**ImPAWsible PURRsuit**

*Game Design Document*

**Copyright notice / author information / boring legal stuff nobody likes**

*Index*

**Index**

1. [Index](https://docs.google.com/document/d/1ct5-qyUZC9cAKn-iLUgtOczDkERmPzNNwPLDfT9Hgjs/preview#bookmark=kix.tn44c9jbklu6)
2. [Game Design](https://docs.google.com/document/d/1ct5-qyUZC9cAKn-iLUgtOczDkERmPzNNwPLDfT9Hgjs/preview#bookmark=kix.vh7mr3wp9gub)
   1. [Summary](https://docs.google.com/document/d/1ct5-qyUZC9cAKn-iLUgtOczDkERmPzNNwPLDfT9Hgjs/preview#bookmark=kix.y0z7a3kyjoqj)
   2. [Gameplay](https://docs.google.com/document/d/1ct5-qyUZC9cAKn-iLUgtOczDkERmPzNNwPLDfT9Hgjs/preview#bookmark=kix.q89snwy3vllo)
   3. [Mindset](https://docs.google.com/document/d/1ct5-qyUZC9cAKn-iLUgtOczDkERmPzNNwPLDfT9Hgjs/preview#bookmark=kix.3j0sjjj4v19l)
3. [Technical](https://docs.google.com/document/d/1ct5-qyUZC9cAKn-iLUgtOczDkERmPzNNwPLDfT9Hgjs/preview#bookmark=kix.nw2pvrargt85)
   1. [Screens](https://docs.google.com/document/d/1ct5-qyUZC9cAKn-iLUgtOczDkERmPzNNwPLDfT9Hgjs/preview#bookmark=kix.5baplgyo85eh)
   2. [Controls](https://docs.google.com/document/d/1ct5-qyUZC9cAKn-iLUgtOczDkERmPzNNwPLDfT9Hgjs/preview#bookmark=kix.4u55u65bonjw)
   3. [Mechanics](https://docs.google.com/document/d/1ct5-qyUZC9cAKn-iLUgtOczDkERmPzNNwPLDfT9Hgjs/preview#bookmark=kix.vrkne3rhovuh)
4. [Level Design](https://docs.google.com/document/d/1ct5-qyUZC9cAKn-iLUgtOczDkERmPzNNwPLDfT9Hgjs/preview#bookmark=kix.mun66rmbl34h)
   1. [Themes](https://docs.google.com/document/d/1ct5-qyUZC9cAKn-iLUgtOczDkERmPzNNwPLDfT9Hgjs/preview#bookmark=kix.feu141lpqdpj)
      1. Ambience
      2. Objects
5. Ambient
6. Interactive
   * 1. Challenges
   1. [Game Flow](https://docs.google.com/document/d/1ct5-qyUZC9cAKn-iLUgtOczDkERmPzNNwPLDfT9Hgjs/preview#bookmark=kix.lrp1xr74olld)
7. [Development](https://docs.google.com/document/d/1ct5-qyUZC9cAKn-iLUgtOczDkERmPzNNwPLDfT9Hgjs/preview#bookmark=kix.k64sfnylstdx)
   1. [Abstract Classes](https://docs.google.com/document/d/1ct5-qyUZC9cAKn-iLUgtOczDkERmPzNNwPLDfT9Hgjs/preview#bookmark=kix.fwz93u72nlt2)
   2. [Derived Classes](https://docs.google.com/document/d/1ct5-qyUZC9cAKn-iLUgtOczDkERmPzNNwPLDfT9Hgjs/preview#bookmark=kix.9mr6xhrqo7o4)
8. [Graphics](https://docs.google.com/document/d/1ct5-qyUZC9cAKn-iLUgtOczDkERmPzNNwPLDfT9Hgjs/preview#bookmark=kix.7fniby1a9lf0)
   1. [Style Attributes](https://docs.google.com/document/d/1ct5-qyUZC9cAKn-iLUgtOczDkERmPzNNwPLDfT9Hgjs/preview#bookmark=kix.3ui65x9w2r9w)
   2. [Graphics Needed](https://docs.google.com/document/d/1ct5-qyUZC9cAKn-iLUgtOczDkERmPzNNwPLDfT9Hgjs/preview#bookmark=kix.cdq39znqma9y)
9. [Sounds/Music](https://docs.google.com/document/d/1ct5-qyUZC9cAKn-iLUgtOczDkERmPzNNwPLDfT9Hgjs/preview#bookmark=kix.p0zdtpym1l8)
   1. [Style Attributes](https://docs.google.com/document/d/1ct5-qyUZC9cAKn-iLUgtOczDkERmPzNNwPLDfT9Hgjs/preview#bookmark=kix.g829e5h0mi8e)
   2. [Sounds Needed](https://docs.google.com/document/d/1ct5-qyUZC9cAKn-iLUgtOczDkERmPzNNwPLDfT9Hgjs/preview#bookmark=kix.1k2k1v9771k6)
   3. [Music Needed](https://docs.google.com/document/d/1ct5-qyUZC9cAKn-iLUgtOczDkERmPzNNwPLDfT9Hgjs/preview#bookmark=kix.coz0pe9ii0ek)
10. [Schedule](https://docs.google.com/document/d/1ct5-qyUZC9cAKn-iLUgtOczDkERmPzNNwPLDfT9Hgjs/preview#bookmark=kix.ur637w5onhwq)

*Game Design*

**Summary**

    In a neighborhood filled with dogs, one single cat must stop the dogs from overrunning the town. It must use it's instincts and abilities to create a neighborhood where it, and other cats, can live in peace.

**Gameplay**

What should the gameplay be like? What is the goal of the game, and what kind of obstacles

are in the way? What tactics should the player use to overcome them?

   MOVEMENT:This is an side scroller game in which you are constantly moving to the right. The player has the ability to jump, speed up, slow down, and interact with certain objects.

GOAL: Reach the end without being defeated by the enemies.

OBSTACLES: There will be enemies which if the player gets touched by, will cause the player to start over. There will also be other obstacles such as cars and water which the player will have to avoid.

TACTICS: The player will have to time their jumps and interactions to keep from being attacked by the enemies and to drop the objects onto the enemies.

**Mindset**

    What kind of mindset do you want to provoke in the player? Do you want them to feel powerful, or weak? Adventurous, or nervous? Hurried, or calm? How do you intend to provoke those emotions?

The mindset of the game should be hurried and to provoke these emotions the enemies will increase speed the longer they are chasing the player and there will be enemies added throughout the level.

*Technical*

**Screens**

1. Title Screen
   1. Options
2. Level Select
3. Game
   1. Inventory
   2. Assessment / Next Level
4. End Credits

*(example)*

**Controls**

    How will the player interact with the game? Will they be able to choose the controls? What kind of in-game events are they going to be able to trigger, and how? (e.g. pressing buttons, opening doors, etc.)

The player will be able to interact with items in the game to drop them in attempt to hit the enemies. They will also be able to open and close doors.

**Mechanics**

    Are there any interesting mechanics? If so, how are you going to accomplish them? Physics, algorithms, etc.

Objects will drop once interacted with – rigidbodies, constraints and physics

*Level Design*

*(Note : These sections can safely be skipped if they’re not relevant, or you’d rather go about it another way. For most games, at least one of them should be useful. But I’ll understand if you don’t want to use them. It’ll only hurt my feelings a little bit.)*

**Themes**

1. Suburbs
   1. Mood
      1. Bright, fast-paced
   2. Objects
      1. *Ambient*
         1. Furniture
         2. Bushes
         3. Trees
         4. House Walls

*Interactive*

* + - 1. Doors
      2. Breakable Objects (vases, picture frames, tvs)

**Game Flow**

1. Player starts outside in a suburban area.
2. Player constantly moves right
3. Bush blocks path, player must jump
4. Fence blocks path, player must double jump
5. Closed door, player must interact with door
6. Player must jump over enemy onto couch
7. … etc.

*Development*

**Abstract Classes / Components**

1. BasePhysics
   1. BasePlayer
   2. BaseEnemy
   3. BaseObject
2. BaseObstacle
3. BaseInteractable

*(example)*

**Derived Classes / Component Compositions**

1. BasePlayer
   1. PlayerMain
   2. PlayerUnlockable
2. BaseEnemy
   1. EnemyWolf
   2. EnemyGoblin
   3. EnemyGuard (may drop key)
   4. EnemyGiantRat
   5. EnemyPrisoner
3. BaseObject
   1. ObjectRock (pick-up-able, throwable)
   2. ObjectChest (pick-up-able, throwable, spits gold coins with key)
   3. ObjectGoldCoin (cha-ching!)
   4. ObjectKey (pick-up-able, throwable)
4. BaseObstacle
   1. ObstacleWindow (destroyed with rock)
   2. ObstacleWall
   3. ObstacleGate (watches to see if certain buttons are pressed)
5. BaseInteractable
   1. InteractableButton

*(example)*

*Graphics*

**Style Attributes**

What kinds of colors will you be using? Do you have a limited palette to work with? A post-processed HSV map/image? Consistency is key for immersion.

The colors will be pretty bright since it will be a sunny day in the suburbs

What kind of graphic style are you going for? Cartoony? Pixel-y? Cute? How, specifically? Solid, thick outlines with flat hues? Non-black outlines with limited tints/shades? Emphasize smooth curvatures over sharp angles? Describe a set of general rules depicting your style here.

3D, low poly look. Rough edges and flat sides. Not too detailed with texturing.

    Well-designed feedback, both good (e.g. leveling up) and bad (e.g. being hit), are great for teaching the player how to play through trial and error, instead of scripting a lengthy tutorial. What kind of visual feedback are you going to use to let the player know they’re interacting with something? That they \*can\* interact with something?

Highlighting the objects that they can interact with

**Graphics Needed**

1. Characters
   1. Animals
      1. Cat (Run, Jump, Game Over)
      2. Dog(Run, Sleep, Swim)
2. Walls
   1. Bricks
   2. Interior Walls
3. Ambient
   1. Cars
   2. Furniture
   3. Sink
   4. Stove
4. Other
   1. Doors
   2. Breakable Objects

*Sounds/Music*

**Style Attributes**

    Again, consistency is key. Define that consistency here. What kind of instruments do you want to use in your music? Any particular tempo, key? Influences, genre? Mood?

Stylistically, what kind of sound effects are you looking for? Do you want to exaggerate actions with lengthy, cartoony sounds (e.g. mario’s jump), or use just enough to let the player know something happened (e.g. mega man’s landing)? Going for realism? You can use the music style as a bit of a reference too.  
      
    Remember, auditory feedback should stand out from the music and other sound effects so the player hears it well. Volume, panning, and frequency/pitch are all important aspects to consider in both music *and* sounds - so plan accordingly!

**Sounds Needed**

1. Effects
   1. Soft Footsteps (dirt floor)
   2. Sharper Footsteps (stone floor)
   3. Soft Landing (low vertical velocity)
   4. Hard Landing (high vertical velocity)
   5. Glass Breaking
   6. Chest Opening
   7. Door Opening
2. Feedback
   1. Relieved “Ahhhh!” (health)
   2. Shocked “Ooomph!” (attacked)
   3. Happy chime (extra life)
   4. Sad chime (died)

*(example)*

**Music Needed**

1. Slow-paced, nerve-racking “forest” track
2. Exciting “castle” track
3. Creepy, slow “dungeon” track
4. Happy ending credits track
5. Rick Astley’s hit #1 single “Never Gonna Give You Up”

*(example)*

*(Note : Again, if you’re soloing you might be able to / want to skip this section. It’s up to you.)*

*Schedule*

*(what is a schedule, i don’t even. list is good enough, right? if not add some dates i guess)*

1. develop base classes
   1. base entity
      1. base player
      2. base enemy
      3. base block
   2. base app state
      1. game world
      2. menu world
2. develop player and basic block classes
   1. physics / collisions
3. find some smooth controls/physics
4. develop other derived classes
   1. blocks
      1. moving
      2. falling
      3. breaking
      4. cloud
   2. enemies
      1. soldier
      2. rat
      3. etc.
5. design levels
   1. introduce motion/jumping
   2. introduce throwing
   3. mind the pacing, let the player play between lessons
6. design sounds
7. design music

*(example)*