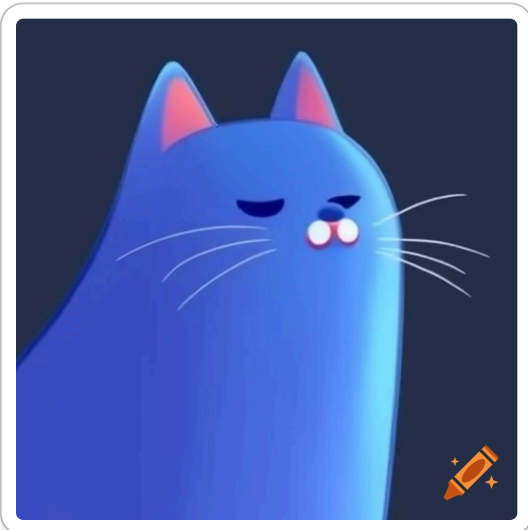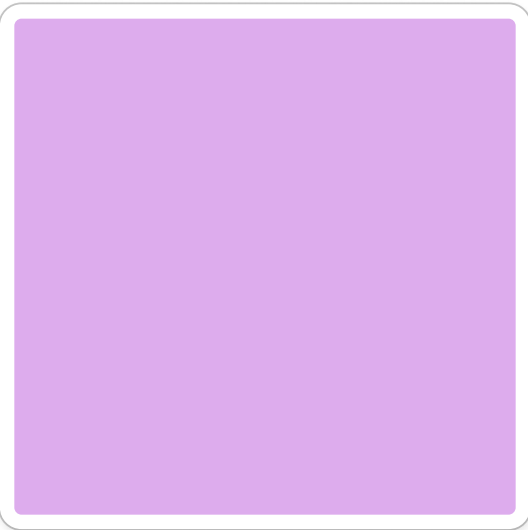08.11.2024

cds inc.

presentation #2

cat distribution system inc.

Hannah Müller, Monika Szuban, Vanessa Scherer

Yes ... we're the cat ladies

As dedicated cat lovers, we couldn't resist building our project around a cat-themed story. Our game, titled Cat System Distribution Inc. plays on the idea that 'you don't choose the cat; the cat chooses you.'

memory

Players play the memory card game where different cat characters are shown. The first pair will be their future ingame cat.

find the toy

Players collect and retrieve cat toys distributed throughout the game world.

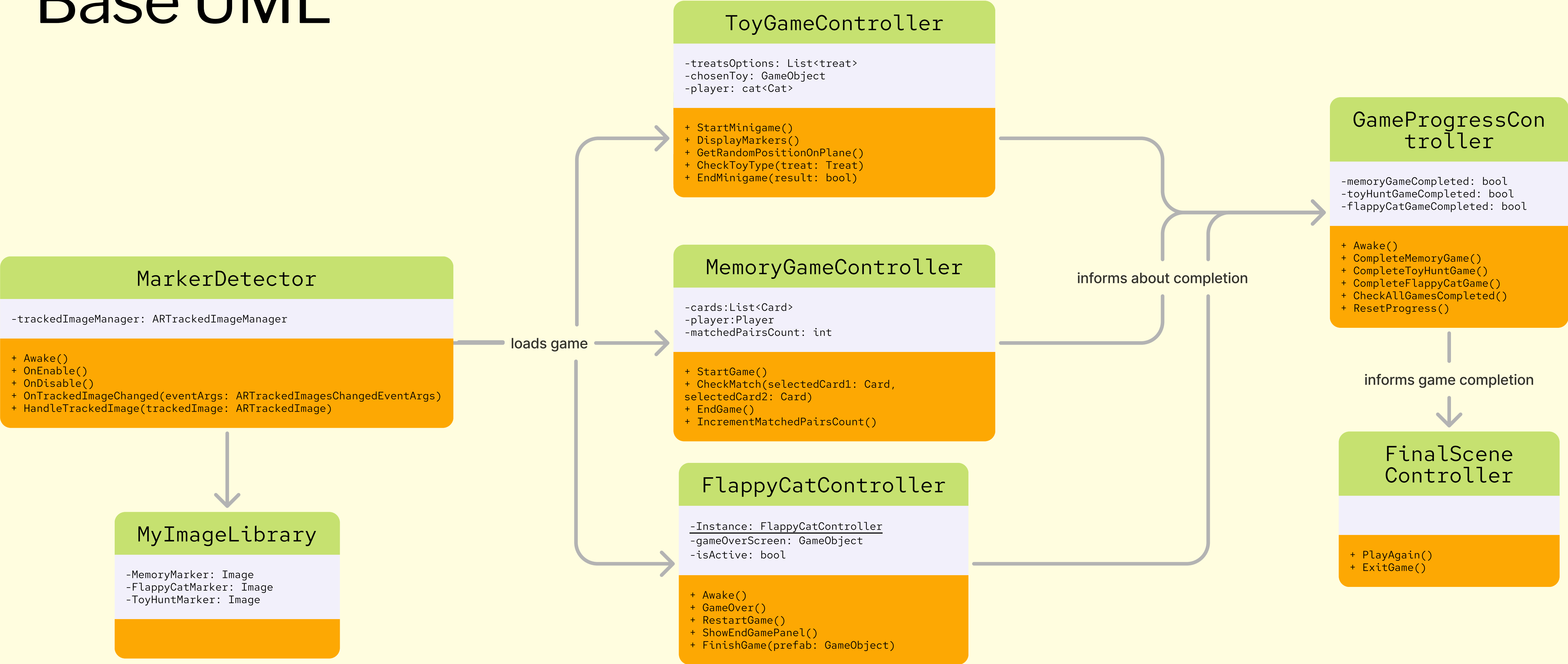## flappy cat

In a mini-game, the cat runs, climbs, and jumps over objects, with the added challenge of helping the cat lose weight.

Base UML

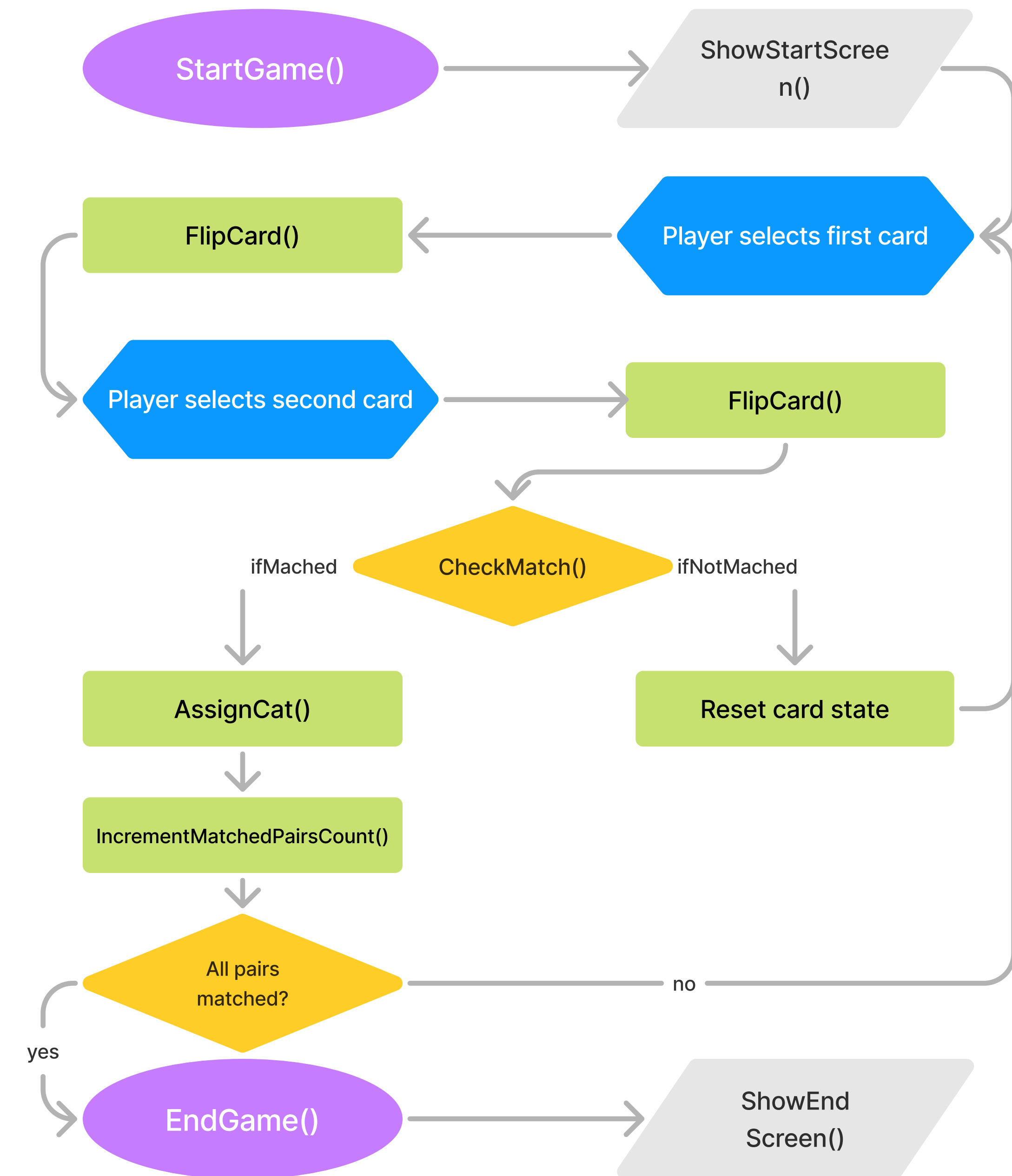## ToyGameController

-treatsOptions: List<treat>
-chosenToy: GameObject
-player: cat<Cat>

+ StartMinigame()
+ DisplayMarkers()
+ GetRandomPositionOnPlane()
+ CheckToyType(treat: Treat)
+ EndMinigame(result: bool)

GameProgressController

-memoryGameCompleted: bool
-toyHuntGameCompleted: bool
-flappyCatGameCompleted: bool

+ Awake()
+ CompleteMemoryGame()
+ CompleteToyHuntGame()
+ CompleteFlappyCatGame()
+ CheckAllGamesCompleted()
+ ResetProgress()

MarkerDetector

-trackedImageManager: ARTrackedImageManager

+ Awake()
+ OnEnable()
+ OnDisable()
+ OnTrackedImageChanged(eventArgs: ARTrackedImagesChangedEventArgs)
+ HandleTrackedImage(trackedImage: ARTrackedImage)

MemoryGameController

-cards:List<Card>
-player:Player
-matchedPairsCount: int

+ StartGame()
+ CheckMatch(selectedCard1: Card, selectedCard2: Card)
+ EndGame()
+ IncrementMatchedPairsCount()

loads game

informs about completion

MyImageLibrary

-MemoryMarker: Image
-FlappyCatMarker: Image
-ToyHuntMarker: Image

FlappyCatController

-Instance: FlappyCatController
-gameOverScreen: GameObject
-isActive: bool

+ Awake()
+ GameOver()
+ RestartGame()
+ ShowEndGamePanel()
+ FinishGame(prefab: GameObject)

informs game completion

FinalSceneController

+ PlayAgain()
+ ExitGame()

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game 1

memory game

A classic memory game in which player acquires their cat type by revealing card pairs. Which one will you get ?

StartGame() → ShowStartScreen()

Player selects first card → FlipCard()

FlipCard() → Player selects second card → FlipCard()

CheckMatch()
- ifMached
- ifNotMached

ifMached → AssignCat()

ifNotMached → Reset card state

AssignCat() → IncrementMatchedPairsCount()

IncrementMatchedPairsCount() → All pairs matched?

All pairs matched?
- yes → EndGame()
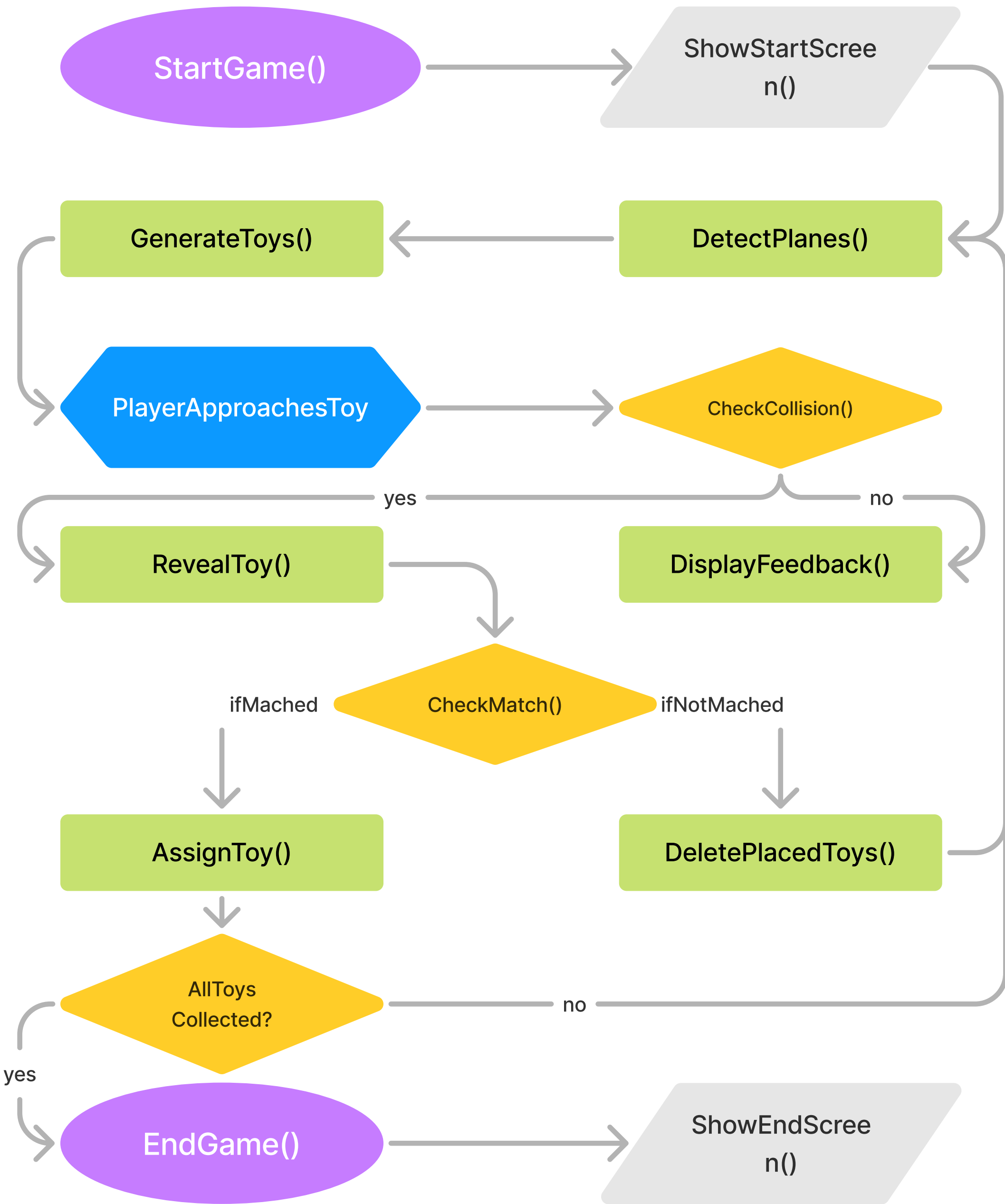- no

EndGame() → ShowEndScreen()

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game 2

find the toy

In the second mini-game, players are challenged to find toys for their new kitty—but remember, cats are very picky! Reveal the toy hidden in the box and search for the one that matches your cat's favourite.

StartGame() → ShowStartScreen()

GenerateToys() ← DetectPlanes()

PlayerApproachesToy → CheckCollision()

yes → RevealToy()

no → DisplayFeedback()

RevealToy() → CheckMatch()

ifMached → CheckMatch() → ifNotMached

AssignToy()

DeletePlacedToys()

AssignToy() → AllToys Collected?

AllToys Collected? → no

yes → EndGame() → ShowEndScreen()

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game 3

flappy cat

In this an action-oriented mini-game, the cat runs and dodges obstacles, which helps him to stay fit.
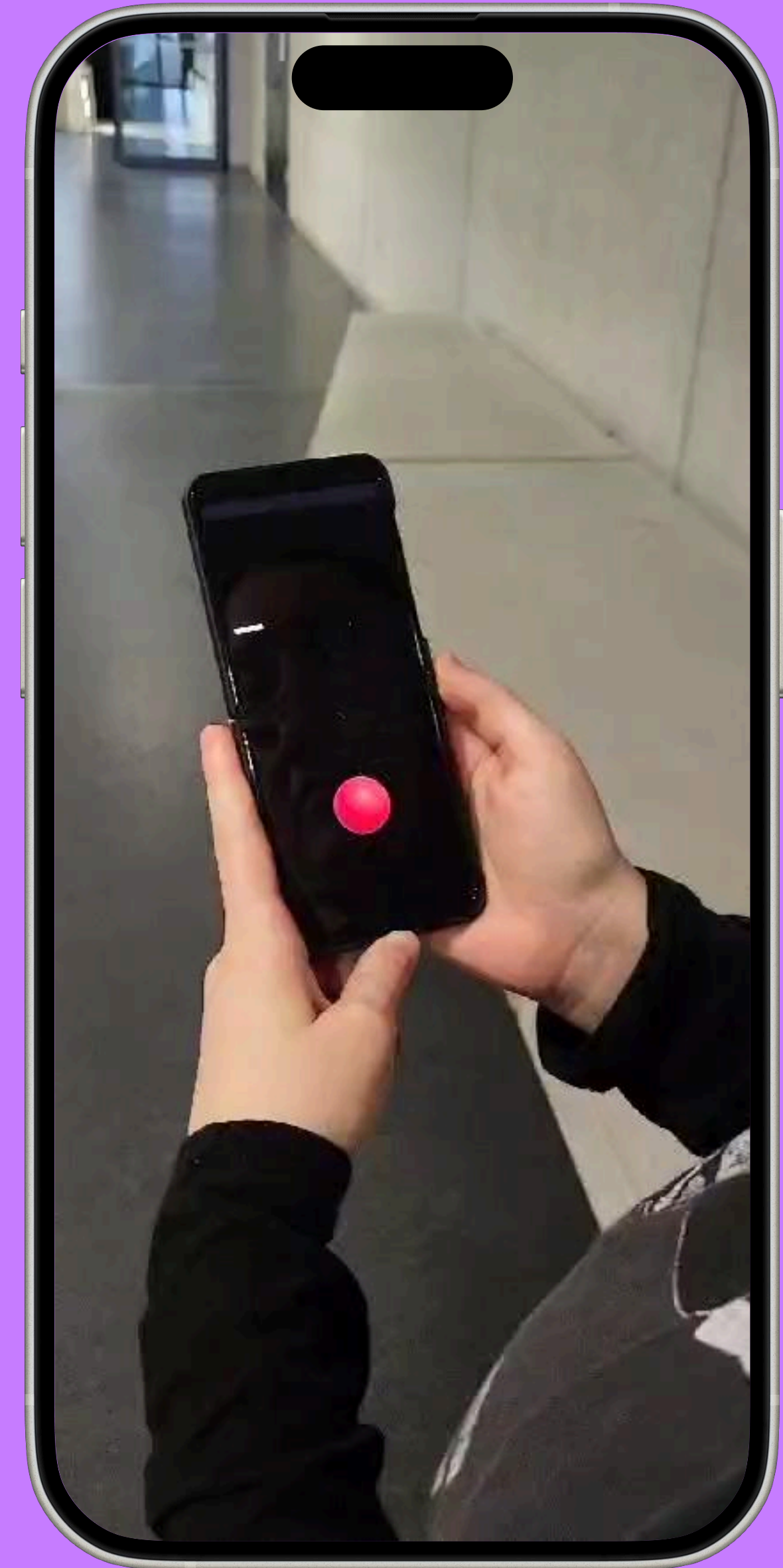
game design document

Congratulation screens

for now we only have one final congrats screen, to keep the game super simple

Start of the mini games

for now users only has to scan the markers and the game starts

`overall changes`

controller

We've changed the controller due to tracking issues
-> control player by tilting device

`flappy cat`

Position of the phone

our first approach was to play the game horizontal, while developing we decided on playing it vertical due to consistency in the gameplay

`flappy cat`

how to start the mini games in the final version

UI of our game

implementation of the cat model

the game requirements of the toy hunt

`what we still need to decide`

Thank you for your attention

and the most important part...