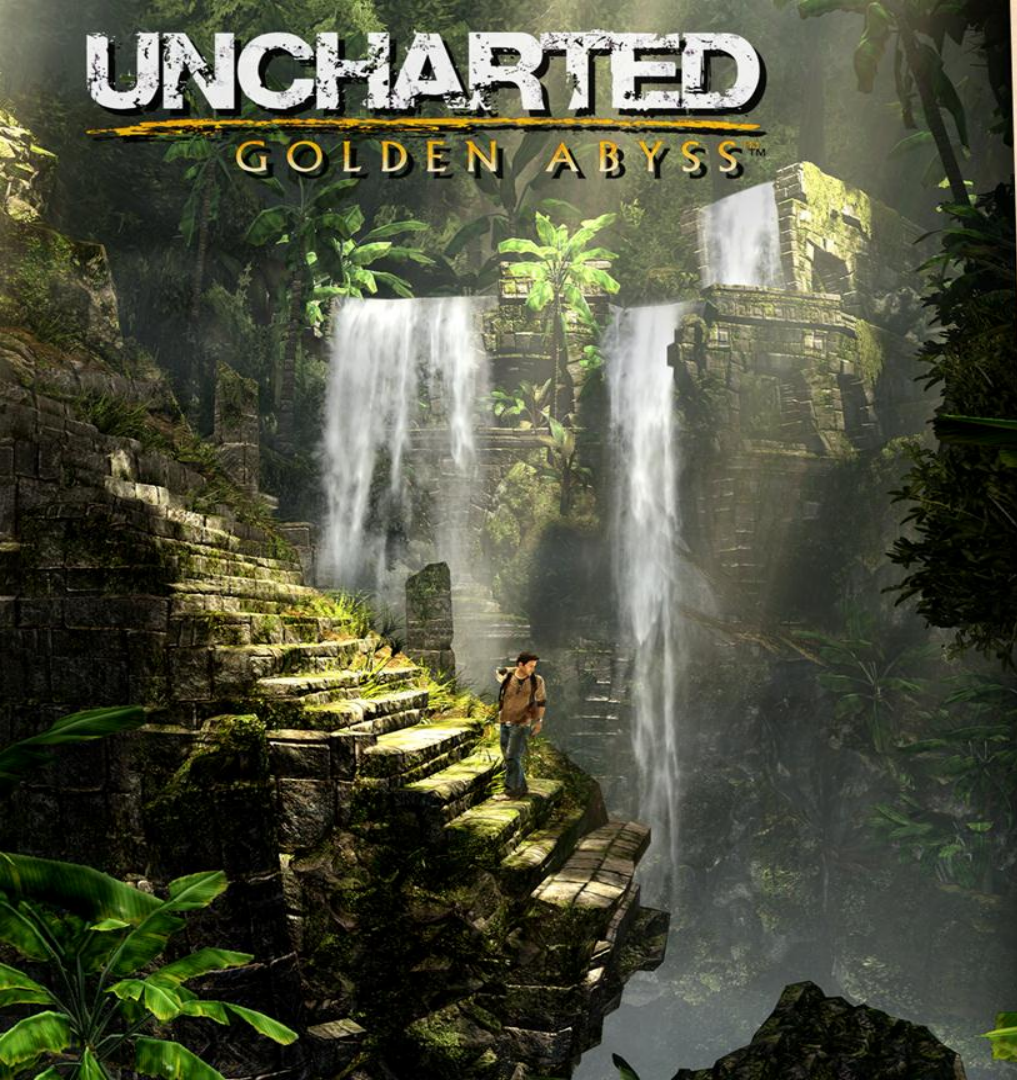


# UNCHARTED

## GOLDEN ABYSS™



**Ron Allen**

**Sr. Staff Designer**

**Sony Computer Entertainment**

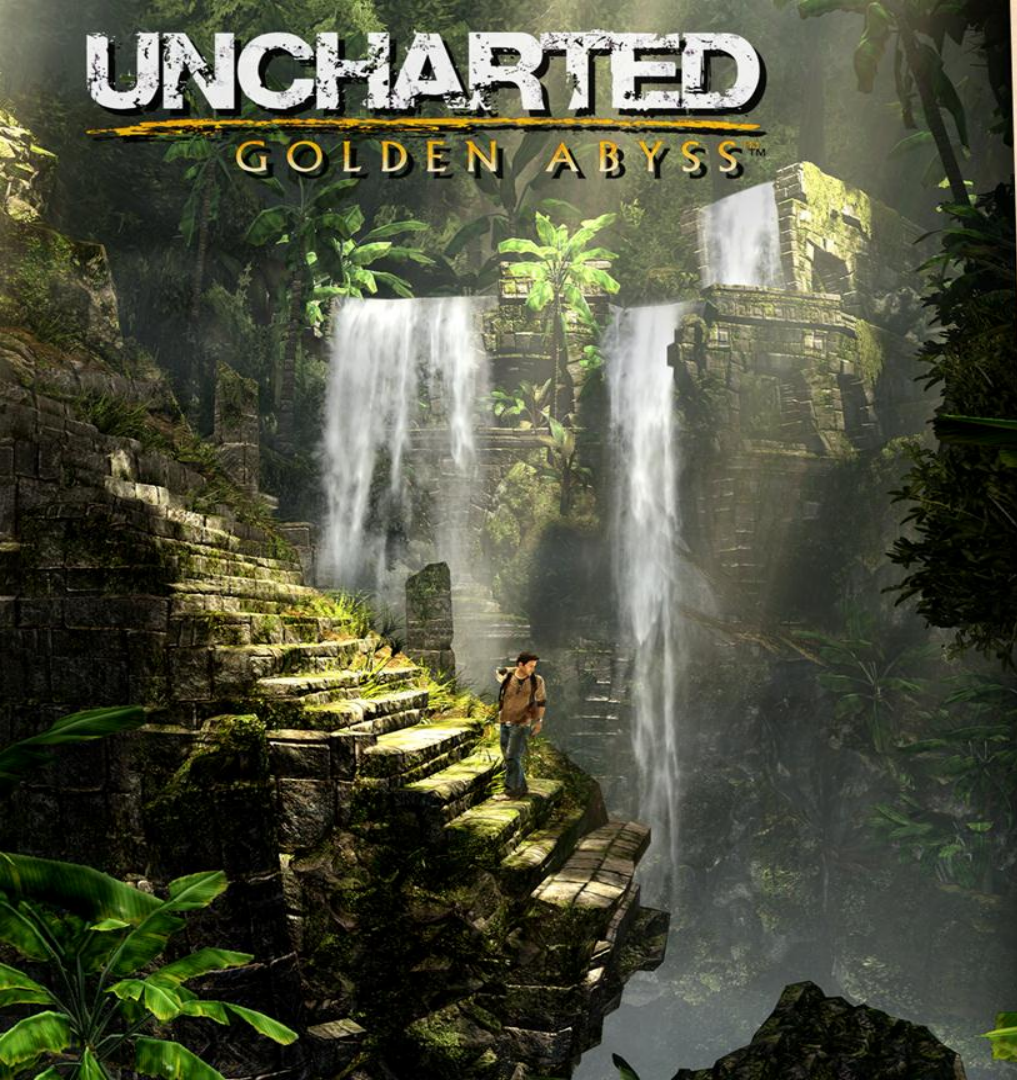
**bend  
STUDIO**

**Controlling the Abyss;  
Designing Uncharted's  
controls for the PlayStation  
Vita**



# UNCHARTED

## GOLDEN ABYSS™



# Presentation Overview

Unique Controls

Touch Climbing

Touch Melee

Canoe Rowing

Gyro Aiming

Lessons Learned

Session Wrap Up

Questions



# HOW DO WE EVEN BEGIN TO DEVELOP CONTROLS FOR A HANDHELD WITH UNIQUE OPPORTUNITIES?

Let's start with understanding the system..



- Missing L2/R2 as well as L3/R3 buttons from the DualShock 3



# TOUCH CLIMBING

Design Task: Create an intuitive touch climbing system





# TOUCH CLIMBING

Design Task: Create an intuitive touch climbing system

Feature: Tap Edge To Climb





# TOUCH CLIMBING

Design Task: Touch edges and have Drake climb there

Feature: Tap Edge To Climb ———> Problem: Tap last edge and wait?





# TOUCH CLIMBING

Design Task: Touch edges and have Drake climb there

Feature: Tap Edge To Climb → Problem: Tap last edge and wait? → Solution: Radius





# TOUCH CLIMBING

Design Task: Touch edges and have Drake climb there

Feature: Tap Edge To Climb —→ Problem: Tap last edge and wait? —→ Solution: Radius

→ Problem: No feedback





# TOUCH CLIMBING

Design Task: Touch edges and have Drake climb there

Feature: Tap Edge To Climb —> Problem: Tap last edge and wait? —> Solution: Radius

—> Problem: No feedback —> Solution: Flashing edges





# TOUCH CLIMBING

**Design Task: Touch edges and have Drake climb there**

Feature: Tap Edge To Climb → Problem: Tap last edge and wait? → Solution: Radius  
→ Problem: No feedback → Solution: Flashing edges → Problem: Always tapping





# TOUCH CLIMBING

## Design Task: Touch edges and have Drake climb there

- Feature: Tap Edge To Climb —> Problem: Tap last edge and wait? —> Solution: Radius
- > Problem: No feedback —> Solution: Flashing edges —> Problem: Always tapping
- > Solution: "Paint your path"





# TOUCH MELEE

Design Task: Create a new and intuitive melee system using touch





# TOUCH MELEE

**Design Task: Create a new and intuitive melee system using touch**

**Feature: Multi-Stage Touch Fight**

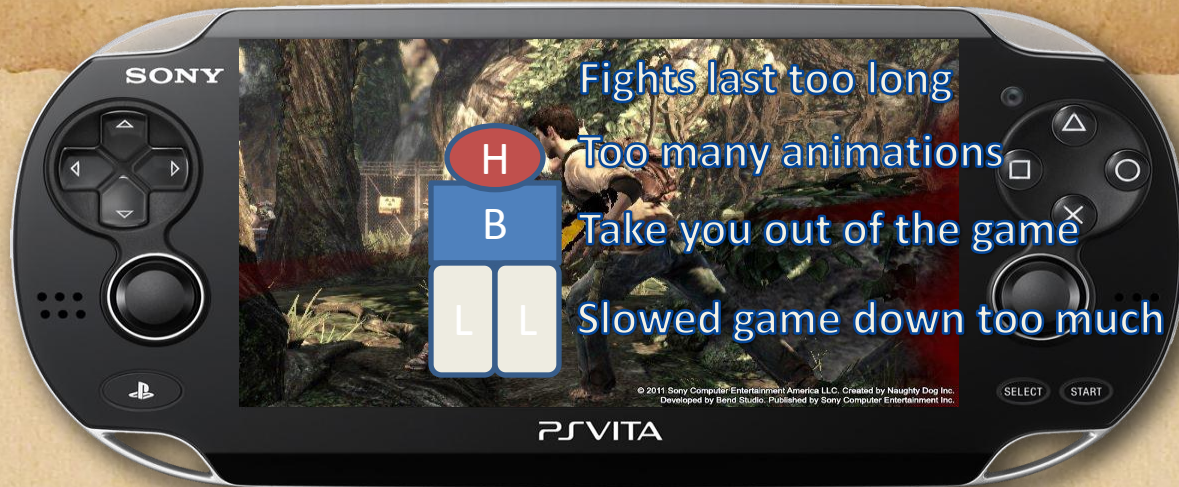




# TOUCH MELEE

Design Task: Create a new and intuitive melee system using touch

Feature: Multi-Stage Touch Fight → Problem: Not Tekken





# TOUCH MELEE

Design Task: Create a new and intuitive melee system using touch

Feature: Multi-Stage Touch Fight → Problem: Not Tekken → Solution: Uncharted w/touch

- Iron Fist
- Two/Three Hit Combo
- Dodge, then finish
- Simple and Familiar..





# TOUCH MELEE

**Design Task: Create a new and intuitive melee system using touch**

Feature: Multi-Stage Touch Fight → Problem: Not Tekken → Solution: Uncharted w/touch

→ Problem: Initiation/Feedback





# TOUCH MELEE

**Design Task: Create a new and intuitive melee system using touch**

Feature: Multi-Stage Touch Fight → Problem: Not Tekken → Solution: Uncharted w/touch

→ Problem: Initiation/Feedback → Solution: Touch icon over enemy



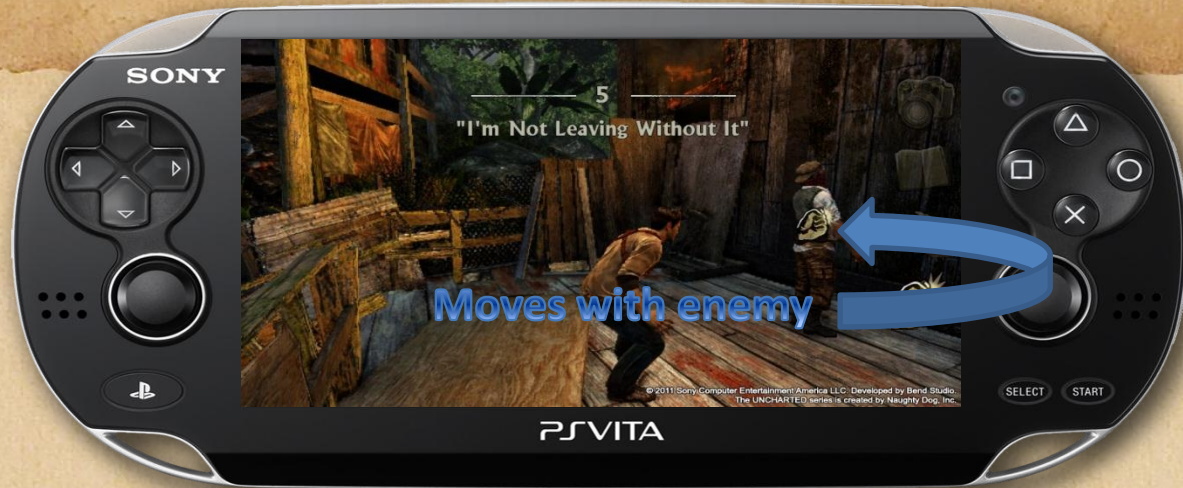


# TOUCH MELEE

**Design Task: Create a new and intuitive melee system using touch**

Feature: Multi-Stage Touch Fight → Problem: Not Tekken → Solution: Uncharted w/touch

→ Problem: Initiation/Feedback → Solution: Touch icon over enemy → Problem: Moving too much





# TOUCH MELEE

**Design Task: Create a new and intuitive melee system using touch**

Feature: Multi-Stage Touch Fight → Problem: Not Tekken → Solution: Uncharted w/touch

→ Problem: Initiation/Feedback → Solution: Touch icon over enemy → Problem: Moving too much

→ Solution: Touch icon bar



Touch Icon



# CANOE ROWING

Design Task: Pilot a canoe with touch – both front and rear





# CANOE ROWING

**Design Task: Pilot a canoe with touch – both front and rear**

**Feature: Swipe to row (SIM)**





# SWIPE CANOE ROWING

**Design Task: Pilot a canoe with touch – both front and rear**

**Feature: Swipe to row (SIM) —→ Problem: Too hard to turn**



**No real way to steer quickly since each swipe turned the same**



# SWIPE CANOE ROWING

**Design Task: Pilot a canoe with touch – both front and rear**

Feature: Swipe to row (SIM) —————> Problem: Too hard to turn —————> Solution: Speed adjustments

- Length of swipe + Speed of swipe
- But needed threshold for animation to play





# SWIPE CANOE ROWING

**Design Task: Pilot a canoe with touch – both front and rear**

Feature: Swipe to row (SIM) —> Problem: Too hard to turn —> Solution: Speed adjustments

→ Problem: Still too hard





# SWIPE CANOE ROWING

## Design Task: Pilot a canoe with touch – both front and rear

Feature: Swipe to row (SIM) —> Problem: Too hard to turn —> Solution: Speed adjustments

→ Problem: Still too hard —> Solution: Angle Adjustments



- 1) Swipe Length and Speed : Travel speed
- 2) Swipe Direction : Angle of turn



# SWIPE CANOE ROWING

## Design Task: Pilot a canoe with touch – both front and rear

Feature: Swipe to row (SIM) —> Problem: Too hard to turn —> Solution: Speed adjustments

→ Problem: Still too hard —> Solution: Angle Adjustments —> Problem: Too complicated





# SWIPE CANOE ROWING

## Design Task: Pilot a canoe with touch – both front and rear

Feature: Swipe to row (SIM) —> Problem: Too hard to turn —> Solution: Speed adjustments

Problem: Still too hard —> Solution: Angle Adjustments —> Problem: Too complicated

Solution: Rail gameplay with cool events





# GYRO AIMING

Design Task: Incorporate Gyro into aiming camera





# GYRO AIMING

Design Task: Incorporate Gyro into aiming camera

Feature: SLR camera aim





# GYRO AIMING

Design Task: Incorporate Gyro into aiming camera

Feature: SLR camera aim —————> Problem: Drift and Accuracy





# GYRO AIMING

## Design Task: Incorporate Gyro into aiming camera

Feature: SLR camera aim —————> Problem: Drift and Accuracy —————> Solution: LS Lock/Reset





# GYRO AIMING

## Design Task: Incorporate Gyro into aiming camera

Feature: SLR camera aim → Problem: Drift and Accuracy → Solution: LS Lock/Reset

→ Problem: Not consistent





# GYRO AIMING

## Design Task: Incorporate Gyro into aiming camera

Feature: SLR camera aim → Problem: Drift and Accuracy → Solution: LS Lock/Reset

→ Problem: Not consistent → Solution: Allowed with Sniper Scope





# GYRO AIMING

## Design Task: Incorporate Gyro into aiming camera

Feature: SLR camera aim → Problem: Drift and Accuracy → Solution: LS Lock/Reset  
→ Problem: Not consistent → Solution: Allowed with Sniper Scope → Problem: Still not consistent





# GYRO AIMING

## Design Task: Incorporate Gyro into aiming camera

Feature: SLR camera aim —————> Problem: Drift and Accuracy —————> Solution: LS Lock/Reset

→ Problem: Not consistent —————> Solution: Allowed with Sniper Scope —————> Problem: Still not consistent

→ Solution: Intu-Aim (aim adjust)

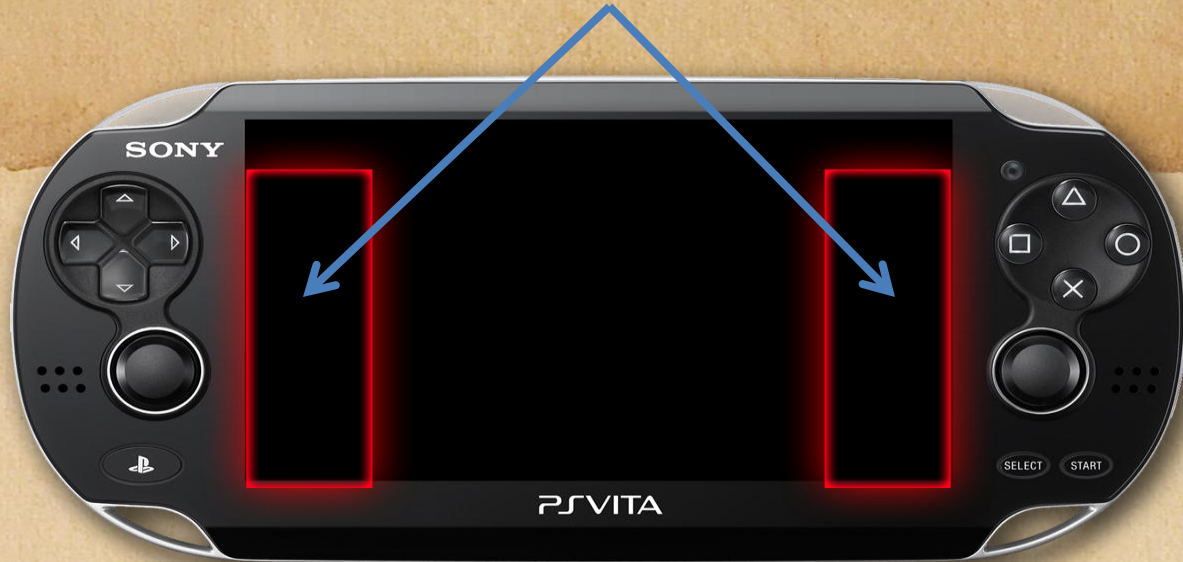




# SOME LESSONS LEARNED

## Front Touch Screen

Quick Access Areas

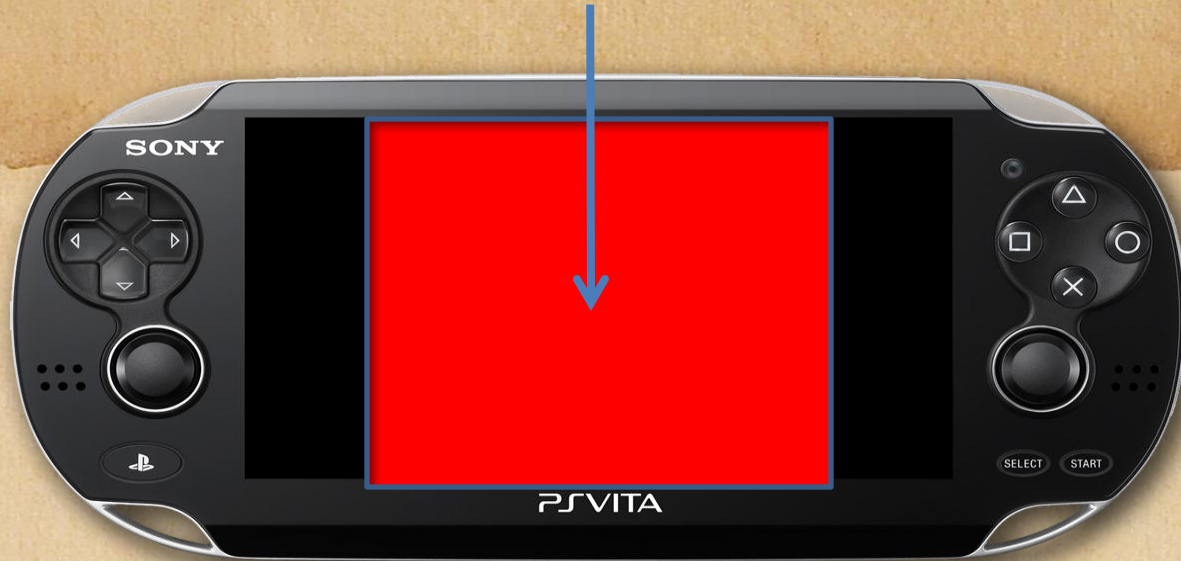




# LESSONS LEARNED

## Front Touch Screen

“Better be worth it” Zone

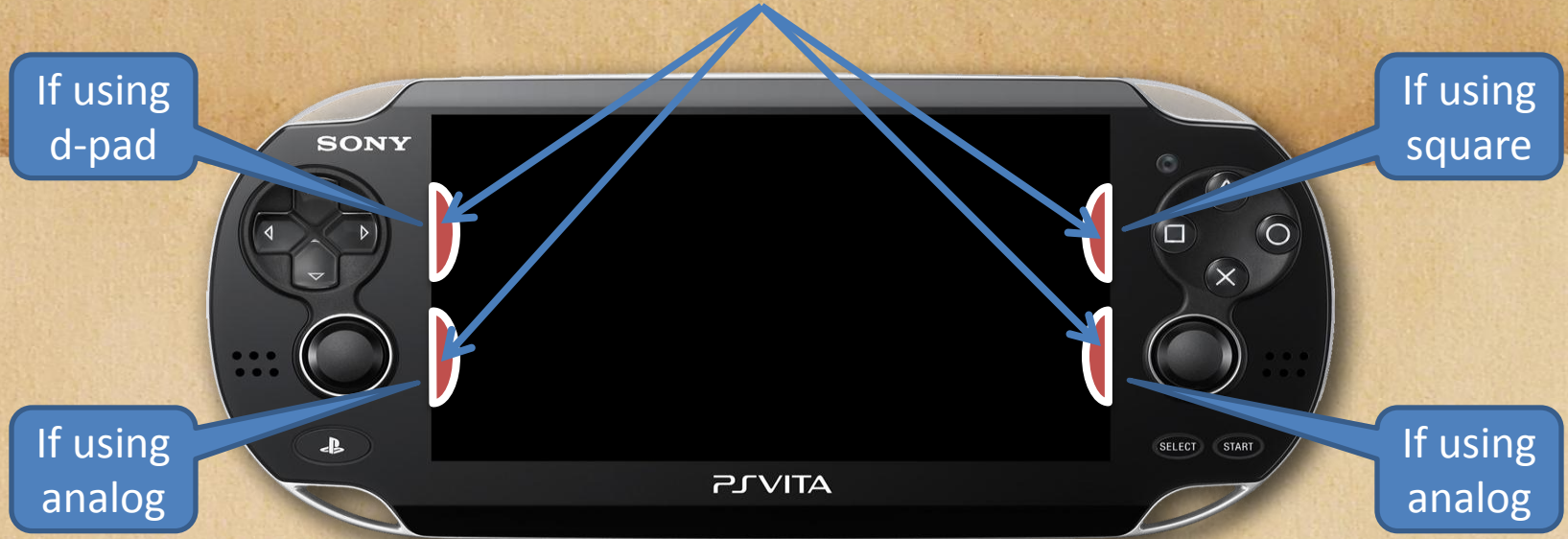




# SOME LESSONS LEARNED

## Front Touch Screen

Sausage Finger Areas

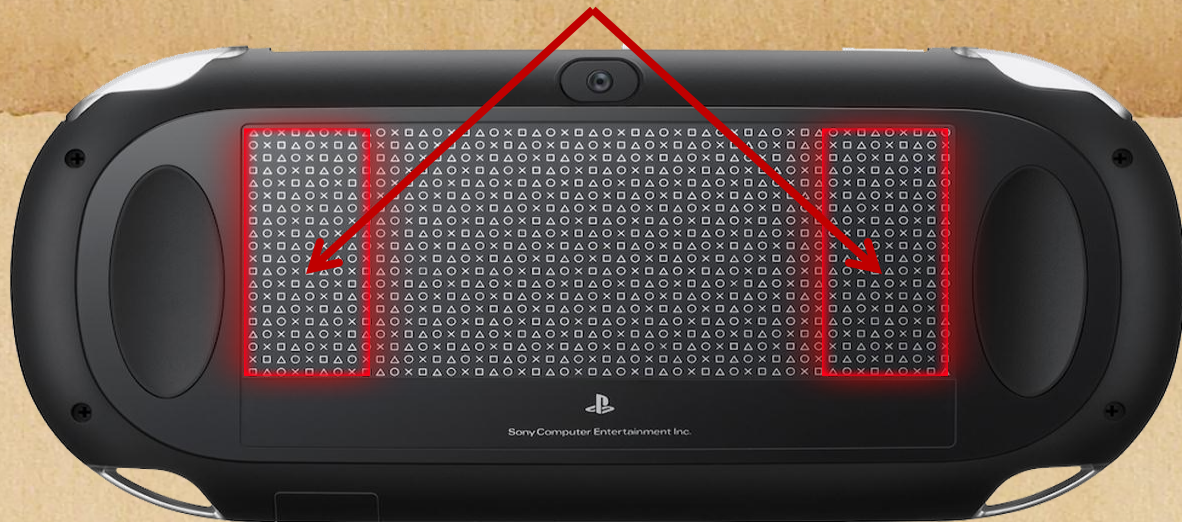




# SOME LESSONS LEARNED

## Rear Touch Panel

Accidental Access Areas  
(Complete Opposite of front screen)

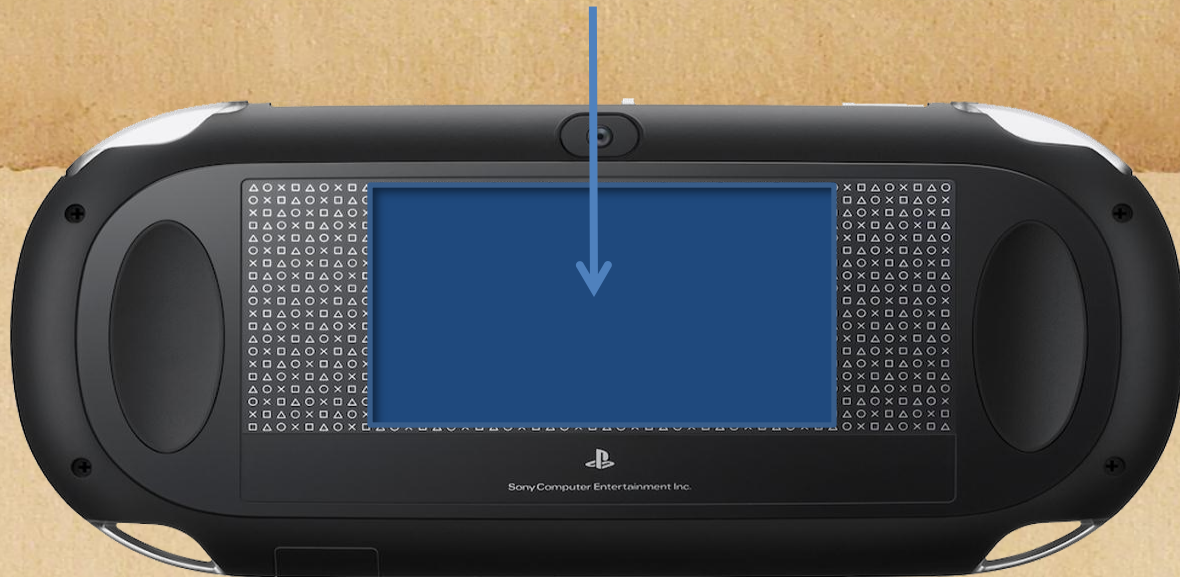




# SOME LESSONS LEARNED

## Rear Touch Panel

Stranger Zone





# SESSION WRAP UP

## Going forward, what would we do?

- We would cut back on some of the “kitchen sink” touch/gyro controls and put more focus on creating an even better PSVITA Uncharted gameplay experience.
- We would still offer some alternate touch controls like touch climbing, but maybe creatively insert a user choice into what would be defaulted on/off at the start of the game.
- Use the PSVITA strengths and create more intuitive and unique gameplay. Us developers have only begun to unlock the potential of the PSVITA. Remember that we are only first generation and the best is yet to come..

## Any advice?

- **SIMPLIFY YOUR DESIGNS.** If you think that some control methods are too complicated, chances are they are WAY overboard. Use this motto: Simplify or die!
- Quick access areas on touch devices in general are important and should be taken advantage of.
- Touch/Six-Axis(Gyro)/Rear Touch controls should not be your enemy, but just try to make sure that they are there for a reason and not just for the sake of putting them there.
- When designing touch controls, try to guestimate where your player's hands will be first, that way touch gestures and icons feel more natural.



QUESTIONS??

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