



Vinchen Amigo | 2024 Portfolio



Vinchen Amigo
(vincent)

About Me

Dedicated Programmer, Passionate Developer

I am currently enrolled in the Apple Developer Academy and bring two years of experience as a freelance developer. My expertise lies in iOS development, with strong proficiency in Swift, SwiftUI, and UIKit. Additionally, I have hands-on experience with JavaScript, PHP, and Laravel, and am passionate about creating innovative solutions across multiple platforms. Beyond mobile and web development, I have practical experience in game development using Unity and C#, allowing me to design and build engaging, interactive experiences.

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Eyesistant: Fashion Color Guide for Partial Colorblind

Year Accomplished

2024

Role/position

iOS Front-end Developer

Design Link

<https://www.figma.com/design/U MPH pUUL1OMHFYqb4b9vkU/Eyesistant?node-id=672-495&t=5Hg4zFJGJ4u68Nzf-1>

Repository

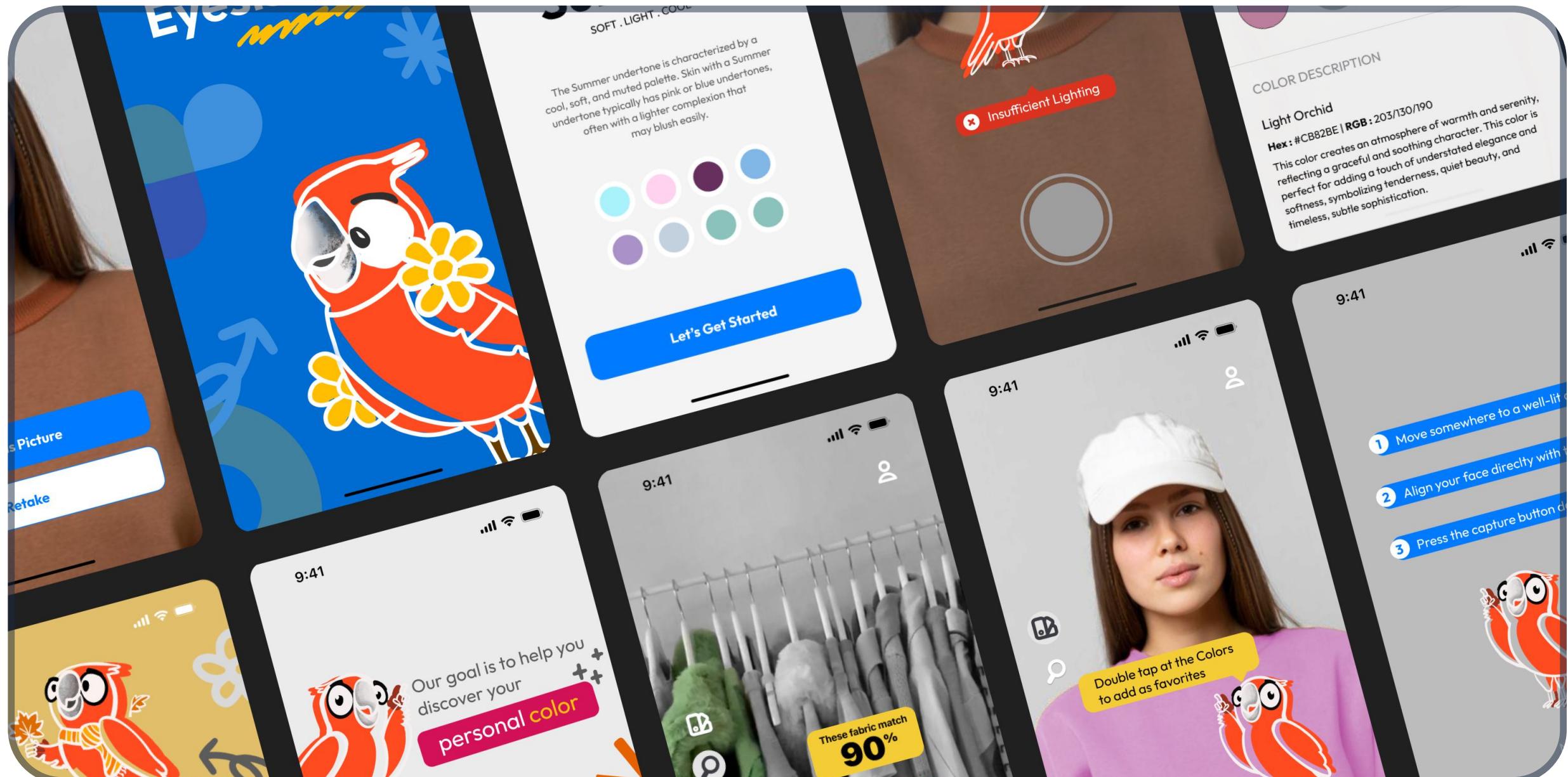
<https://github.com/Ekkh0/eyesistant>

Publication

<https://medium.com/@vinchenamigo/eyesistant-an-attempt-on-building-inclusivity-for-partially-colorblind-using-uikit-d8365329bb07>

Project Description

This project aims to assist partially color-blind individuals in overcoming the challenges they face when choosing clothing colors. Many of these individuals struggle with concerns about whether the colors they select suit them personally and are socially acceptable. They often rely on other people's eye for color validation, which can be inconvenient and sometimes embarrassing. The solution is a mobile application that leverages personal color theory to provide personalized color recommendations. By offering tailored guidance, the app empowers users to make fashion choices independently.



Tech Stack

Swift, UIKit
Vision, AVFoundation, CoreImage
Xcode, VSCode, Github

Architecture

MVVM design pattern,
UIKit frontend,
UserDefaults Storage

Features

Face and luminosity detection camera, skin tone fetching,
personal color classification, selected color clothes overlay,
selected color filtering



Project Description

The project "Sunny Side" reimagines traditional weather apps by focusing on the specific needs of homemakers engaged in outdoor activities. The challenge identified through research was that existing weather apps cover large areas, making it difficult to determine weather conditions for a specific place. The solution is a weather app that allows users to search for precise locations, receive recommendations on what to prepare for those conditions, and pin the location for easy access on the homepage. It utilizes SwiftUI, WeatherKit, and reverse geolocation to enhance user convenience.

Sunny Side:

Reimagining
Weather app for
Commuters

Year Accomplished

2024

Role/position

iOS Front-end Developer,
Tech lead

Design Link

<https://www.figma.com/design/Rwqm7eC0xcHFNkDfeaqx2/nano3?node-id=728-66871&t=Ubn6wVhjTbT66xXj-1>

Repository

<https://github.com/baduthutan/GoodHusband>

Publication

<https://medium.com/@vinchenamigo/my-experience-as-a-tech-lead-on-sunny-side-project-reimagining-weather-app-for-commuters-6186c8535061>

GoodHusband Team x Apple Developer Academy @ Binus

Tech Stack

</> Swift, SwiftUI
⌘ WeatherKit, CoreLocation, MapKit
⚡ Xcode, VSCode, Github

Architechture

MVVM design pattern,
SwiftUI frontend,
Singleton UserDefaults Storage

Features

Specific location weather forecast, suggestion for current weather, dark mode, English and Bahasa Indonesia language localization



SwiftConnect:

ML Powered
License Plate
Scanner

Year Accomplished

2024

Role/position

iOS Front-end Developer

Design Prototype

<https://bit.ly/SiConPrototype>

Repository

<https://github.com/anggaraswn/SICON>

Publication

<https://medium.com/@vinchenamigo/building-swiftconnect-how-a-beginner-used-mvvm-for-an-ml-powered-license-plate-scanner-9a8d0f531b9d>

Project Description

SiCon (Swift Connect), an application designed to assist security personnel in efficiently managing motorcycle parking at GOP 9. The app uses machine learning to scan license plates and quickly retrieve the owner's information—such as name, workplace, front desk number, and license number—from a database. This significantly reduces the time it takes for security to contact the owner of a vehicle that's parked improperly, eliminating the need to go through building management.

An application to make it easier and faster for security to call vehicle owners just by scanning or entering the vehicle license plate

Nyangut?
pake SICON aja

Tech Stack

</> Swift, SwiftUI
📦 SwiftData, VisionKit, WhatsApp API
🔨 Xcode, Github

Architecture

MVVM design pattern,
SwiftUI frontend,
SwiftData Storage

Features

FaceID or password authorization to open app, license number scanner, fetch vehicle owner data, connect to vehicle owner office via WhatsApp



Project Description

"Snap or Splash" is an interactive game inspired by 'Hole in the Wall,' where players mimic predefined poses that are evaluated for accuracy by a machine learning model. Key to the challenge was achieving precise real-time pose detection on MacOS. We used AVFoundation for camera management, Vision API for pose capture, and CoreML for integrating the Human Pose Classifier Model. CreateML streamlined model training and testing, ensuring a smooth user experience..

SnapOrSplash:

Reinventing Hole in the Wall game via Machine Learning

Year Accomplished

2024

Role/position

MacOS App Developer

Design Link

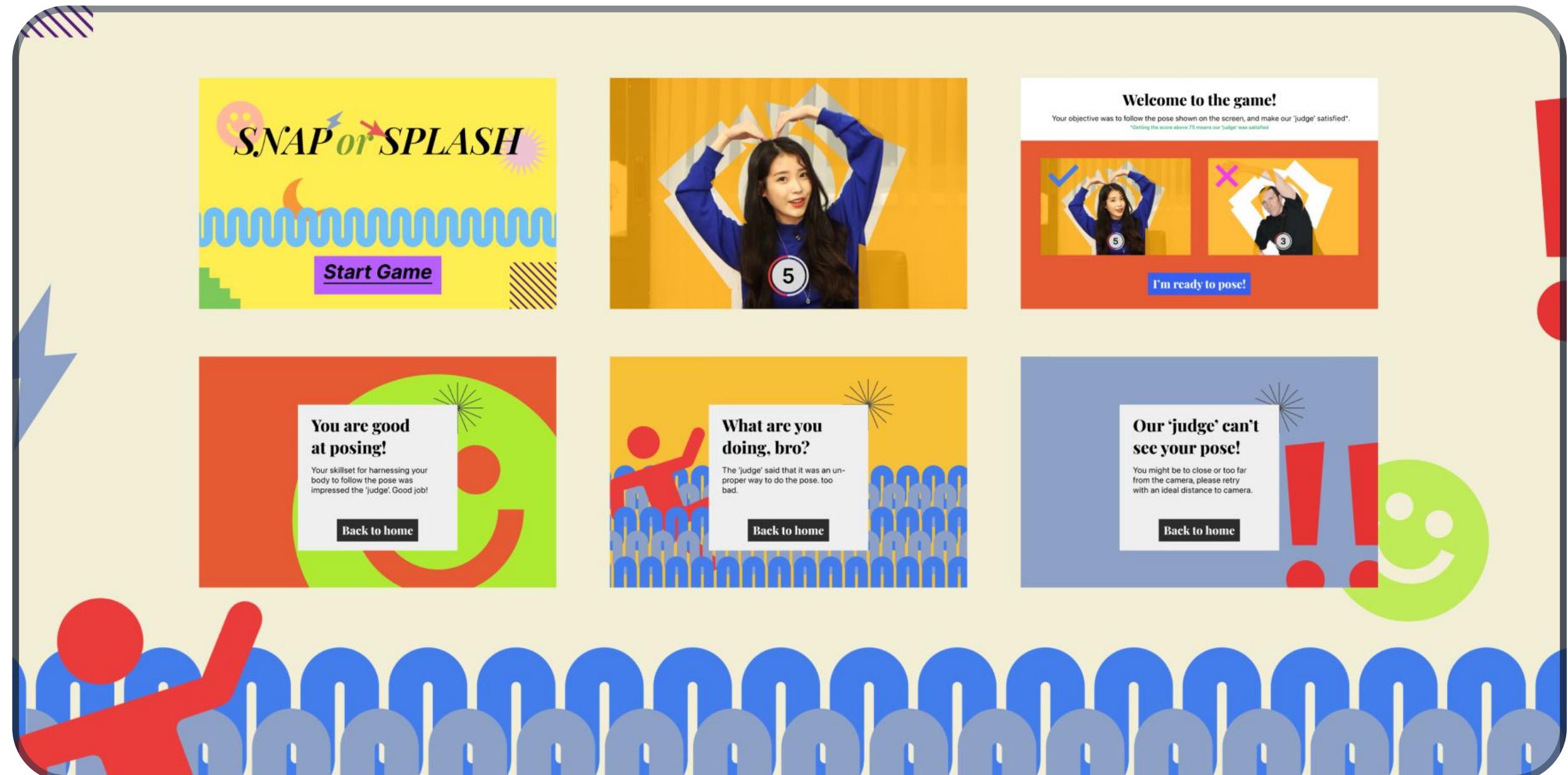
<https://www.figma.com/design/JWissRS7jfA9whlt56mMNa/Snap!/?node-id=0-1&t=Z1DWxZTHsMcMh9Aa-1>

Repository

<https://github.com/baduthutan/Snap-or-Splash>

Publication

<https://medium.com/@vinchenamigo/snap-or-splash-bringing-the-nostalgic-hole-in-the-wall-game-how-to-your-mac-using-machine-learning-26838ddc15bf>



Tech Stack

Swift, SwiftUI
CoreML, Vision, AVFoundation
Xcode, Create ML, Github

Architecture

MVC design pattern,
SwiftUI frontend,
No Storage

Features

Camera shot countdown, pose overlay, detect user pose, result score processing by model confidence



Project Description

TypeCaster is a classic RPG game that elevates the "bullet hell" genre by combining intense action with precise typing mechanics. In this game, players face a continuous barrage of attacks and must skillfully type magical spells to launch counterattacks while avoiding damage. The core challenge lies in managing both evasion and offense simultaneously. As in real spell casting, player can't revert back misspelled words and will be stunned. By blending these elements, TypeCaster delivers a unique gameplay experience where quick reflexes and precise typing are essential for survival and success.

TypeCaster:

The Ultimate
Spell Typing
Battle RPG

Year Accomplished

2024

Role/position

MacOS App Developer,
Asset Designer

Repository

[https://github.com/TessyJr/
TypeCaster](https://github.com/TessyJr/TypeCaster)

Game Demo

[https://youtu.be/
r06JyNzosGs](https://youtu.be/r06JyNzosGs)

Publication

[https://www.linkedin.com/
pulse/creating-pixel-art-
character-aseprite-
designing-riki-vincent-
vincent-go5lc/?
trackingId=jWznZ6fyLueNm
%2FmGLjTO%2Bg%3D
%3D](https://www.linkedin.com/pulse/creating-pixel-art-character-aseprite-designing-riki-vincent-vincent-go5lc/?trackingId=jWznZ6fyLueNm%2FmGLjTO%2Bg%3D%3D)

TypeCaster

Explore the tower of trials

Unique type-cast mechanics

Rigorous bullet hell RPG

Compatible for macOS

Tech Stack

</> Swift, SpriteKit
SKTiles, Cocoa, AVFoundation
Xcode, Aseprite, Github

Architecture

MVC design pattern,
SKScene frontend,
No Storage

Features

Type to cast spell mechanism, tutorial scene, exploration scene, battle scene, intractable objects, unlock-able spell



Project Description

OddOffice is a game designed to amaze players with its unique and challenging puzzles. In the game, players are positioned as they are attending a job recruitment for a security force. To pass the test and escape the room, they must solve complex challenges using scout codes. The innovative gameplay incorporates AR elements, including haptic feedback for Morse code, brightness-dependent Pig Pen codes, and Semaphore codes that shift between dark and light modes. These features create a multifaceted experience that enhances problem-solving skills and keeps players engaged.

OddOffice AR:

Escape plan from
the unusual scouts
room

Year Accomplished

2024

Role/position

iOS AR Game Developer

Repository

<https://github.com/baduthutan/oDD-oFFicE-AR>

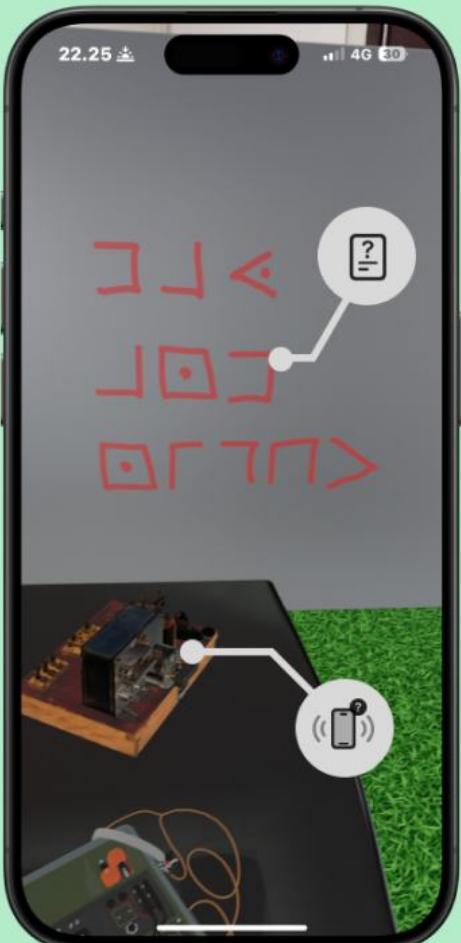
Game Demo

https://youtu.be/_AMkWcJwKf0?si=JosfC5unVjJ37Ew

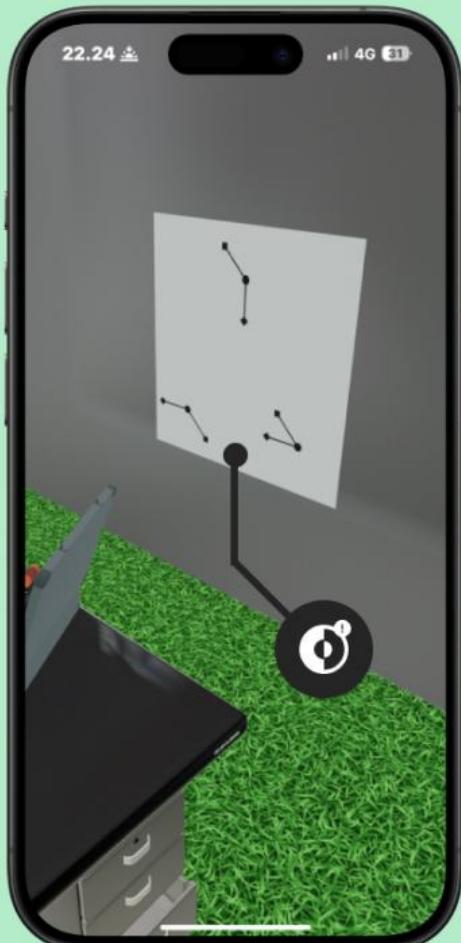
Publication

<https://medium.com/@vinchenamigo/exploration-on-iphones-system-features-and-outputs-through-oddofficear-a-case-study-aac37caeef98>

TEAM CEO MAGER



Interact with objects
and solve the riddle



Play with system setting
to unveil mystery



Say the password and
to escape the room

Tech Stack

</> Swift, SwiftUI
📦 RealityKit, ARKit, Speech, AVFoundation
🔧 Xcode, Reality Composer, Github

Architecture

MVC design pattern,
SwiftUI frontend,
No Storage

Features

Coaching overlay, vibrating morse code,
screen brightness detector, light-dark mode detector,
speech recognition, change scene on proximity



LonelyScape:

Solve the riddles,
escape the
loneliness

Year Accomplished

2023

Role/position

iOS AR Game Developer

Presentation Slides

[https://bit.ly/
LonelyScapePresentationSlides](https://bit.ly/LonelyScapePresentationSlides)

Repository

[https://github.com/
baduthutan/LonelyScapeAR](https://github.com/baduthutan/LonelyScapeAR)

Game Trailer

[https://www.youtube.com/
watch?v=yoGGu5_WwzE](https://www.youtube.com/watch?v=yoGGu5_WwzE)

Project Description

LonelyScape is an innovative augmented reality escape room game that merges virtual elements in a dynamic 3D environment with our real world. The objective of LonelyScape is to provide a captivating and interactive gaming experience that challenges players' problem-solving skills by gathering clues from English letter riddles and interactions with the objects on the scene. LonelyScape represents a promising evolution in the escape room genre, combining physical and virtual challenges to deliver an entertaining and immersive experience.

Publication

[https://ieeexplore.ieee.org/
abstract/
document/10277954](https://ieeexplore.ieee.org/abstract/document/10277954)

Tech Stack

Swift, SwiftUI
RealityKit, ARKit, AVKit
Xcode, Reality Composer, Github

Architecture

MVC design pattern,
SwiftUI frontend,
No Storage

Features

Coaching overlay, audio play on tap, interactable objects,
add overlay on interaction and proximity



TypeCaster (remastered):

Into the Tower of Trials

Year Accomplished

2024 (v 1.0)

Role/position

Unity Game Developer

Itch.io Page

[https://tba-studio.itch.io/
typecaster](https://tba-studio.itch.io/typecaster)

Game Trailer

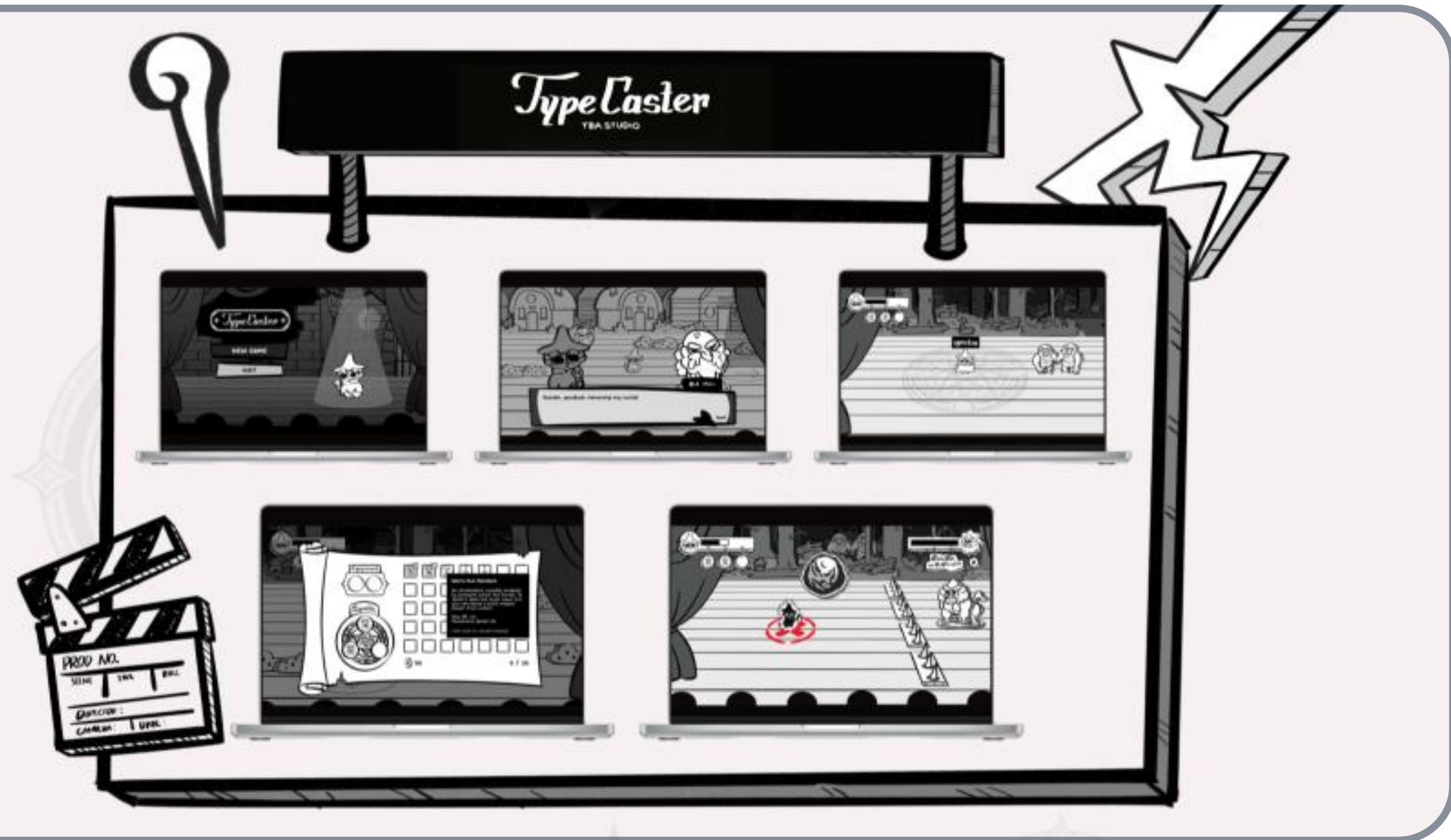
[https://youtu.be/
zlVnCJ23haw?
si=fv5Cr3pXdkdBMK1z](https://youtu.be/zlVnCJ23haw?si=fv5Cr3pXdkdBMK1z)

Social Media

[https://www.instagram.com/
typecaster_rpg/](https://www.instagram.com/typecaster_rpg/)

Project Description

TypeCaster is a 2.5D action RPG that combines nostalgic RPG elements with a unique, skill-based twist. Players cast powerful spells by typing with precision, customize their characters with spells, equipment, and potions, and immerse themselves in a rich story filled with NPC interactions and cutscenes. This version is a remaster of the original TypeCaster, which was created with SpriteKit, reimaged in Unity with 2.5D design to enhance gameplay and deliver a more immersive experience.



Tech Stack

▷ C#
≡ AI Navigation, Cinemachine, 2D, Fungus
👉 Unity, Visual Studio Code, Github

Architecture

Unity ECS Architecture

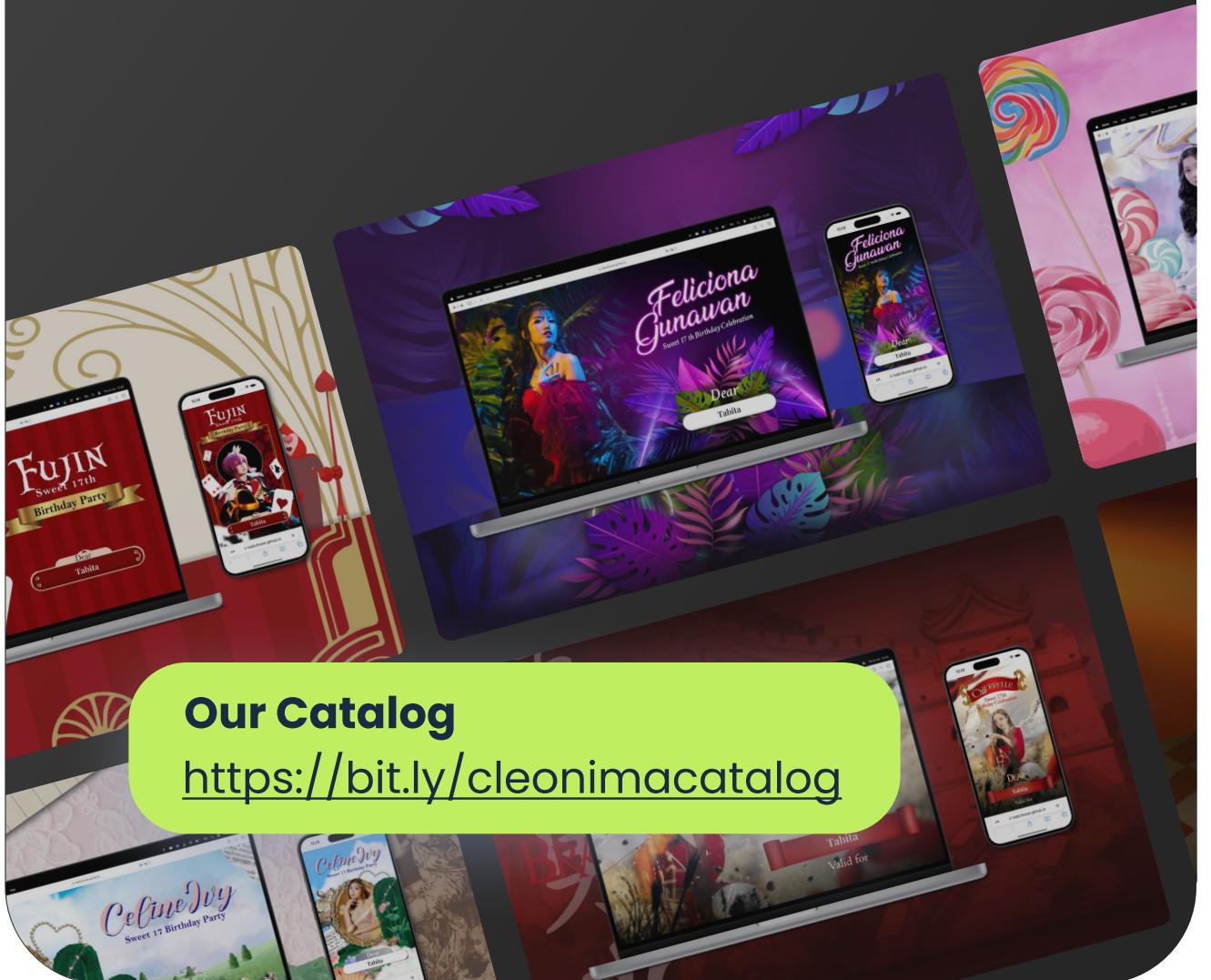
Features

Type to cast spell mechanism, tutorial scenes, exploration scene, boss scene, interactable objects, customizable spells and equipments, item shop

I'M CURRENTLY WORKING WITH

Cleonima Invitations

Bringing your sweet seventeen
birthday invitation to life



Our Catalog

<https://bit.ly/cleonicmacatalog>

**" So don't worry
about tomorrow, for
tomorrow will bring
its own worries.**

**Today's trouble is
enough for today. "**

Matthew 6-34 NLT

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