James DeGruttola
UI/UX Portfolio

FIELDRUNNERS ATTACK!

1. HERO INFORMATION

2. DAILY QUEST + CACHE

RUINS OF GLITTERDEEP

3. VISUAL DEVELOPMENT

MANA GRIND
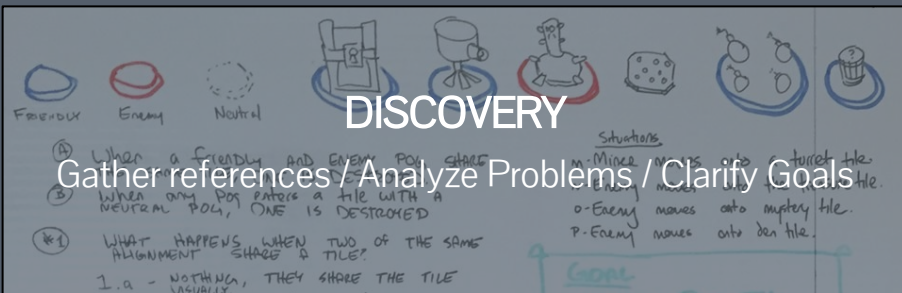
4. OTHER FUN STUFF

RESUME

DEV BLOG

JDEEGZ@GMAIL.COM

DISCOVERY

Gather references / Analyze Problems / Clarify Goals

CONCEPTING

Explore Solutions / Low-Fi Mockups / Storyboards

REFINING

Synthesize Concepts / Feasibility Checks
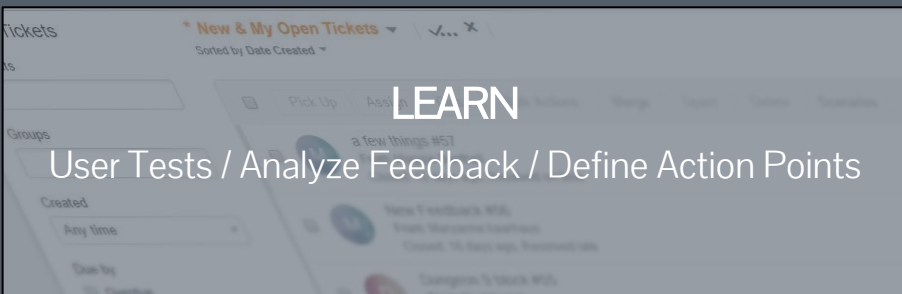
INTEGRATION

Dev Side-by-Side / Asset Generation
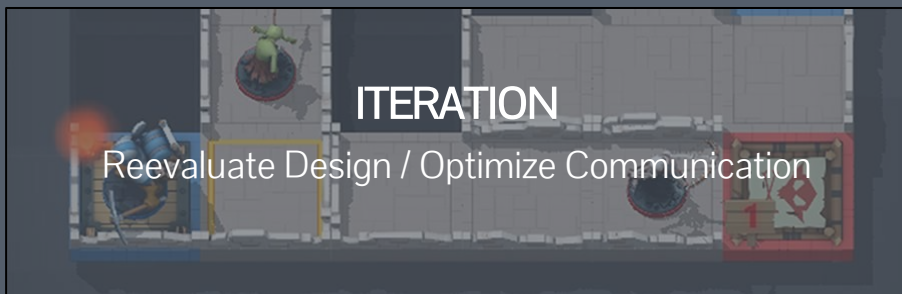
LEARN

User Tests / Analyze Feedback / Define Action Points

ITERATION

Reevaluate Design / Optimize Communication

DIABOLICA
Wheelies from Hell

FURIOUS GEORGE
Missing a Banana

109

JAX
Metal Shredder

96

CLUCK NORRIS
Akimbo Chicken

95

HELLS BELLS
Metal Shredder

74

ARACHNAT
Flight Simu

Level 35

Levl 26

In Fieldrunners Attack! Players collect and battle with over 30 unique heroes. Heroes are the **core component** of the game, and getting players to **want** to view and interact with their collection is my goal.

Players deploy heroes in combat, and control them individually. With 30+ options to choose from, it's important players know each hero's **strengths** and **weaknesses**.

CONTROL MANY HEROES
DESTROY YOUR ENEMIES

The goal of the hero information screen is to provide all the information that would allow players to know which tool is right for the job of defeating their enemies. There is a lot of information to display, and coming up with a pleasing and intuitive design was essential.

Hero Stars - The number of stars a hero has earned determines the **maximum level** a hero can achieve.

Hero Level - A hero's level determines the **damage** and **health** stats for the hero, as well as the number of times a **hero power** can be upgraded.

Hero Powers - The components that establish the difference between **heroes** and **regular troops**. Some powers are passive bonuses, others are active abilities the player activates in combat.

Additional - Hero Damage and Health, Name, Role, Description, Environment Type, Strength Value

Fieldrunners Attack! HERO INFORMATION

Early wireframing and ideation. Exploring information hierarchy and organization.

Wireframe 1

Hero Name

| Stats | Powers | Upgrade | X |

HERO PORTRAIT

Health:
1000
Damage:
2000
Targets:
Air and Ground
Speed:
Fast

NEXT LEVEL
+ 100

+ 200

Hero Power

Airstrike:
Calls down a massive Airstrike causing **100** damage per second for **10** seconds in a large area.

Leader Skills

Soul Steal:
Hero has a 55% chance to steal health from an enemy.
Next Rank +5%

Resolve:
Hero has a 15% chance to block all damage.
Next Rank +5%

Frost Walk (unlocks at rank 6)

Next Star: 21/30:

LvL 28   1000/20000
Rank   5/5

Wireframe 2

HERO NAME   x

| INTEL | POWERS | UPGRADE+ |

Health:
1000
Damage:
2000
Targets:
Air and Ground
Speed:
Fast

NEXT LEVEL
+ 100

+ 200

This hero spent decades in super max prison, training their CQC abilities against the meanest of criminals.

Hero Power

Leader Skills

Wireframe 3

HERO NAME   x

| INTEL | UPGRADE+ |

Health:
1000
Damage:
2000
Targets:
Air and Ground
Speed:
Fast

NEXT LEVEL
+ 100

+ 200

Hero Power

Airstrike:
Calls down a massive Airstrike causing 100 damage per second for 10 seconds in a large area.

Leader Skills

Wireframe 4

HERO NAME   x

| INTEL | UPGRADE |

Health:
1000
Damage:
2000
Targets:
Air and Ground
Speed:
Fast

NEXT LEVEL
+ 100

+ 200

Hero Power

Airstrike:
Calls down a massive Airstrike causing **100** damage per second for **10** seconds in a large area.

Leader Skills

Soul Steal:
Hero has a 55% chance to steal health from an enemy.
Next Rank +5%

Resolve:
Hero has a 15% chance to block all damage.
Next Rank +5%

Next Star: 21/30:

5/5
1000/20000

Wireframe 5 (large)

HERO NAME   X

| INTEL | POWERS | UPGRADE+ |

Health:
1000
Damage:
2000
Targets:
Air and Ground
Speed:
Fast

NEXT LEVEL
+ 100

+ 200

This hero spent decades in super max prison, training their CQC abilities against the meanest of criminals.

Next Star: 21/30

5/5
1000/20000

First integration. System and idea validation.

In the hero system's early development, players invested cola drinks to increase a hero's stats and strength of special powers.

The large, striking hero portraits created a **sense of place** for players in a game filled with stats and menus.

HERO INFORMATION

Fieldrunners Attack!

Learn from feedback and observation. Hero Powers are awesome, let's interact with them more!

I wanted Heroes to **feel more powerful** than troops, and I saw an opportunity to achieve this and also increase **player engagement** by making hero powers individually upgradeable.

Allowing players to choose which hero powers they could upgrade increased the feeling of **ownership** and perceived value of each hero and their powers.

Iteration and Refinement. Upgrading heroes is great but the process is not fun.
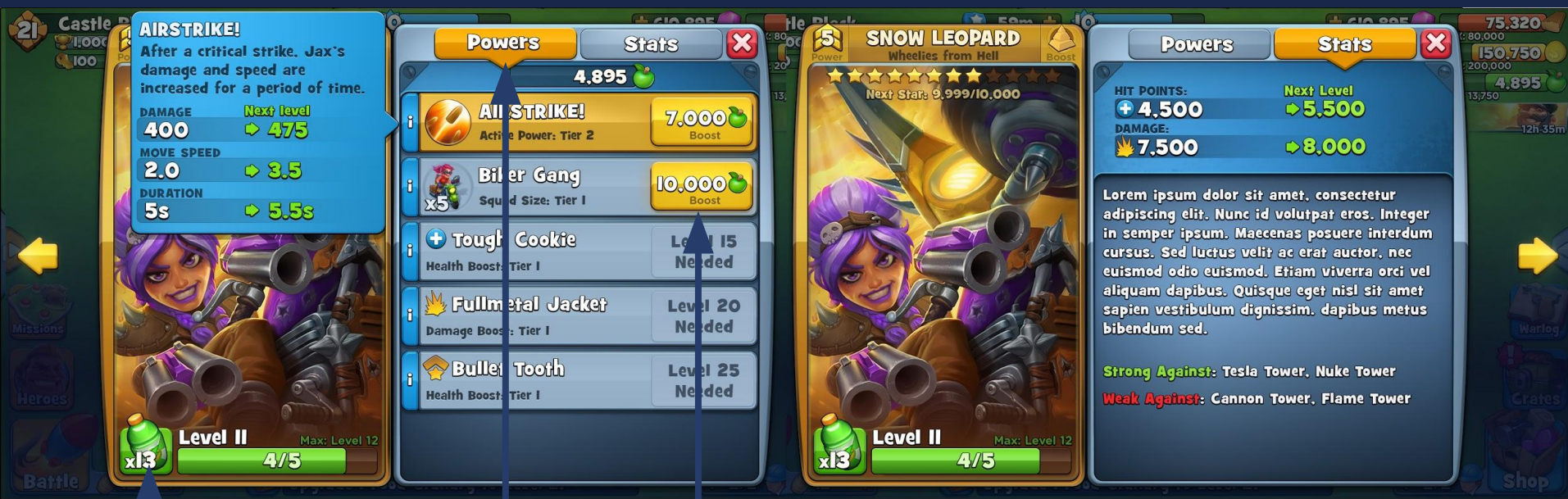
Once the hero powers became a **point of interaction** for players, they had to be moved **above-the-fold**. The number of colas was reduced from 4 to 1. The currencies required to upgrade powers reduced from 6 to 1.

The basic stats and hero description, while important are **not viewed and engaged** with as often as the Cola and Power upgrade buttons, the stats tab is no longer the **default tab** when the interface is opened.

Reflect and analyze successes and failures.

Defining the importance of each bit of data - Understanding how **we want** the player to use the interface and how **they do use** the interface allows me to understand what's important and what can be put aside.
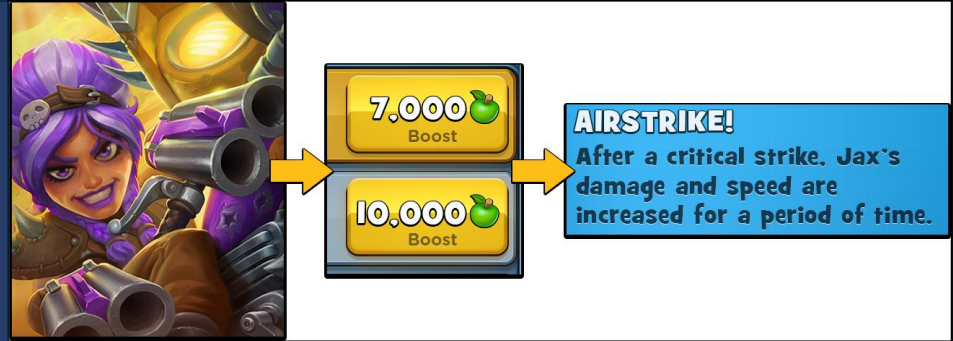
Consistent branding **prevents** an interface filled with different bits of data from **feeling overwhelming.**

Utilizing the **minimal space** on mobile devices starts with understanding what the **player needs**.

When systems feel **complicated** to players, they need to be re-examined. They are **not achieving their goals**.

JAX
Metal Shredder

ARACHNATRON
Flight Simulator

DIABOLICA
Wheelies from Hell

5 Power

Boost

Next Star: 9.999/10.000

Powers | Stats

4,895 🍎

AIRSTRIKE!
Active Power: Tier 2
7,000 🍎 Boost

Biker Gang
x5
Squad Size: Tier 1
10,000 🍎 Boost

Tough Cookie
Health Boost: Tier 1
Level 15 Needed

Fullmetal Jacket
Damage Boost: Tier 1
Level 20 Needed

Bullet Tooth
Health Boost: Tier 1
Level 25 Needed

x13

Level 11
Max: Level 12
4/5

unlock 4/5

DAILY QUEST + CACHE

Daily retention is a metric for a free-to-play mobile game that helps evaluate its performance. It measures the proportion of users that continue playing a game after Day 1.

Day 1:	**40%**	→	Day 1:	**80%**	
Day 7:	**20%**		Day 7:	**40%**	
Day 30:	**5%**		Day 30:	**15%**	

Getting players to **try** your game is the first battle. Getting them to **return** is the next great challenge. I needed a feature that would have players battling in Fieldrunners **every day**.

Daily retention values are an estimate and do not reflect real Fieldrunners Attack! data.

Rapid Ideation. I needed a solution that was low risk, low cost, and could be done quickly.

Castle Black
1,000
100

59m +   IO

+ 610,895

75.
MAX: 80,000

I50.
MAX: 200,000

4.
MAX: 13,750

ACHIEVEMENTS

Guide   **Town**   **Combat**   **Heroes**

	Progress:	Rewards:
Complete 5 Campaign Missions	Complete ✓	100,000 100,000
Collect IOO,OOO Gold	90,000/100,000	100,000 100,000
Upgrade 4 Lumbermills to level 5	3/5	100,000 100,000
Upgrade 3 Gatling Towers to level 6	I/3	100,000 100,000

2/2

I determined that we could reuse the core components of our achievement system to create a cycling daily quest system, saving production time and making something the players can understand due to familiarity.

Quest Image

Quest Objective

Collect IOO,OOO Gold

Quest Progress

Progress: 90,000/100,000

Quest Rewards

Rewards: 100,000   100,000

Rapid Ideation. How does the player access the daily quest and cache?

Option A

Daily quests/rewards are added to the existing Achievement screen via tab. Guide remains the default tab. 'Guide' quests populate the bar on the HUD.

Option B

Quest bar is removed from HUD. Two buttons added below League icon. 'Task board' and 'Achievements'

Achievements UI operates as it currently does.

Task Board will start with one tab, Daily. It will be modular and be able to grow to include longer quests that will help long-term retention.

Option C

Quest bar and Achievements button remain in tact. Task board button added below league.

Achievements UI operates as it currently does.

Task Board will start with one tab, Daily. It will be modular and be able to grow to include longer quests that will help long-term retention.

Option D

Quest bar and Achievements button remain in tact. Task board button added below league.

Daily quests tab is added to the achievements UI. Tapping the Achievement button opens to achievment tab.

Tapping the Daily button below the league icon opens the achievments UI, but to the daily tab.

Option E

Use the quest bar to display items of importantce throughout the life of the game.

Once the player understands and is familiar with how to interact with the game, begin showing daily quests, as they are more important to act upon NOW than high-level achievements.

I mocked up possibilities for how to **access** the daily quests and how are the daily quests **integrated** with the achievements system.

Option C was chosen for its balanced development time, accessibility and player excitement.

Fieldrunners Attack! DAILY QUEST + CACHE

First Integration. Idea validation and user testing.
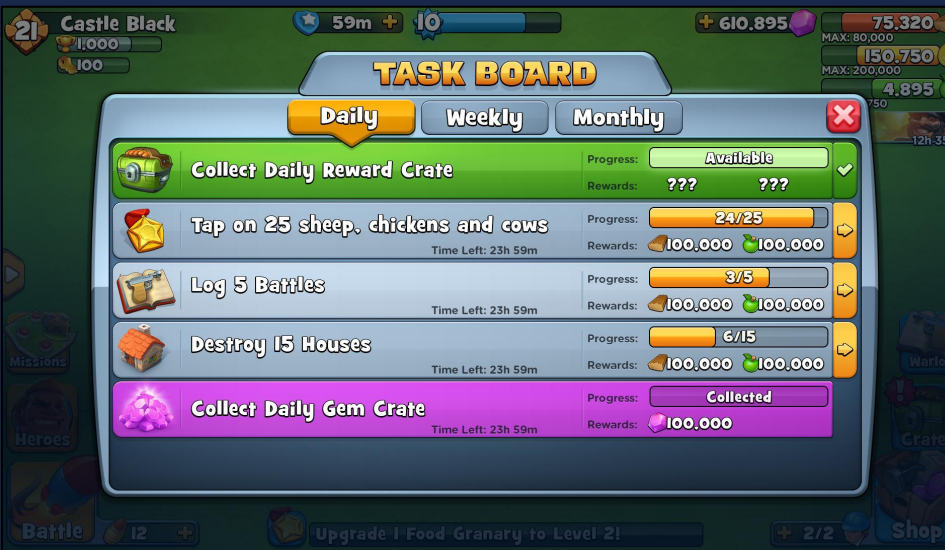
In roughly two days the Daily Quest system was crudely working in Fieldrunners Attack! The system was a visual clone of the Achievements interface with the addition of the Daily Cache, Daily Gems, and 24 hour timers.

Initial play-testers responded positively towards being rewarded for accomplishing small feats each day.

Fieldrunners Attack! DAILY QUEST + CACHE
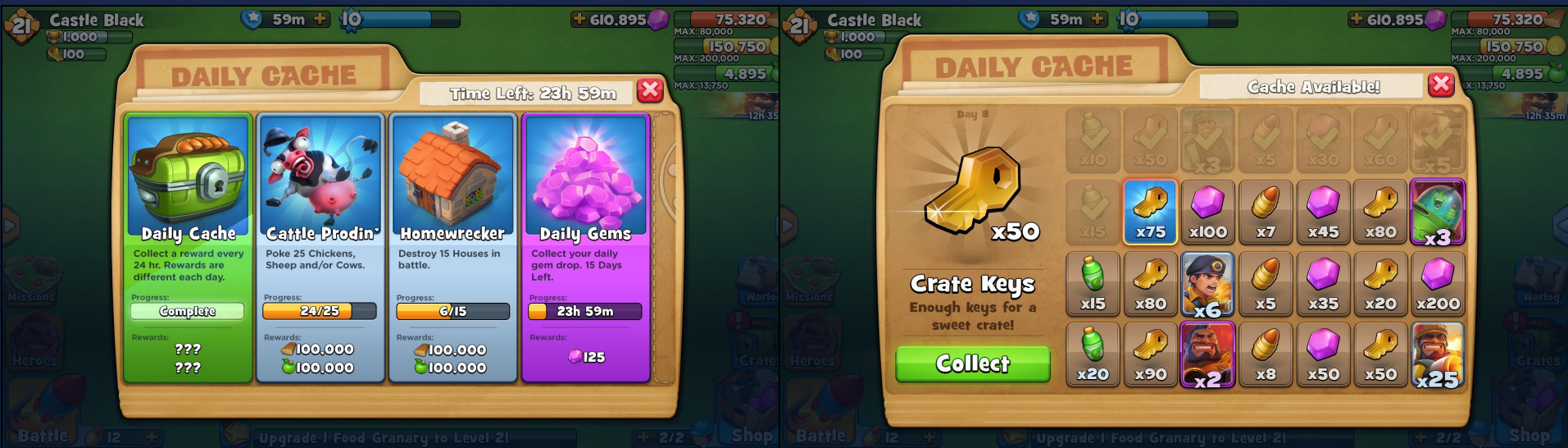
Visual refinement

By skinning the prototype, the old system feels fresh and unique. The Daily Quests need to be visually distinct from the Achievements to excite players to return each day.

DAILY QUEST + CACHE

Visual refinement

Daily Ops
Closed, Work to do.

Daily Ops
Open, Rewards to claim!

Players access the Daily Quest interface using the Daily Ops button at the top-left of the HUD, normally where a player's eye begins reading the screen.

Ruins of Glitterdeep is a puzzle + RPG where players need their wits about them to navigate dangerous dungeons and reclaim the lost relics of an ancient dwarven city, Glitterdeep.

Overview. My experiences working on side-projects.

Working on a side project is a **significant** undertaking. Because **time** is a limited resource, you begin to value it more than quality or cost.

You can **gamify** your time by min/maxing it:

- Lean on **what you know**.

- Constantly examine **priorities**.

- Time block **experimental** phases.

- Find opportunities for **scalability**.

- **Communicate** effectively and often.

- Be **mindful** of how your work affects **teammates**.

Concepting. Rough sketches + braindump.
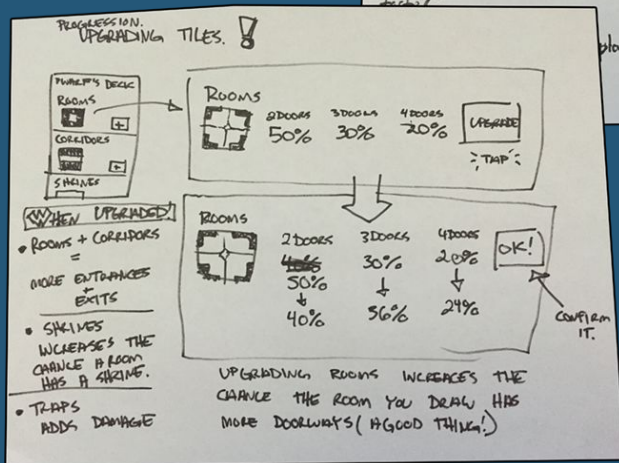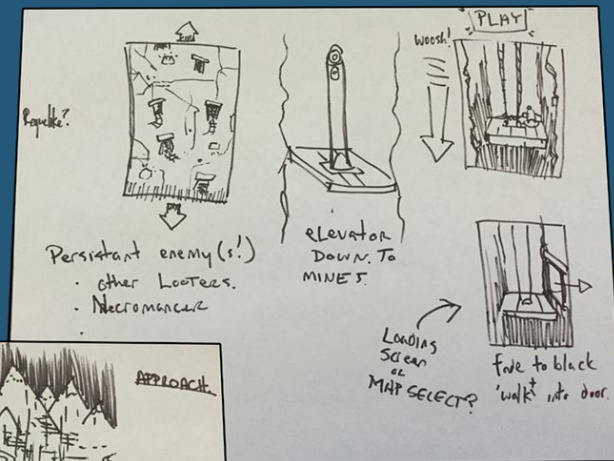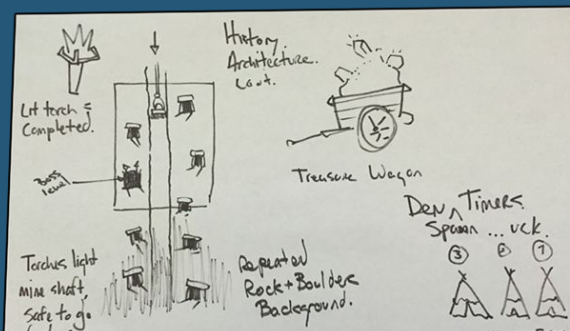
Rough sketches exploring the possible experiences players will have exploring the world, choosing dungeons to loot, and upgrading the characters they acquire.

Concept synthesizing. A good high-level starting point.
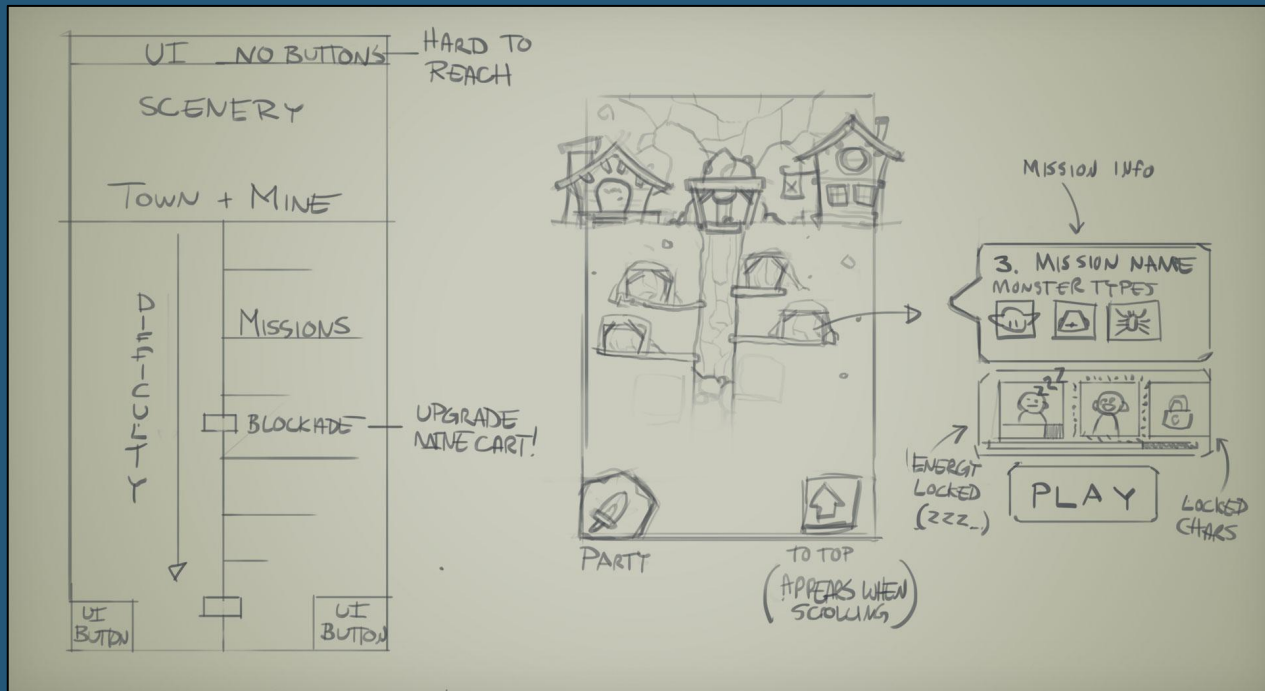
Created a refined sketch to communicate the ideas to the team. We discussed technical feasibility and laid out a battle plan.
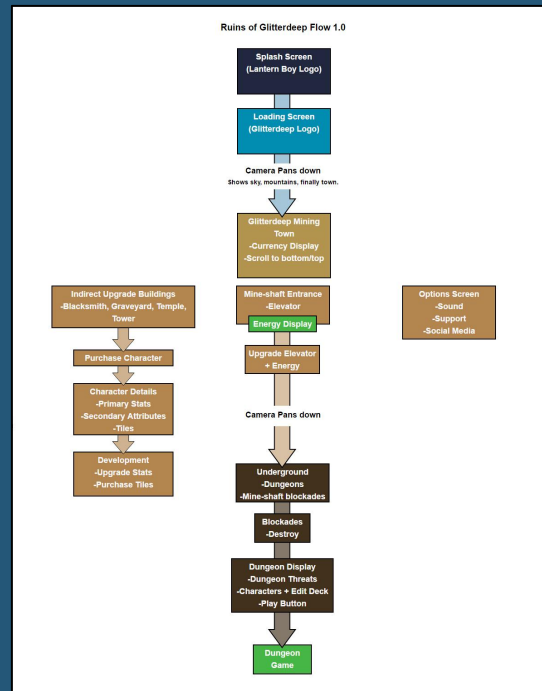
A linear flow is simple for players to use and digest.

Analyze team feedback + begin prototyping.

New town layout sketch
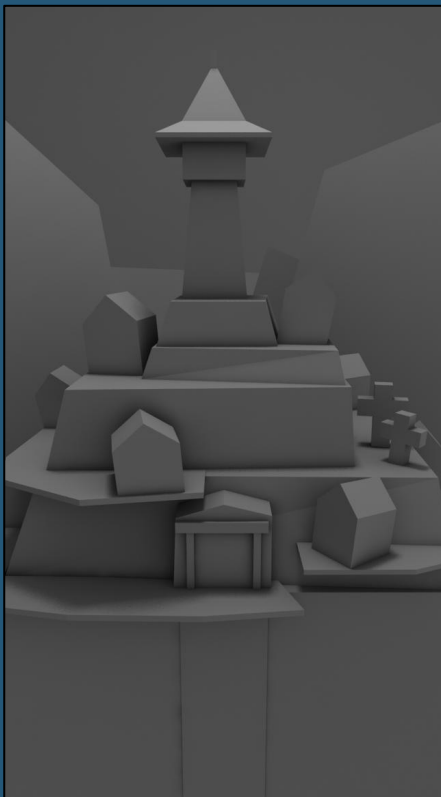
Town model whitebox
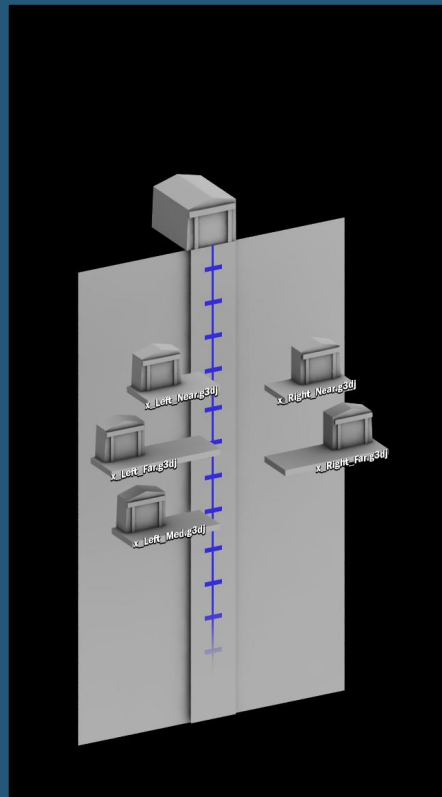
Dungeon schematic
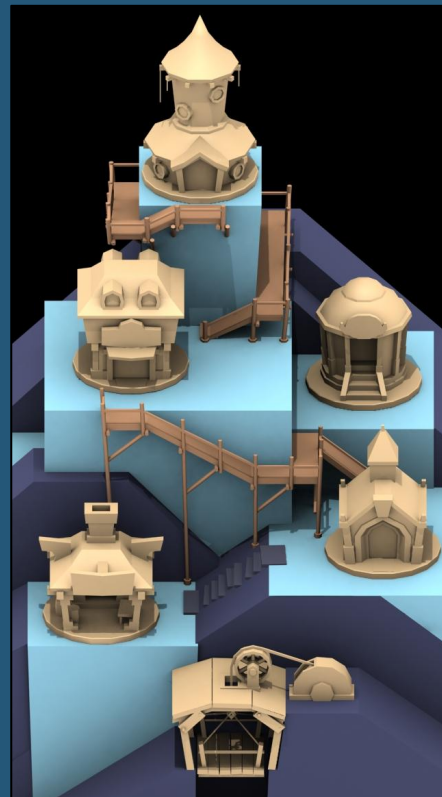
Town model refinement

Test, define problems, iterate solutions.

The prototype had the town built on the top of a mountain, with the wizard's tower on the peak. Scalability became an obvious issue, each time we want to add or remove a building, the design of the mountain needs to adjust, requiring a lot of work.

The number of buildings required for launch was reduced from 6 to 4, but the two removed would be added in the future.

The solution takes advantage of the vertical orientation of the game. By stacking each building on its own peak, I created flexibility for adding and removing buildings to the mountain.

tap tavern to buy
potions, gems, gold etc

tap church to buy
character and refine it

tap blacksmith to
refine your miner

tap mine to enter dungeon
select.
camera always scrolls down
so this is in view on game load.

tap character to pick
a new one, and pick tiles.

stack more buildings,
oo new content!

Test, define problems, iterate solutions.

defeated dungeon

dungeon name

6

7

not-defeated dungeon
List always opens to this mission

8

selected char
reminder

locked dungeon

space for dungeon threats

9

10

space every 5 dungeons for a breath

11

Accessing dungeons below the town by scrolling became a **frustrating** experience. As the player progresses, they unlock more dungeons, further from the town, increasing the distance required to scroll.
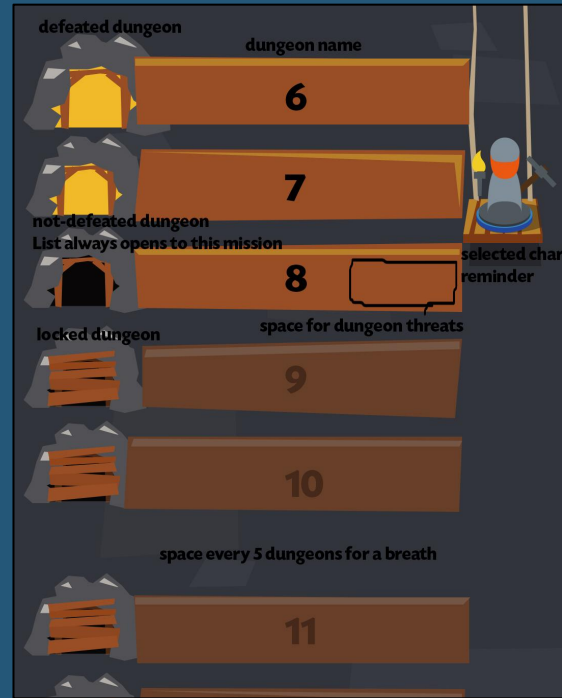
A procedurally generated dungeon **list** was the **best solution** for players and devs.

Refinement and Integration.

The players no longer have to scroll past the town to find the dungeon they want to loot. Tapping the mine entrance in the town opens a list that **auto-scrolls** to their furthest progression, presenting the ideal choice.

Wireframe ideation. Blacksmith Shop - character upgrade interface.

Blacksmith Concept A

Blacksmith Concept B

Blacksmith
Level 2

X

+15% → +20%

-500 Gold | Upgrade Blacksmith

Tile Title (Level 1)
6 Word Tile Description
Upgrade effect
cost

Tile Title (Level 1)
6 Word Tile Description
Upgrade effect
cost

Tile Title (Level 1)
6 Word Tile Description

Blacksmith
Level 2

X

15% → 20%

Increase Armor
cost

Miner Tiles
Level | Level | Level

Tile Title
Tile Description and upgrade effect.

Upgrade Tile
cost

Tinkerer Tiles

Though the character upgrade system was still in its infancy, we wanted to create some visuals that may illuminate the issues a player may have interacting with it.

Blacksmith
Level 2

15% → 20%

Increase Armor
500

Miner - Turret Tile

Creates a turret that damages enemies in range.
Increase damage to 210.

Upgrade Turrets
5,000

Time to upgrade my turret tile!

Blacksmith
Level 2

15% → 20%

Increase Armor
500

Miner - Turret Tile

Creates a turret that damages enemies in range.

MAX

Maxed out my turret tile!
Oh, a new tab, and it's glowing!

Blacksmith
Level 2

15% → 20%

Increase Armor
500

Miner - Turret Tile

Creates a turret that fires TNT at enemies in range.
Replaces Turret Tiles with Exploding Turret Tiles

Evolve Tile
15,000

EVOLVE my tile? Gosh! I DO!

The wireframes brought to light the unnecessary complexity of the upgrade system, and allowed us to re-evaluate early in development.

Blacksmith
Level 2

15% → 20%

X

Bolster the defenses of all your adventurers.

Increase Armor
500

Miner's Tiles

Turret Tile - Level 1
Shoots enemies in range.
Increase damage to 210
UPGRADE
5,000

Barrels o' Fun - Level 99
Place barrels of mystery and wonder.
MAX LEVEL

TNT Barrel - Level 4
TNT Barrel will explode after 3 turns.
Increase damage to 560
UNLOCK
Lv. 3

Gravedigger's Tiles

Undead Shrine - Level 2
Slain enemies respawn as your followers.
Add a room exit
UPGRADE
8,000

Tombstone'd - Level 3
UPGRADE

Style concept exploration. Blacksmith Shop - character upgrade interface.

Blacksmith (Lv. 1)

Bolster your adventurers' defenses

500
Upgrade Blacksmith

Explosive Miner Tiles

Tile Name
1 Sentence description.
Upgrade description
1,000 Upgrade

Tile Name
1 Sentence description.
Upgrade description
1,000 Upgrade

Tile Name
1 Sentence description.
Upgrade description
1,000 Upgrade

Metal Gravedigger Tiles

Tile Name
1 Sentence description.
Upgrade description
1,000 Upgrade

Material and scale exploration

BLACKSMITH

500

Less rigid sketch to loosen up

Blacksmith (Lv. 1)

Bolster the defences of all adventurers.

500
Upgrade Blacksmith

Glitterdeep Miner Tiles

CHEST OF FORTUNES
Rescue the chest, become rich!
Then get mad bitches.
Increase rich by 200, bitches by 50.
Lv. 1
13 Upgrade

BONE SNIPER
Bones will fire arrows at unwanted enemies in the area.
Increase damage to 50.
Lv. 46
10,564 Upgrade

TROLLHUNTERS
Spawn gross trolls every 3rd turn.
Lv.2 Locked

Singer's Gravedigger Tiles

Refined sketch with data

35 1,340

Miner Jones
Health ♥♥♥♥♥
Damage **10**
Armor **3**

More Health!
Increase your health pool by one heart.
600

More Damage!
Increase your damage by one point.
650

More Armor!
Add a point of armor.
Level 5

Dynomite!
Deal 3 damage to near-by tiles after 3 rounds.
0/4
Level 7

Escape!
Make an impromtu escape from the dungeon
2/4
Level 11
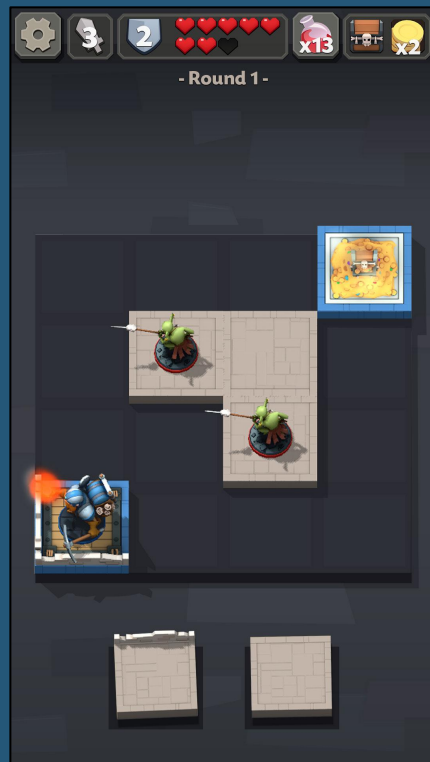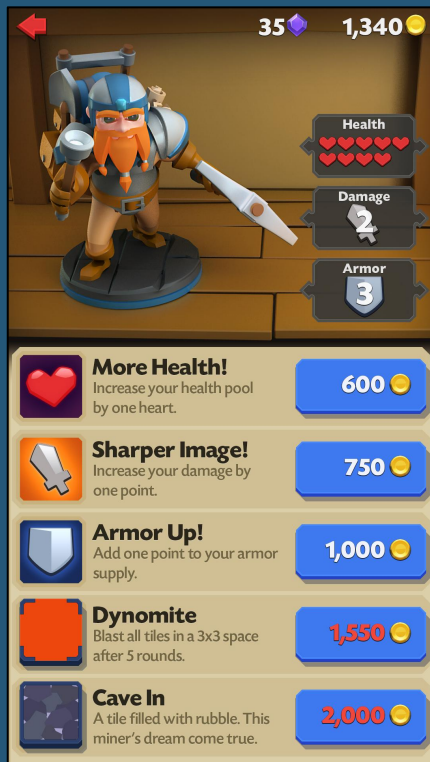
The original vision for the style was heavy on **fantasy** themes. Metal frames, wood grains and bolts to make the UI feel **crafted**. I needed to re-evaluate the **effort required** to implement the style. I began to move towards a UI that is simpler and bold, with small fantasy flourishes.

Wireframe concepting. Blacksmith Shop - character upgrade interface.

Panel 1 — Character upgrade interface

35 · 1,340

Health

Damage
2

Armor
3

More Health! Increase your health pool by one heart. — 600

Sharper Image! Increase your damage by one point. — 750

Armor Up! Add one point to your armor supply. — 1,000

Dynomite Blast all tiles in a 3x3 space after 5 rounds. — 1,550

Cave In A tile filled with rubble. This miner's dream come true. — 2,000

Panel 2 — The Jousting Jugs

1,340 · 52

3 — Price 15
10 — Price 50
50 — Price 300

1,000 — Price 200
5,000 — Price 600
12,500 — Price 1,200

500 — Price $19.99
1,200 — Price $19.99
15,000 — Price $19.99

Panel 3

3 · 2 · x13 · x2

- Round 1 -

Panel 4 — Victory

15 · 10,000 · x13 · 205

- Round 1 -

VICTORY!

You found...
A shiny metal figurine

You think the figurine would sell for...

1,000

15

NEXT

A simple UI style saves time by **adapting** to system changes easily and **facilitates** new feature development.
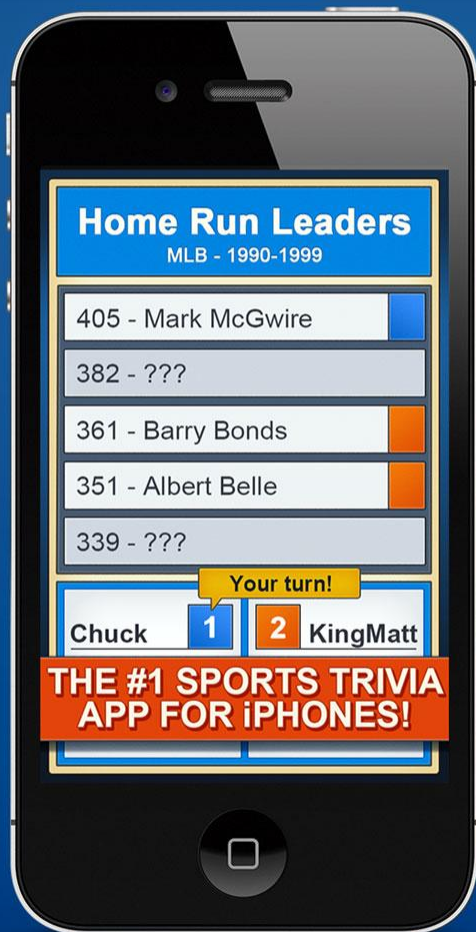
Chucksports is the multiplayer sports trivia app available on the iOS store.

www.Chucksports.com

Home Run Leaders
MLB - 1990-1999

405 - Mark McGwire

382 - ???

361 - Barry Bonds

351 - Albert Belle

339 - ???

Your turn!

Chuck 1   2 KingMatt

THE #1 SPORTS TRIVIA APP FOR ¡PHONES!

Your turn

2 - 2 **vs. Bones**
Superbowl MVPs

1 - 2 **vs. KingMatt**
AL Homerun leaders

Start a new game

Game of the Day

4 **Game of the Day**
4000+ Rebounds and 2000+ Assi...

Their Turn

3 - 5 **vs. SoxFan**
Goals Leaders

4 - 2 **vs. Adam L.**
Rookie 3-pt Leaders

6 - 5 **vs. CWonger4**

TAKE ON EVERYONE AT THE SAME TIME!

Game of the Day
4000+ Rebounds and 2000+ Assists
NBA - 2000-2009

SAS - Tim Duncan

MIN - Kevin Garnett

DAL - ???

LAL - Lamar Odom

MEM - Pau Gasol

Chuck   4

COMPETE IN A NEW GAME EVERY DAY!

Preferences
Pick the sports and years you know best!

MLB   NFL

NHL   NBA

2000-2009   1990-1999

1980-1989   1970-1979

1960-1969

Save

THOUSANDS OF GAMES TO PLAY!

See more about how I designed, styled, and marketed Chucksports

COMPETITIVE HEARTHSTONE COMMUNITY

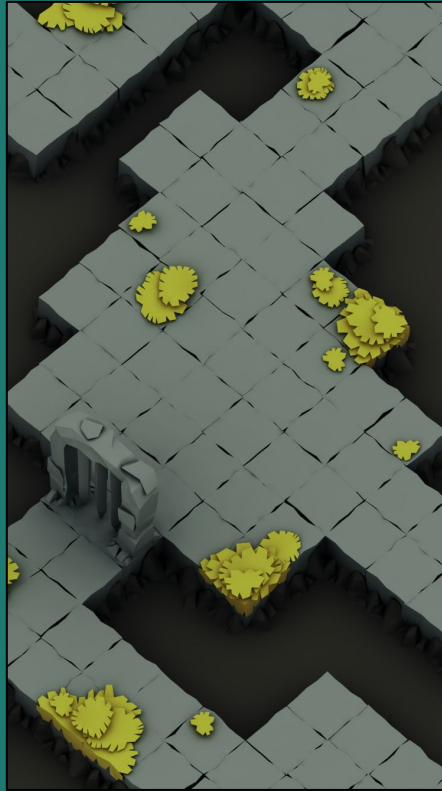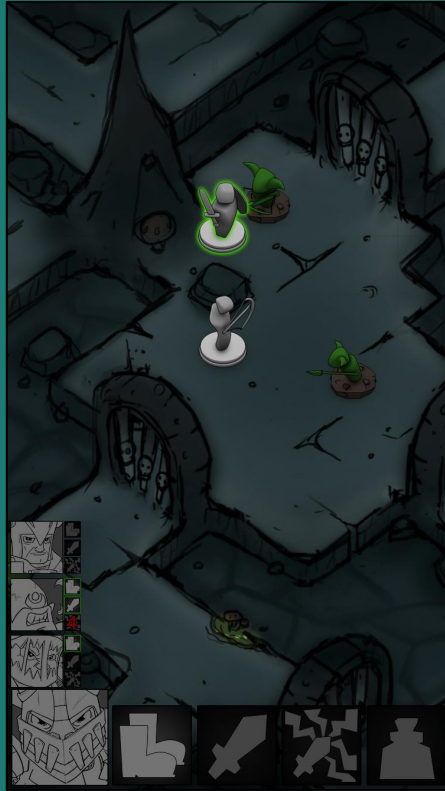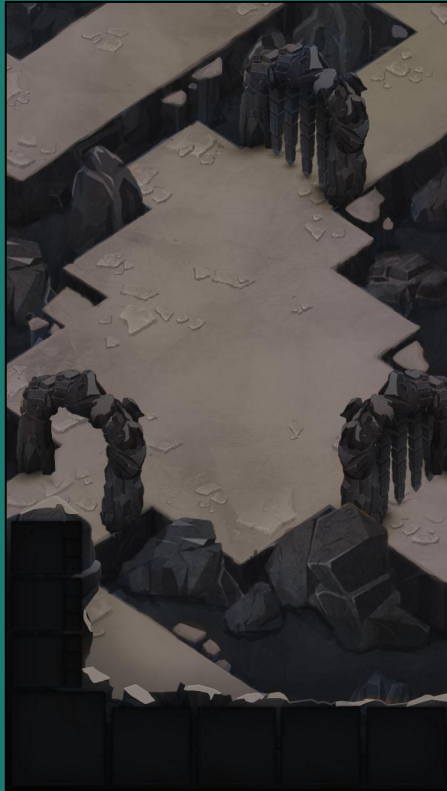Style conceptualizing -> Tool exploration -> Polished production assets.
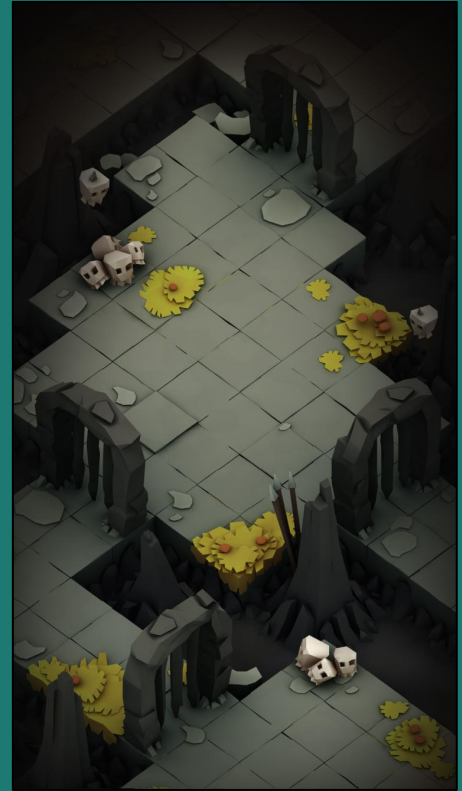
James DeGruttola
UI/UX Portfolio

Thank you for taking your time to look at my portfolio, below are some links to other collections of my work.

ARTIST PORTFOLIO

Want to see some art? I've got a whole other portfolio just for that. Click here and check it out!

DEV BLOG

I like to write about the problems I have faced through different phases of game development and creative content creation.

JDEEGZ@GMAIL.COM

RESUME