to the end of the game when all lives are gone. The game is fast-paced and aims to keep player in a tension all the time. The tension arises as the game goes, and it is is achieved by increasing number of dogs, decreasing number of balls and decreasing number of donuts throughout the time. The key dramatic moments are when player reaches critical number of dogs, which are positioned next to giving points balls and has to deliberately give up a life to collect points. This is intended to provide the player with a controversial choice they are pushed to make in a limited amount of time.
Since the game is targeted of achieving the highest score, the player will lose sooner or later, there is no real "winning" in the game, only highest score. The idea is to create competitive environment and make different players to compare and compete for the highest score.

Mechanics

Avatar movement: The avatar moves with increasing over time speed over y axes, player controls avatar's movement on x-axes, however they cannot control avatar's acceleration or break. The avatar cannot pass borders of the track (carpet), when it collides with game entities such as dogs, donuts or balls the avatar keeps moving with the same speed and in the same direction, in other words collision does not affect avatar's movement. Collision with the dog causes the loss on one life, while collecting one donut gives one life, each of balls gives 100 points.

Enemy movement: Dogs are created as game progresses, the number of dogs increases over time to provide the player with the feeling of drama. They are created at random spots within the borders of the carpet. Their speed varies from one dog to another and keep be slower or faster than avatar's speed, this is intended to prevent players from predicting the next dog's movement . Dogs are not aimed on chasing the avatar, instead they move in their own direction.

Balls movement: The game starts with a lot of balls spread all over screen, and it is fairly easy for the player to pick them up. Although, since their position is random it is not possible for a player to collect all of the ones in their sight, which creates an additional sense of drama and pressures the player with some things being out of their hands. As game progresses, there are less and less balls created, slowly the tension of the game increases and player has to react faster to gain points, score of the game progresses much slower at this point than before. That is intended to create a frustrating experience and push players to losing the game, which in its turn will make them play more to get higher score.

Donuts movement: They appear at random on the track and move in their own speed. Donuts do not collide with other objects and are shredded in the end of the track if not collected by the player. There are more donuts appearing as the game progresses to balance out more dogs and make game thoroughly balanced as well as prevent players from losing too quickly.

Dynamics

The most important dynamic is the feeling of tension and relief provided by the number of dogs created over time. At first it will be easy for the player to avoid the dogs but eventually a faster reaction will be needed for the player to survive. As number of dogs increases, death will be inevitable and the player will need to think of a way of colliding with as less dogs as possible and also try to catch more donuts so they will have more lives and try to get a higher score. Tension always resolves in loss as the player is expected to lose at some point in the game, but there are some moments of relief when the player manages to get more lives and survive for a little longer.

Improvements

We are satisfied with the overall dynamics of the game and experience it provides the player with. However, there is always a room for improvement. Artwork, style and animation would benefit from some work done on it, for example currently cat's and carpet's texture feel a little off comparing to dogs' and donuts' texture and movements. Dogs need an animation, especially when colliding with the cat. Controlling frequency of donuts appearing depending on number of lives the player has left would significantly improve the overall balance of the game. Displaying balls in a collectable path can add to the game aesthetics, as well as giving additional points for a number of collected balls in one go. Furthermore, balls collected in the middle of

the game should be more valuable than the ones collected in the beginning since there are less of them. We find the same scene playable but only for so long, adding more rooms/levels and game objects would add more variety to the game and keep players interested in playing the game for longer, that could work as a reward when player's score hits 10000 or so.