A Tale of Villains and Scoundrels

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Game Overview and Technology

Introduction

In designing *A Tale of Villains and Scoundrels*, our team hoped to capture the taboo experience of playing as the evil antagonist. We noticed that such an experience is underrepresented in the video game industry, and decided to capitalize on the opening. To truly realize the becoming an evil, final boss that is challenged by groups of adventurers, we believed it was necessary to include a lair and minions. After all, a true boss encounter is not complete without hordes of minions and traps to overcome first. We also saw this as a great opportunity to allow players to veer away from the villain tropes they have seen in past games or movies, and design lairs in ways that make sense to them.

Some inspiration for the planning aspect of the game came from the traditional tabletop RPG *Dungeons and Dragons*. During the first phase of each level in our game, the player takes on a pseudo-dungeon master role. They will have the ability to place traps, manage minions, and perform upgrades on their lair. The typical adventuring party usually succeeds in defeating the villain they set out to kill, and to prevent such a fate from befalling themselves the player must use their ingenuity to weaken the party.

Whether the course of action entails delaying the party from arriving at the player's lair to buy time for a crucial upgrade, utilizing traps to isolate and damage particular party members, or simply causing raw area of effect damage to the entire party the player has the tools available to maximize their chance at survival.

Following each lair building phase will be an action combat phase where the player controls the villain as she chooses. In this phase the focus will be on letting the player decide their method of attacking the adventurers based on their interactions with one another. Perhaps two of the heroes have excellent synergy with one another, and keeping them separate allows for a much easier victory. Maybe the healer for a particular group is quite hardy and a difficult target to take down first, so the player decides to burst down other members of the party first. Ultimately, we want players to experience the chaos of fighting multiple enemies that are actually working together, and give them an opportunity to let their skills really shine.

We believe the best platform to host our game would be the PC, as the keyboard and mouse lend themselves to isometric view games, and still allow players to intuitively control their character in an action combat setting.

Another consideration for our game is the engine it is based upon. For our game, the engine would be handling indoor environments and few active units on the field. We would have no more than seven active enemies, plus the player, which would allow for

a wide set of engine options. The major differentiation between options will be their ability to create dynamic environments and their graphical fidelity. Since our game will not be particularly demanding with regard to numbers of enemies or complex outdoor lighting environments, we can funnel some of the resources those assets would take into making a well graphically polished product. Therefore we believe Unreal Engine 4 or Cryengine would be better options than Unity, as Unity's graphical output is subpar compared to the other two. Unreal Engine 4 has the harsher pricing model of the two, but is more beginner friendly. With experienced developers we believe Cryengine would be the proper choice for our game.

Razor Statement:

A Tale of Villains and Scoundrels is a isometric level design/ third person action combat hybrid game where the player takes on the role of the primary antagonist to groups of wandering adventurers. The player creates their own lair, which parties of adventurers proceed through, then engages in action combat with the adventurers.
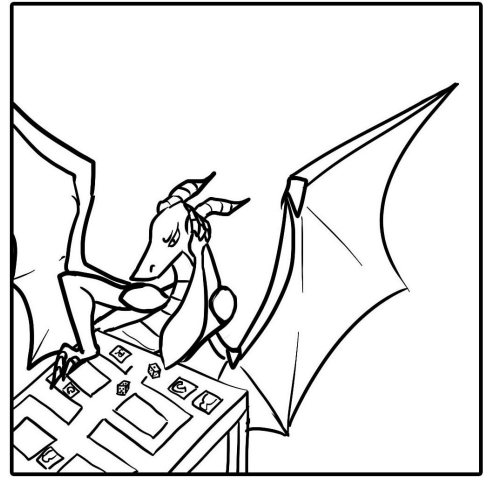
Focus:

In *No More Heroes,* the player takes on the role of a villain plagued by groups of adventurers. Different types of villains will have different abilities, for example our dragon has a concentrated breath attack. The villains will also have different lair options, in the dragon's case he has a set of mechanical minions he constructs. The

player will face each "wave" of adventurers in two stages. The first stage involves the player designing their own lair to weaken the adventurers or otherwise drain their resources. The second stage involves the player engaging in third person action combat with the adventurers themselves. The adventuring parties will have various compositions, and it will be up to the player to identify which adventurers are high priority targets to focus. The adventurer AI will generally be smart, for example a wizard AI would stay at a distance and use mobility spells to avoid attacks. A warrior AI might take a defensive stance until it sees an opening to attack the player. The player's chosen villain might be swift with many mobility options and rapid but weak attacks, or they may be a lumbering beast with crippling blows that are more difficult to land. The options available to the player for designing their lair will expand with the number of adventurers they defeat. The size and skill of adventuring parties will increase over time as well. Each team of adventurers will have a heroic captain, which will tie into the villain's backstory. These captains will have well established identities and reasons for attacking the villain.

Game Mechanics

As previously stated, *A Tale of Villains and Scoundrels* is split between two unique styles of gameplay that work together to give the player a more varied and satisfying experience. The first section that the player experiences is the trap phase. The heroes enter through the start of the level and start to explore in real time, looking for the villain. The heroes come in groups, or *parties* that can have between 4 and 6 heroes. One of these heroes is the *captain,* and is stronger than the rest of the heroes. He is the leader of the group, and each captain is customized for each level. Later levels could have multiple captains in charge of separate parties all attacking at the same time. AI parties also have *morale*, and every successful move the player makes in thwarting the party's progress through the lair lowers the morale bar. The death of any party member hurts the party morale even more than straight damage and the death of the captain severely harms the party morale. When the party morale drops below a certain value, the heroes will start to flee from the lair. There will also be special traps that can lower morale in the final game.

The AI is designed to be intelligent by planning the attack in a strategic way that will depend on how the player interacts with the level. As the Heroes travel through the Villain's lair, the player will have a strategic view of the lair and will have the option of
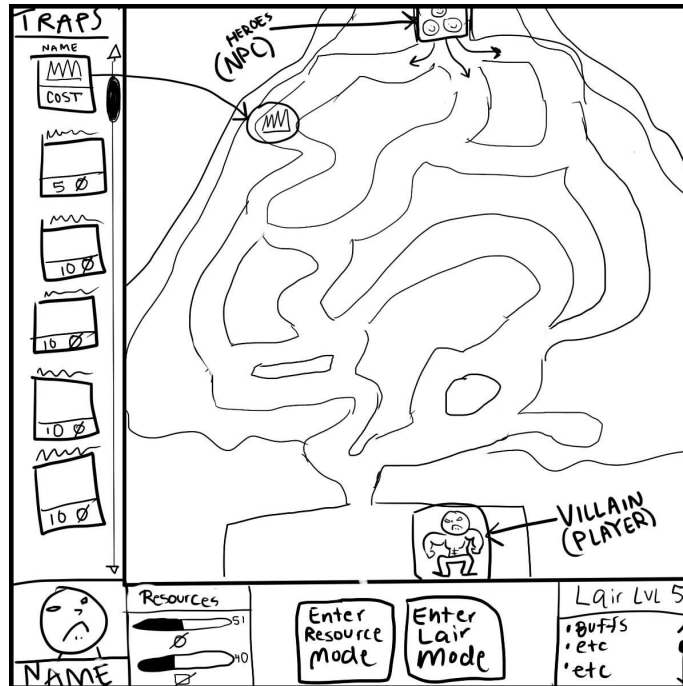
placing traps, upgrading their character, upgrading their lair, upgrading their traps, or collecting more resources. All traps and upgrades will cost resources, so the player must decide what to spend their time and resources on. In addition, upgrades will increase in cost for every upgrade of that type, so players are limited on how strong they can make one specific trap or attack move. Cost of traps will also increase for each trap placed. The specifics of these traps will be discussed in later sections.

If the player does not defeat all the heroes before they make it through the lair, the second stage of the game will begin. The second stage is a third person action combat stage that puts the player up against any surviving heroes. The game will be balanced so that most players will not be able to defeat every hero before they reach the end of the lair. Each villain will have special combat skills that are fitting for the villain and are explained in later sections. This combat should feel satisfying, and will be balanced through testing before the game's official release to make sure it's challenging and fun for the player.

We would like the player to have the option to complete the levels in many different ways and not have to rely on a single strategy for every playthrough. A skill tree will be used so the player can customize their experience across multiple playthroughs if they wish to do so. A player that finds the trap phase very fun will be able to focus on unlocking more useful and more powerful traps. A player that doesn't enjoy the trap phase very much can focus on making the villain stronger and unlocking more powerful abilities. We want players to come up with unique strategies and be able to work towards making a character the player is satisfied playing as.

Currently, the game is designed as a single player experience, but it could always be an option in the future to include a multiplayer mode after the game's release. We plan to develop the game for all relevant modern consoles, including PC, Xbox One, PS4, and the Nintendo Switch. Therefore, the controls cannot be too complicated since there is a limit to how many buttons there are on a controller. For consoles and PC, we will use typical controller scheme that similar games use as a default such as WASD/left stick to move and mouse/right stick for camera controls. All the controls will be designed so they can be re-mapped to whatever the player is comfortable using.

There will be two different forms of the UI for the player to interact with: the combat UI and the lair UI. The lair UI will be typical of top down strategy games or tower defense games. The lair will be shown in a simplified view with top down player sprites moving through the lair. The player will have a list of traps that shows resource cost, damage values, what the traps do, and an accompanying image that shows what the trap looks like. The character name and image will be shown along with a list of current resources and resource production. You will also be able to view any upgrades currently in effect on the level. The lair UI will allow you to enter into *resource mode*, where you spend time mining resources. However, you will not be able to view the lair while you mine, so you could miss opportunities to place traps if you spend too long mining. The lair UI also has *lair mode,* where you can select upgrades for your traps or your character. A simplified draft of the first level shows roughly what the lair UI will look like in the final product.

TRAPS
NAME
COST
5 Ø
10 Ø
10 Ø
10 Ø
10 Ø

HEROES (NPC)

VILLAIN (PLAYER)

Resources
51
HO

Enter Resource Mode

Enter Lair Mode

Lair Lvl 5
· Buffs
· etc
· etc

NAME

The combat UI will be much less intrusive, as we want the player to focus on the action and not be distracted by menus and information. The combat UI will show the HUD in the top left that includes health and a cooldown bar for special abilities that use cooldowns. On the bottom left, the player will be shown their attack names and the buttons they are mapped to.

Another important UI screen is the pause menu, which allows the player to save, load, read previous tutorial messages, and change the options of their game.

These mechanics differ from the prototype in that the game is now played in real time rather than turn based. Because of this, time is now a limiting resource that changes player behavior. Players in the prototype could spend as much time as they needed planning out strategies. Now, players need to use time wisely and be able to adapt quickly to changing AI strategies.

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Artificial Intelligence

Goals

For our game, we decided that we wanted our artificial intelligence to accurately represent what a party of adventurers would be to a villain: a real threat. While each individual member of the party might not be able to hold a candle to the villain's power, the combination of many members should allow interactions between themselves which greatly increase their overall power as a group. We wanted the AI to utilize synergy between abilities, as well as make reasonable decisions based upon their status. We wanted AI that was in bad shape to back off from the villain to attempt and regain their strength, or perhaps switch to evasive maneuvers over attacking. Our number one goal was for the player to feel that the AI is smart. The player as the villain needs to prioritize and strategize which members to focus first to break the synergy of the party.

To that end, we came up with a series of enemies with particular behavioral patterns. These behavioral patterns are not hard rules, but guidelines for how the AI should prioritize their actions. We designed some of these behaviors to naturally be beneficial to one another, and in the game implemented some measures to ensure that the AI would take advantage of these beneficial relationships if the opportunity arises. The following table summarizes our major behavioral pattern ideas, and the details of how each hero will implement these patterns will be discussed later in the document.

Type	Description	Potential Synergy
Protector	Focus on placing itself between fragile party members and villain.	Hunter/Healer
Brawny	Focus on head on damage, heavy aversion to retreating.	Control/Healer
Flanker	Focus on attacking from non-frontal angles, heavy preference on attacks from behind.	Control/Mobile
Mobile	Focus on dealing damage while moving, nearly never still.	Flanker
Hunter	Focus on dealing heavy ranged damage, which requires setting up for shot.	Protector/Brawny
Control	Focus on impairing/corralling villain.	Brawny/Hunter

Part of establishing these behavior types allows us to develop fresh unique heroes that stray from tropes, with a simple underlying behavior that can easily be implemented by programmers. The heroes developed can have their own way of utilizing these behavior types.

In line with the typical design mantra for developing AI, we will not be implementing leading edge artificial intelligence in the game, merely AI with simple rules and boundaries that will prefer beneficial combination interactions with other AI when possible. The AI will internally keep track of the cooldowns of other AI and determine the best time to strike with those cooldowns simultaneously.

Game Elements

Characters

Our game will have a character selection for a variety of villains to play, and the list will continue to grow! Through updates, we will be able to release new villains that have their own story to unfold.

Main Villains

Avarin Bronzeclaw of the Scorching Forge (Brawny)

Avarin is a master blacksmith that is known for breathing life into his creations. As heroes progress through his volcanic lair, he has a legion of strong automatons at his disposal, as well as traps ready to be triggered. Past all of these obstacles is the real challenge. Avarin himself is skillful in battle, capable of breathing blistering fire and dealing heavy blows. He is also difficult to take down with his resilient armor.

Gosa M'Bani of the Unknown Galaxy (Flanker)

Gosa is an intergalactic traveler that is considered a mysterious threat to the people in Tscarra. With his ship as his lair, he has a full view of an intruders, as well as multiple security measures. Gosa holds powerful damage in his plasma weapons as well as his changeable metal arm. He's also very difficult to take down in battle due to his quick reflexes and reflective arm.

Future Developing Villains

**Nicrofia of the Undead Organization (Mage)**

Nicrofia is one of the most feared villains in Tscarra, known for not abiding anyone's rules. She leads an organization of unknown origin and motive, and rumors say that the members are people that were once deceased. Nicrofia is capable utilizing the dead with her necromancy, yet
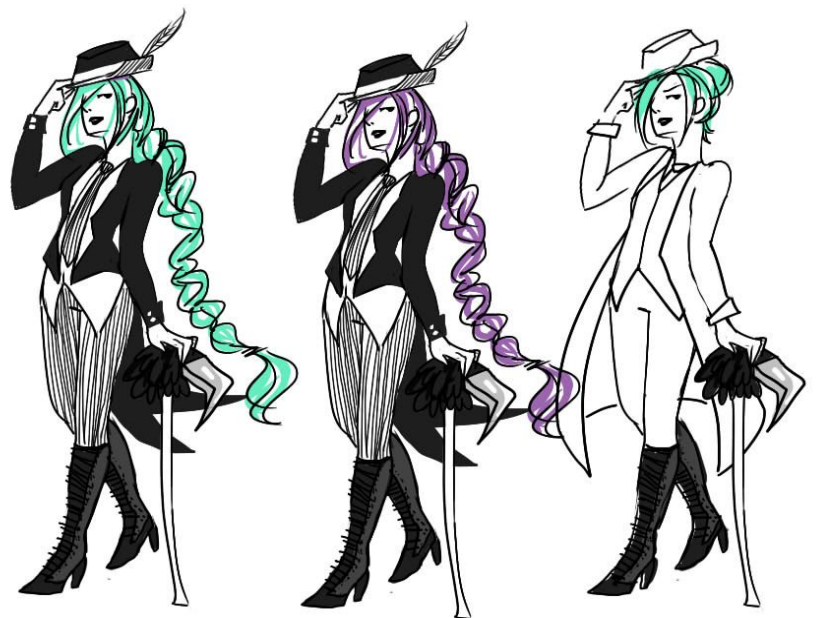
even without her summons she shouldn't be taken lightly. She's incredibly crafty and has connections that can easily take anyone out.

Yra Osenta of the Southbay Ruins (Utility)

Yra Osenta is a highly powerful mage and ex-High Priestess of the Southbay Academy of the Unknown who has mastered the arcane magical art form of plane shifting in and out of alternate planes of existence. However, even when she's not shifting her body in and out of the physical plane of reality, she is not to be underestimated, for her magical abilities are exceptionally powerful as well.
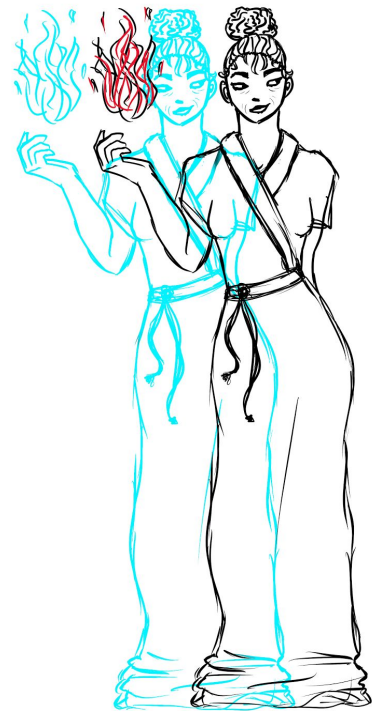
Enemies

With each protagonist comes an antagonist, and vice versa! The player must fight against parties of justice-seeking heroes that are trying to take them down. As such, our team has created worthy enemies to battle against the villain.

There are four classes that classify a hero: Attacker, Ranged, Tank, and Healer. Each hero will be of a specific type that can specialize in one of the four classes. Each type has a specific role in the gameplay, and can also mix and match the classes. The table below displays the possible ways in which the types and classifications are matched. There is also two different types of damage: Burst and Consistent. Burst damage is essentially heavier damage dealt in singular, yet spaced attacks. Consistent damage is a regular amount of damage dealt consistently over time.

A special status bar called morale is applied to the heroes that enter the lair. Morale is very important to take account of when facing off the heroes, because the higher the morale means the heroes will gain drastic buffs in health, attack, speed, and defense. This increases the need for strategy, since the villain can't fight a high morale party head-on and expect to be victorious. Heroes' morale can be lowered drastically by damaging or picking off heroes with traps during the trap phase, and some combat moves are able to lower morale during the battle phase. If a hero's morale reaches a low enough threshold, the hero will flee to save his own life. If a captain runs away due to a lack of morale the entire party takes a morale hit. Typically the heroes will all run away at this point, however bringing the morale of the captain down is no easy task. Also if the rest of the party has nearly full morale they will forsake their captain as a coward and continue fighting.

Heroes

The Scrap Knight of Kailore (Flanker)

Self proclaimed Sir. Scrap had been angered by Avarin's blatant attack on his fortress of blacksmithing. Avarin had also taken an important ore of his: Princess Boxite. He won't stop until he rescues his princess and justice is served! Sir. Scrap trained himself in the ways of sword fighting, and implemented his own blacksmithing skill into creating a worthy suit of armor for his amazing self.

The Savage Spearman of Q'Vhines (Hunter)

When the goddess Amaris is disrespected, the tribes of Q'Vhines immediately take action against the non-believers. Although highly intelligent in magic, the more impulsive, savage tendencies emerge during the hunt of non-believers. Uka is the leader of one of the hunts for Gosa and is renowned across the islands of Q'Vhines for his utilization of a combination of magic and physical spear attacks.

| Type	Description	Potential Classes
Protector	Either a heavy healer of lower health or a defense-based tank.	Healer/Tank
Brawny	Either an attacker of higher health and consistent damage or an attack based tank with slow but heavy burst damage.	Tank/Attacker
Flanker	An attacker that specializes in burst damage.	Attacker
Mobile	A highly mobile attacker/ranged class that focuses on dealing consistent damage.	Attacker/Ranged
Hunter/Mage	A low-health ranged character that can deal burst	Ranged

	damage from afar.	
Control	Focuses on status ailments and team buffs.	Healer

Trap Phase: Traps & Minions

Each villain has their own traps and minions that they can utilize to slow down and weaken the heroes as they approach the battle phase.

Avarin Bronzeclaw

- Guardian - Large mechanical humanoid that is most effective against tank heroes.

- Fire Arrows - Fire arrows are triggered to fall as the heroes are passing it and is most damaging to the healer.

- Fledglings - Agile and quick automaton minions that attack the ranged heroes.

- Magneton Trap - The heroes are held back by their shiny belongings and falling metal for 10 seconds.

- Lava Crawler - Ferocious beast that targets attacker heroes.
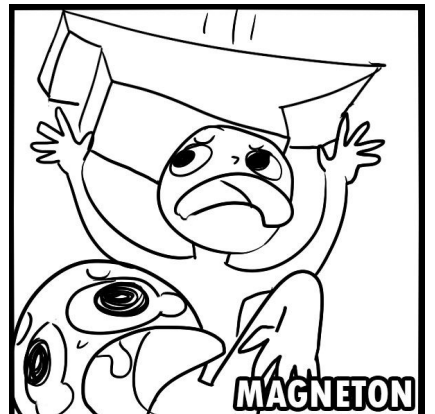
Gosa M'Bani

- Laser Wall - Triggered by motion, a wall of lasers damage the heroes and stops them for 5 seconds.

- Gravity Pulse - Gravity is greatly increased within the vicinity and the heroes are slowed for 15 seconds.

- Oxygen Release - Oxygen is quickly evacuated from the area and the heroes are dealt damage over time within the affected area.

LAVA CRAWLER

- COMMAND: LOCK - Gosa issues a command that locks down the passageway and forces the heroes to take a different path.

- COMMAND: AUTOFIRE - A command is issued for hidden turrets to attack the backline of the hero party.

Battle Phase: Combat Attacks

Each hero receives their own set of special moves to use during the battle phase, and some unlockable moves. Sometimes lair upgrades can lead to new combat attacks for the battle phase.

Avarin Bronzeclaw

Flame breath - Avarin has a rather abnormal fire breath for a dragon. Instead of the normal large cone of conflagration, Avarin's breath forms a highly concentrated area of heat in a short range in front of him. It takes a great deal of effort for him to use his breath as a result, and he only uses it sparingly while practicing his craft. The flame

breath can be aimed at a hero immediately in front of Avarin at the cost of movement speed and attack speed afterwards. It can also be used on other objects.

Heated Hammer - Avarin can use his flame breath on his own hammer, causing it to become white-hot. While heated the hammer becomes more pliable, thus less impactful against armored targets. However targets without hard armor will be in direct contact with the heated metal. The next few attacks made by the hammer will deal additional damage to lightly armored targets, and reduced damage to heavily armored ones.

Heated Armor - Avarin's natural resistance to heat allows him to use his breath on his own armor. The heated armor deals damage to heroes which attack him with melee attacks. Being near the heated armor also starts to exhaust heroes, reducing their morale. (Morale reduction in an area around Avarin)

Wing Buffet - Avarin uses his intact wing to create a brief, strong gust of wind. The gust can be used to knock a hero off-balance, interrupting any casting or attack wind-ups.

Mechanical Wing - (This ability is only available after the player has done it's lair upgrade.) Avarin, having lost one of his wings in a previous encounter, can decide to use his crafting prowess to create a new wing for himself. The new wing allows him to make a great leap, as well as doubles the opportunity for a wing buffet attack. (either double area or 2 charges of the ability before cooldown)

Lava Release Lever - (This ability is only available after the player has done it's lair upgrade.) Avarin prioritizes his own survival above all, any crafted work can be

recreated or improved upon with his own genius. In the most dire of circumstances he can release the molten rock he uses as a forge into his lair, dealing massive damage to all heroes caught in the torrent. Avarin's natural resistance to heat protects him from the lava.

Gosa M'Bani

Magical Accuracy - The advanced magical rifle wielded by Gosa allows him to hit his targets with unusual projectile paths. Gosa has the ability to control the trajectory of his projectiles when he locks onto a target. (Choose healer as target, curve bullet around tank for example) If he is not locked onto a target, the projectile travels normally.

Augmented Assault - Gosa overdrives his mechanical arm to produce a rapid series of attacks with his mechanical arm. The arm discharges afterwards, causing damage to enemies nearby and rendering the arm useless for a period of time. Some munitions require two arms to fire. An arm recharging bar can be implemented as an upgrade.

Arcane Munitions - Gosa has the opportunity to change ammunitions mid combat via weapon ports in his ship. Gosa places the weapon in the port and is briefly disarmed, then retrieves his rifle with new munitions. (He can still use his mechanical arm while changing) Each munition will run out after a certain amount of uses and will need to be recharged to use again.

Basic Munition: Bolt - When no special magical munition is equipped, Gosa's rifle shoots an arcane bolt, similar to a crossbow bolt, of energy. This munition builds momentum after initially firing, reaches a peak of momentum, then slows again.

(Therefore there is a medium range where it does the most damage, falling off if too close or far)

Munition: Plasma - Gosa's rifle fires gelatinous, electrical plasma orbs. The plasma orbs stick to surfaces and heroes, and slowly dissipate over time. The plasma inflicts damage over time and a slow effect.

Munition: Ice slug - Gosa launches a solid ball of ice at a target. If Gosa chooses, he may shatter the ball mid trajectory to produce a barrage of needle-like icicles. The solid ball would deal more damage to heavily armored targets, and the needles would cause medium damage and an interrupt effect on on lighter armored targets. (needles to the face, a caster mid-casting hates)

Storytelling

World

Tscarra

The game takes place upon the fictional planet of Tscarra, which consists of two large land masses and various smaller islands within the separating waters, as is shown in the figure below. Four nations reside on Tscarra – Kailore, Ynesteon, Q'Vhines, and Ustaea. Within the timeline occurring directly before the game takes place, a number of villains (and scoundrels) were terrorizing and threatening Tscarra on both national and global levels. As such, the four leading nations decided to band together to sign a peace treaty – The Villains and Scoundrels Peace Treaty – to have a truce until all of the evils plaguing Tscarra are rooted out and destroyed.

Kailore

By far the most densely populated region of Tscarra, Kailore encompasses the entirety of the Western Highland Planes as well as the Forbidden Pass Mountain

Range. Kailore serves as a home for more work-oriented and domestic peoples, as its climate and soil conditions prove perfect for farming and raising livestock. As well as this, many poorer Kai peoples find work mining in and around the Forbidden Pass Mountains – infamous for its tendency for landslides, rock falls, as well as attacks from resident villain Avarin Bronzeclaw. While the small towns in Kailore are hosts to the farmers and miners of the nation, the wealthy and noble Kai people are likely more suited to live within the walls of Kailore's capital city, Masall, also home to the King and Queen.

Despite the fact that Kailore is generally less wealthy and less prominent from a military standpoint, the kingdom of Kailore owns a prominent amount of Tscarra's land, and they remain in good faith with the other nation's leaders and keep them happy by supplying trade items such as much needed ores and minerals as well as farm fresh goods and livestock. The one nation, however, that threatens the peace and sanctity of the Kai Kingdom is Ynesteon, who wishes to control more of the goods and resources produced within the Forbidden Pass – more specifically, Ynesteon wants to keep Kailore from putting metal ore (used to create weapons) into the hands of Ustaea, Ynesteon's enemy. However, the charismatic Kai King and Queen used their silver tongues to negotiate the Villains and Scoundrels Peace Treaty before any major conflict erupted between them. The Kai people's military consists mostly of knights and other warrior type peoples with very few mages. While the use and study of magic is not uncommon or taboo within the borders of Kailore, Kailore itself has no actual college of magic, unlike Q'Vhines or Ynesteon.

Ynesteon

Ynesteon is a large and strong nation valuing honor and loyalty above everything else. Before the Villains and Scoundrels Peace Treaty took effect, Ynesteon was in the middle of a steady war with Ustaea over the untimely and dishonorable assassination of Ynesteon's last ruler – Fhin Redstar – who was at the time a freshly crowned 16 year old, killed by the Ustaean peoples as a challenge to Ynesteon, which at the time claimed to be the strongest nation on Tscarra. Since the attack, Fhin's older sister, Desa, has taken on the burden of ruling Ynesteon as well as leading the attack on Ustaea. Desa has also maintained a generally diplomatic friendship and alliance with Kailore and Q'Vhines, despite recently bumping heads with the Kai King and Queen, whom Desa accused of being disloyal by trading valuable goods (including the ores used to make weapons) with Ynesteon's sworn enemy, Ustaea. Despite this recent misunderstand, however, Desa agreed with the Kai on creating and signing the Villains and Scoundrels Peace Treaty, due to the sudden rise in power of a mysterious mafia, ominously dubbed the Undead Organization.

Ynesteon's army consists of a deadly mix of mages and warrior-type fighters, making their army arguably the most fearsome on all of Tscarra. Not all of their peoples are war-oriented, however – Ynesteon also hosts quite a few coastal fishing towns, as that is their largest export. As well as this, the violent nature of most Ynesteons makes for excellent hunters, so they also trade large sums of raw meat. Ynesteon is also the home of the Virie College of Magical Alignment – one of the only two active colleges of magic on Tscarra – located on the northern tip of Ynesteon.

Q'Vhines

Q'Vhines is a nation consisting of the many islands – both large and small – existing within the Moonlit Sea. The Q'Vhinean people are very spiritual people – unlike the majority of the people of Tscarra – and they devote most of their lives to pleasing the lunar goddess Amaris. Within the legends told throughout the Q'Vhinean islands, Amaris was said to have passed her knowledge of the divine arts to the mortals, so learning and practicing magic is seen to be the ultimate tribute to one's love and devotion to Amaris. Thus most Q'Vhinean people devote themselves to the divine arts by attending the only other active college of magic on Tscarra, the Divine Arts Seminary, located on one of Q'Vhines' larger islands in the capital city of Aella.

Q'Vhines is ruled by a council of the most powerful and devoted magi from each major island of Q'Vhines called the High Court. The High Court itself is fronted by the Archmage – the most powerful and devoted mage from Aella. Q'Vhines – being such a spiritual and magic-oriented domain – is a fierce enemy of Ustaea, a region which has banned all magic from being studied or practiced within its territory (save for the court wizard). As well as this, Q'Vhines is a loyal ally of Ynesteon due to them both advocating the formal instruction and acceptance of magic (as well as the fact that they are both enemies with Ustaea). Q'Vhines also gets along well enough with Kailore, but, besides their trade circles, Q'Vhines has no strong reason to like or dislike the nation of Kailore. Q'Vhines, despite not maintain a close alliance with Kailore, agreed to sign the Villains and Scoundrels Peace Treaty because one of its larger islands, Ylena, was attacked by planetary traveler Gosa M'Bani, destroying an entire village including one of

the more decorated members of the High Court as well as one of the sacred shrines of the goddess Amaris. Since Gosa landed on the island, countless Q'Vhineans have gone missing going on search missions to Ylena.

Ustaea

Taking up the entire western landmass on the face of Tscarra, Ustaea is a fiercely independent and proud nation. Ustaea remains mostly self-sufficient from hunting and farming on its own land, but a lack of stone and ore resources would leave Ustaea vulnerable if not for its healthy trade relations with Kailore, who still maintains control of the resources taken from the Forbidden Pass Mountains. Ustaea previously hosted a third College of Magic; however, the Southbay Academy of the Unknown remains nothing but ruins ever since the rogue High Priestess Yra Osenta destroyed the Academy after becoming deeply invested in the lost magical art form of plane shifting – a technique she learned after uncovering a hidden arcane grimoire from the depths of the Academy's archives. Since the Academy's destruction, Yra disappeared, though some believe she still lurks around the Academy's ruins as no one has been able to journey to Southbay and live to tell the tale.

Regardless, Yra's reckless behavior led the rulers of Ustaea to believe that magic users cannot be trusted, and thus they banned the use of magic from their domain (unless from a court-appointed mage). Ustaea then began pouring all of their energy and resources into building a stronger army/naval forces full of strong warriors of all types (except, of course, for mages). Once strong enough, Ustaea challenged the islands of Q'Vhines due to their excessive use and instruction of magic. It was at this

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time that Ustaea also began hearing whispers that Ynesteon was claiming themselves to be the most powerful nation on Tscarra. Believing their pride had been threatened, Ustaea immediately launched an attack on Ynesteon, assassinating the Ynesteon ruler, Fhin Redstar, thus declaring war on Ynesteon as well.

Ustaea would never fully and openly admit to weakness, but as they became more actively involved with two enemies – as well as dealing with the internal struggle of rumors of Yra still haunting Southbay – their resources were becoming scarce. Thus when Kailore suggested signing the Villains and Scoundrels Peace Treaty, Ustaea took the opportunity to buy time, believing that whatever few years it took to root out all evil beings upon Tscarra would allow Ustaea to gain the resources they need to finally prove themselves as the most powerful nation.

Character Biographies

Avarin Bronzeclaw

Avarin Bronzeclaw was born to two bankers in Kailore. Given that the most common professions for dragons are in finance, as their best quality is often their superior money management skills, this was quite commonplace and unsurprising. What was strange and surprising, however, was Avarin's complete lack of interest in economics. Even as a young fledgling, he found he would much prefer to melt and meld the gold he was supposed to be counting. At this young age, his parents discouraged him from inventing and making creations with metals, instead only training him harder to eventually inherit their bank. Dissatisfied with this fate, Avarin took matters into his own

hands, running away from his home and relocating in one of the Forbidden Pass Mountains.

In his new mountain home, he found an endless supply of metal ores for him to use at his own discretion and for whatever new project he wished to create. He taught himself how to bend the metal to his will, but with no real training in smithing it was difficult for him to truly create to metal and mechanical weapons that were swimming around his head. As such, he flew around the valleys of the Forbidden Pass, searching for signs of life and villages where he could find a master blacksmith to teach him the trade he so desired. He eventually found a blacksmith by the name of Ildris Falor – a human – to assist him in mastering the skill. Avarin quickly found he was extremely adept at properly smithing. Soon he was able to create lavish armor for himself, as well as numerous weapons both for himself and to sell to the village.

After mastering the art of smithing armor and weapons, Avarin decided it was time to finally get back to creating the beings he had envisioned for so long. He attempted making mockups of humanoid automatons and mechanical fledglings, but he found the metal ores that Ildris supplied him were not sufficiently able to hold as defined a shape as he wished. Ildris, was however, a part of a Blacksmith's Guild within Kailore, and as such he caught word of a new ore with amazing properties discovered by crazed blacksmith, Sir. Scrap. At this, Avarin acted impulsively, and attacked Sir Scrap's smithing fortress, stealing all of the precious new ore he found and destroying everything in his path. Sir Scrap was so angry at this attack that he slashed at Avarin with his mighty greatsword, cutting one of Avarin's wings clean off. Avarin was still able

to make his way to a nearby volcano to hole up in, however, and soon he went back to creating automatons, finding the new metal ore the perfect metal to breathe life into his mechanical minions. However, word of the savage dragon attack made its way back to the Kai King and Queen, and a bounty was quickly put on Avarin, earning his title as one of the notorious villains of Tscarra.

Gosa M'Bani

Not much is known of Gosa M'Bani's origins, besides the fact that he is a humanoid being from an unknown galaxy who crash-landed on Tscarra during a space exploration mission, destroying a village and religious shrine on the Q'Vhinean island of Ylena. Gosa, however, did not understand what happened, and why many tribal people soon showed up in front of his ship looking angry and ready to attack. Activating the defenses on his ship, he immediately obliterated the majority of these tribal peoples as they ran at him, attempting to murder him. After such an encounter, Gosa immediately felt the people of Tscarra were unnecessarily aggressive and savage, and he did not want anything to do with them, so he consistently acted aggressively back to the humans as they kept coming back onto the island that was now effectively his.

While Gosa did not particularly like the people of Tscarra, he loved the scenery (or, at least, what he'd seen of it so far). The pristine beaches and forestry on Ylena were bright and beautiful to Gosa, whose own planet was drab and dull, with little wildlife to sit and watch. Gosa found himself more and more at home on Ylena, and thus wanted to protect the island from any pesky humans as much as possible, so he would quickly rid of any and all humans who attempted to come onto the island and/or near his

ship. This behavior quickly caught the attention of the Q'Vhinean High Court, causing them to order experienced and deadly hunters to attack and kill Gosa at any cost.

Nicrofia

Nicrofia is as dark and mysterious as her organization, such that only rumors floating about Ynesteon survive of her true identity and origins. Some believe her to be a descendent from a rich and powerful family of necromancers, while others whisper about her being as undead as her mob members. But these are merely conspiracies, and only Nicrofia herself knows the truth – she was simply a young girl, growing up a homeless orphan in the slums, who was taught the wrong things at the right time.

Nicrofia grew up living with her parents in the slums of Ynesteon's capital, Maeha, but when her parents passed suddenly from disease when she was 10, she used all of her inheritance money from them to give them a proper and respectful burial, rather than to take care of herself. From there, she slept by her parents' graves at night, and during the day relied on her cleverness and stealth to fend for herself – pickpocketing money, discretely stealing food, and haggling with shopkeepers to give her significant discounts, using her silver tongue and sob story as a weapon. As soon as the city undertaker found her sleeping in his graveyard, however, he took her in under his wing as if his own child. As one of the richer citizens of Ynesteon, he was well educated and thus was able to provide for her throughout her adolescence both financially and intellectually. He taught her everything she would have learned in any of the private schools for children of nobles, and more. It was from him that she learned the powerful and dangerous technique of necromancy.

Nicrofia, the clever girl she was, quickly found the immense benefits that would come from mastering necromancy to be enticing, so she practiced daily with the old undertaker in his graveyard, until it came as naturally to her as the words that so eloquently escaped her lips. From here, she began to build her empire. Taking contacts from the undertaker, she started to network at the age of 16, routing herself with the most prominent noble figures throughout Maeha, then throughout Ynesteon, and then through all of Tscarra. With an army of undead at her disposal, Nicrofia quickly found the most rewarding business for her was the business that nobles didn't want their names to be associated with – the dirty work. As she took more and more contracts for intimidation, extortion, and assassination, her organization grew in power, becoming infamous in the streets of Ynesteon, and she and her mob – the Undead Organization – earned their reputation, causing Desa, the ruler of Ynesteon, to train her sights on destroying them.

Yra Osenta

Yra Osenta has no malicious past – she was born an ordinary girl in Ustaea, with ordinary parents, and an exceptionally ordinary life. She attended school for language and arithmetic, and then decided to further her education by attending Southbay Academy of the Unknown to study magic and the arcane arts (which seems to be extraordinary, but was really rather ordinary, as magical studies were extremely popular in Ustaea at the time). She earned a reputation, then, as one of the more outstanding mages at the college. However, rather than entering the military to be part of a special forces team, or becoming a court wizard, or leading a magical revolution, Yra decided to

become a professor, once again, displaying her ordinary life. She then climbed the professional hierarchy to become the High Priestess in charge of the Academy.

This, however, is when things become interesting. As she was going through the archives of the Academy one ordinary afternoon, Yra stumbled upon an arcane tome described various ancient magical art forms. Studying them further, she found one particularly interesting magical technique that she had never before even heard of – plane shifting. This piqued her interest, so she devoted herself to learning as much as she could of plane shifting from the tome so that she may add to the magical theory taught at the Academy. However, the more she learned of plane shifting, the harder the magic was to control. She would find herself going through her daily routine in the entirely wrong plane of existence without even realizing it – which became a problem when she found that her body was existing simultaneously in both planes. What she did in one plane, she would sometimes do in the real world as well. The more problems plane shifting gave Yra, the more fascinated she became with it, wanting – no, *needing* – to master it.

Yra continued to attempt to learn the ancient art form of plane shifting – at what seemed to be a great success. She found herself no longer existing in multiple planes. This became extremely advantageous to her, as she could magically shift planes to test more dangerous spells without consequence. Yra did, however, act carelessly one day, shifting planes without taking the necessary precautions of keeping only one instance of her body active. This misstep resulted in Yra destroying the entire Southbay Academy in a large explosion caused by Yra's powerful magic she was only meaning to test.

Since this incident, Yra has been haunted by the image of her precious Academy burning and crumbling down, giving her constant nightmares and terrorizing her daily. Yra generally tries to live a new life on an alternate plane of existence, although she is occasionally triggered when she feels the presence of a body on the Academy's campus, causing her to shift back to Ustaea and irrationally attack whoever sets foot on her campus' ruins. These random attacks unsettled the rulers of Ustaea, causing them to send numerous warriors in the direction of the Academy's ruins in order to take down Yra for good.

Mode of Delivery

Environment and Character Design

The main focus of A Tale of Villains and Scoundrels is gameplay – more specifically, the gameplay is what is meant to be the most fun and addicting part of the game, rather than the story. However, the world in which the game takes place is so rich in history and characteristics that there *is* a significant story to be told - or rather, to be seen. However, the game doesn't lend itself to have story directly given to the player by way of cutscenes and narrative dialogue. Thusly, story must be delivered in a different way – through the environment and character designs.

The story of the villains and of the world itself will be shown in the environment of the game through the seemingly minute details that will exist within the lairs of the characters - and on the characters themselves. For example, in Avarin Bronzeclaw's story, he has his wing sliced off by Sir Scrap. This is something that is explicitly visible on Avarin's design, and even accented within in the game with the possibility of creating

the "Mechanical Wing" upgrade, in order to replace his missing wing. In Gosa M'Bani's case, his lair is what would show the majority of his story. His lair is his ship, so details could be inserted such that the ship appears broken or dented in certain areas, signifying Gosa's story of crash-landing on Tscarra.

The character designs of the heroes would also be extremely significant in showing the story of the game. Depending on the area of origin of a hero, the design of the character would be extremely different because of the influences of their native nation. Consider a hero from Kailore versus a hero from Q'Vhines. Kailore is more likely to a have a warrior-type hero, while Q'Vhines is more likely to have a magic user. As well as this, because Q'Vhines is made up of islands, the heroes from Q'Vhines are likely to be wearing less armor in order to keep themselves cool in the island heat, while heavy armor is likely more commonplace in Kailore,

especially due to the number of ore mines and blacksmiths that exist in Kailore. The area's influence can directly be seen in the character designs of the heroes Sir Scrap and Uka, shown earlier (pg. 18, images repeated for convenience).
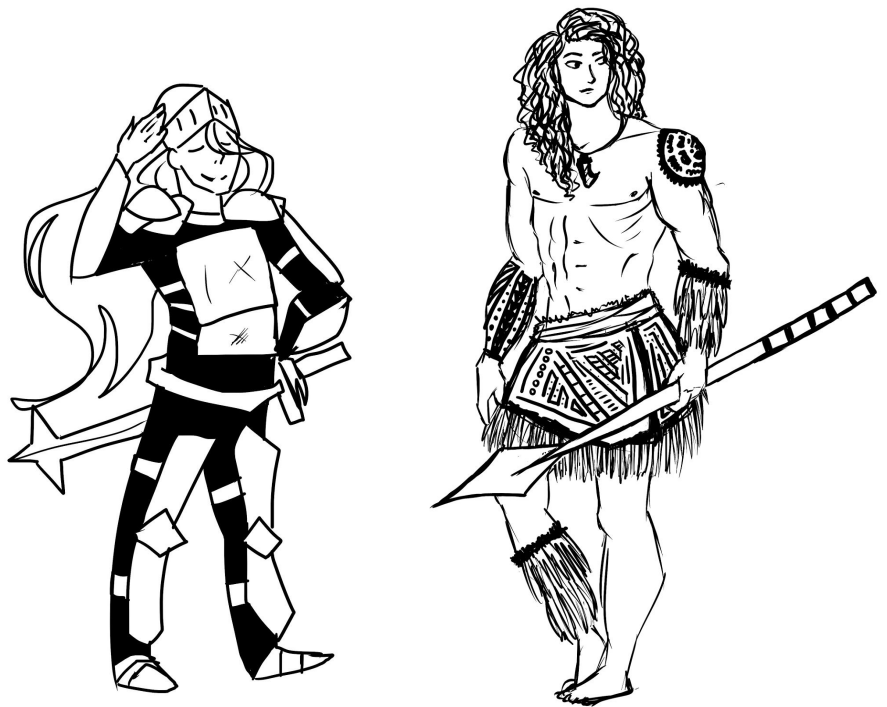
Voice Lines

Another way story is able to be delivered in the game is through voice lines delivered by the heroes as well as by the villain while in game. The heroes and villains will all have their own set of dialogue that could be spoken in any given situation (if a hero witnesses a team member's death, if a hero is healed, if a hero takes damage, if the villain takes damage, if the villain kills a hero, etc). In every instance that a hero or villain would or could possibly react a situation, their voice line will in some reflect the story of the character, the villain, and/or the world. An example of this would be if a healer hero AI from Q'Vhines healed a teammate, he/she might say "Amaris bless us," representing the religious nature of Q'Vhinean natives.

For villains, voice lines will help the player gauge the villain's personality and background story as well. Namely, Nicrofia, the clever, business-oriented mob boss, would have very telling voice lines. If she were to kill a hero, for instance, a line she could say would be "Well, that must be bad for business."

Additionally, there are specific hero captains tailored to each villain, and as such each hero captain will have their own set of dialogue. In particular, one of the specific heroes tailored to Avarin was Sir Scrap. Sir Scrap has his own personal story of why he dislikes Avarin, and this would be reflected in Sir Scrap's in combat dialogue directed towards Avarin. Sir Scrap might say "This is for the Guild!" when attacking Avarin, showing his involvement with the Blacksmith's Guild and their distrust and dislike of Avarin. As well as this, he might reference how Avarin stole his most prized and precious possession, Princess Boxite.

Game Progression

Levels

Each level is designed as the lair of the villain and expands with each level. There are two phases in the level, which are the Trap Phase and the Battle Phase. There are three options that the player may focus on in the initial phase of the level:
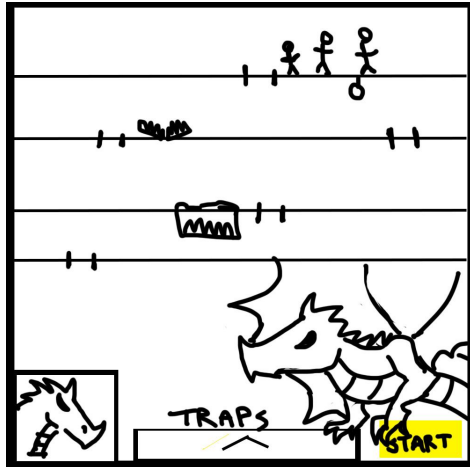
- Lair Upgrades

- Traps/Minions

- Resource Management

Rather than being a simple tower defense game by setting up the lair and watching the unsuspecting parties of heroes fall prey to conniving ploys, the player must do an amount of multitasking during the trap phase. Rather than setting up the traps prior to the heroes entrance, the heroes will be continuously moving and traps will be set by the player in real-time. While setting traps, they will have to keep an eye on their resources and develop more. Even while there's downtime while waiting for the resources and trap cooldowns, the player has the option to upgrade their lair through minigames. This option will allow the player to gain more benefits and buffs during the battle phase, which can be a great gamechanger.

Each level becomes progressively harder as more heroes come with higher stats. Heroes will also begin to use more erratic strategies that are less predictable by the player, by splitting up as they take different routes, and opening up new routes as well.

Mockups (UI, Beginning Level)

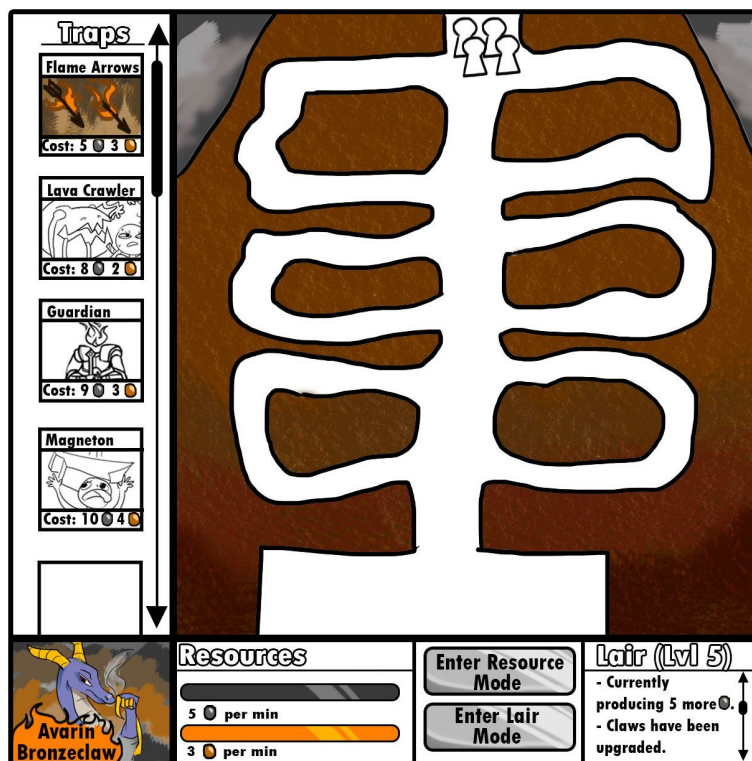First Concept Sketch (Trap Phase)   First Concept Sketch (Battle Phase)

Original Concept Sketch (trap phase):

First Draft (trap phase):

Polished Draft (trap phase):

Trap Phase

Trap Phase Progression

      With the initiation of the game, the player enters the trap phase and has a short head start before the parties of heroes enter the lair. During trap phase, the player must focus on placing down traps, creating resources, and upgrading their lair. The heroes will progress through the lair in parties, and some have higher movement speed compared to others, such as a scout. Each party has their own strategy, meaning that they may stick together or split up at times and have differing movement speeds based on buffs from the healer or being slowed down by the tank.

Lair Mode

Each villain's lair has unique characteristics that are specific to the villains themselves, so each villain may have different options for upgrades and progression. During the trap phase, the player is given the option to upgrade their lair that gives them buffs for the battle phase. Entering lair mode will initiate a mini-game that will be intended to improve or create a part of the lair. For example, going into lair mode with Avarin may initiate a game where you have to build a new automaton that can be put towards trap usage or for assistance during the battle phase. These upgrades can come in handy when it comes to resource production during the trap phase, or new combat strategies during the battle phase.

Traps/Minions

Each villain has their own traps and minions that they can utilize to slow down and weaken the heroes as they approach the battle phase. Each trap or minion is balanced to specialize in dealing damage to certain heroes, or causing the heroes to reach the lair slower. This is meant to give the player a greater advantage against the heroes during the battle phase. Each trap and minion also cost resources in order to be played, therefore resources must be managed and produced in order to consistently place down traps.

Resource Mode

Traps and minions are limited, so the player has resources to manage in order to produce and place down more traps. Resources are constantly being produced at a

certain rate that can be increased. Resource production rate depends on how much the lair has been upgraded, as well as how often the player chooses to enter resource mode. Resource mode is essentially a mini-game that must be played in order to gain more resources within a shorter time. On the other hand, the player must also make sure they keep an eye on the heroes progressing through the lair.

Battle phase

Battle Phase Progression

As whatever is left of the hero party reaches the player, the battle phase is initiated. During battle phase, the player is attacking the heroes directly as the villain. This phase is styled more to utilize the villain's attacks in order to finish off the heroes in the 'final boss battle'. The player must be crafty and strategize with their lair upgrades and combat moves in order to succeed in defeating the heroes. Since each combat move has their own characteristics and debuffs, there are plenty of combinations that can be executed in order to finish off the party of heroes.

Prototyping and Playtesting

Concept for Prototype

There are two main gameplay stages to our game: the trap/minions overview and the third person action combat. Since our design stage has a very early deadline, we decided to focus on the first of the two main gameplay stages: the trap/minions overview and management. During our first pitch we received feedback curious about how exactly this functionality would work in our game and also concern about how fun this gameplay functionality would be. We used the opportunity of the playtest to really flesh out what the stage might look like and find how we might ensure that it is a fun stage of the main game. We decided that the best format to test this would be a board game format. Using a board game allows us to create very straight-forward gameplay that decreases the amount of variability the game has and thus allows us to isolate variables for testing.

Rules:

Turn Instructions:
First the player goes, then the enemy moves
- Player's turn:
  - Three options:
    - Mine resources:
      - Obtain base resource gain (initial: 5) + dice roll value
    - Purchase and place a trap/minion
    - Purchase upgrade
- Enemy's turn:
  - If at a juncture, the enemy randomly decides to follow one of three possible paths: either right, left, or straight. The enemy will also not go the same direction more than one time during the duration of the match

(the enemy will not go straight at the first juncture then straight at the second or third juncture). Also, when on a right or left path, the adventurer's party will move two spaces in a turn as opposed to one. Possible enemy rolls:
- 3 path options:
  - Roll 1 or 2: go left path
  - Roll 3 or 4: go straight
  - Roll 5 or 6: go right
- 2 path options:
  - Roll 1-3: go left-most direction
  - Roll 4-6: go right-most direction
- ○ Otherwise, the enemy will move one place down their path.

This pattern continues until the enemy reaches the lair. At that point, the game enters the boss fight of the game.

The Boss Fight
Again, the player will move first then the enemy
- The Player
  - The player will roll the dice and will attack for an amount based on the roll:
    - Roll 1: 0
    - Roll 2-5: base attack
    - Roll 6: 3 x base attack
- The Enemy
  - Each enemy party member will do different amounts of damage/healing:
    - Tank: 3 damage for every 10 health it has
    - DPS members: 20 each
    - Healer: no damage, heals party 10 health each, 5 for self

This will continue for as long as either the party or the player dies.

Trap/Minion Types:
- Guardian: Tall mech that is slow but strong, does extra damage to tanks
- Fledgling: Monster minion that fights the adventurers with great agility and speed, doing extra damage to the archer
- Lava Crawler: Ferocious minion like the fledgling but much slower, does extra damage to the swordsman
- Fire arrow trap: Trap that springs up just as the adventurers are about to pass it, doing extra damage to the healer
- Magneton: Trap that annoyingly bogs the adventurers down but does not harm them and instead causes them to have to take two turns to leave the square it is placed in

Strength/Health of Characters:
- Player:

- ○ Initial health: 100
- ○ Initial base attack: 5
- Tank:
  - ○ Initial health: 90
  - ○ Initial attack: 27
- Archer:
  - ○ Initial health: 65
  - ○ Attack: 30
- Swordsman:
  - ○ Initial health: 75
  - ○ Attack: 30
- Healer:
  - ○ Initial health: 65
  - ○ Attack: 0
- Trap/Minion damage:
  - ○ Base damage: 3
  - ○ Bonus damage (to its specific target): 2

Upgrade Types:
- Magical alignment:
  - ○ Increase player strength by 2
- Improved copper:
  - ○ Improve trap damage by 1
- Caffeine deposit:
  - ○ Increase resource production by 5
- New material discovery:
  - ○ Improve player health by 2

Costs:
- Traps: 10
- Upgrades: 10 first time, increase by 5 for each time after
- Player begins game with 10 resources
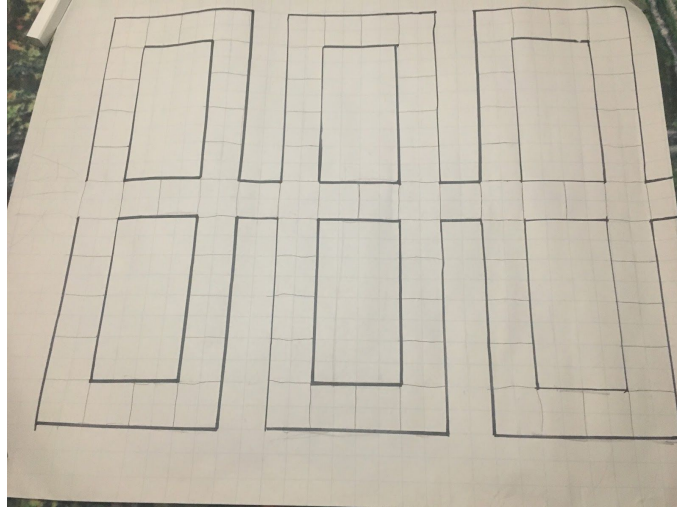
Playtest Procedure

Because of conflicting schedules, not all playtests were able to be held on a single day. Instead, they were held on two consecutive days. Our playtesters were all males in
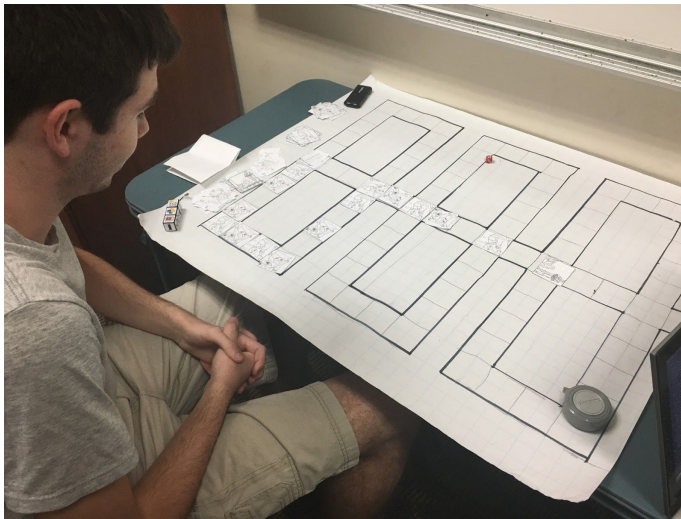
between the ages 19 and 25. Although all playtesters were males, they were also all members of the UCF programming team. We felt these people would be good for playtesting because for programming team, they have to solve problems involve optimizing

processes and finding and using patterns. We believed these playtesters would be able to find optimal strategies in our playtest.

For the testing, each playtester would play the board game one at a time and in a separate room from the other playtesters so as to not influence the other playtesters.
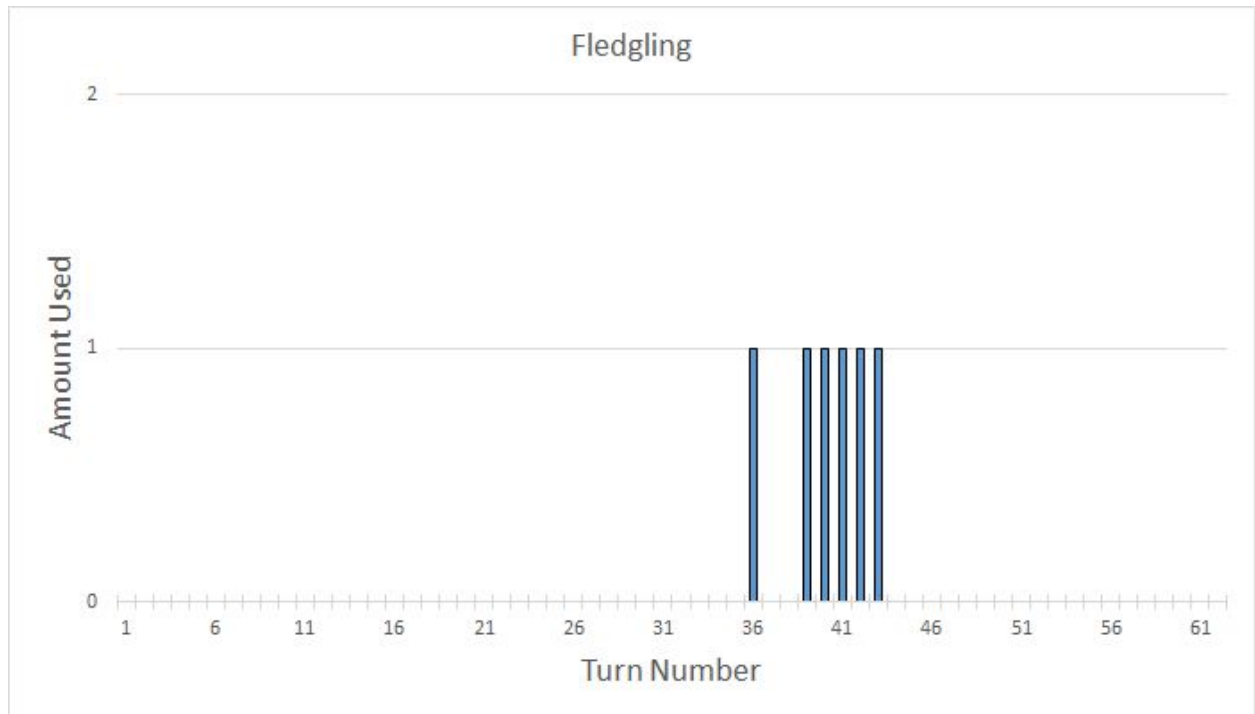
For playing the game Noah would moderate the game and keep track of all the numbers for the player while they played the game and recorded the player's moves.
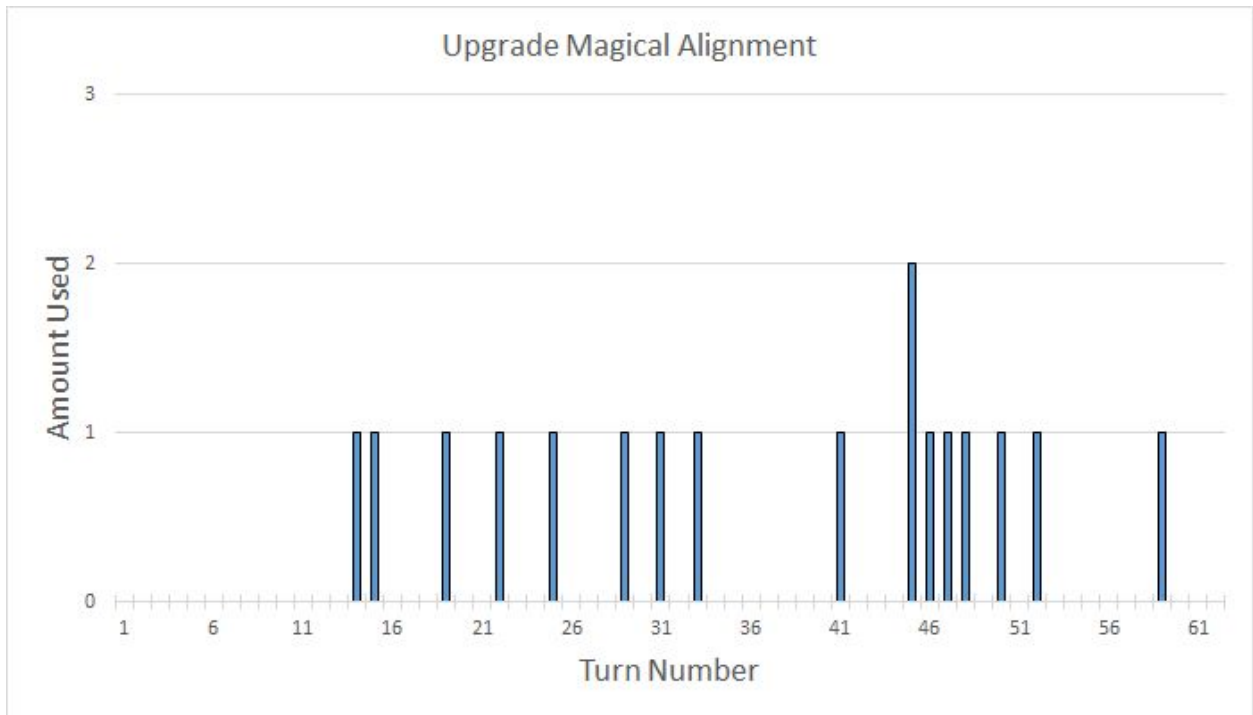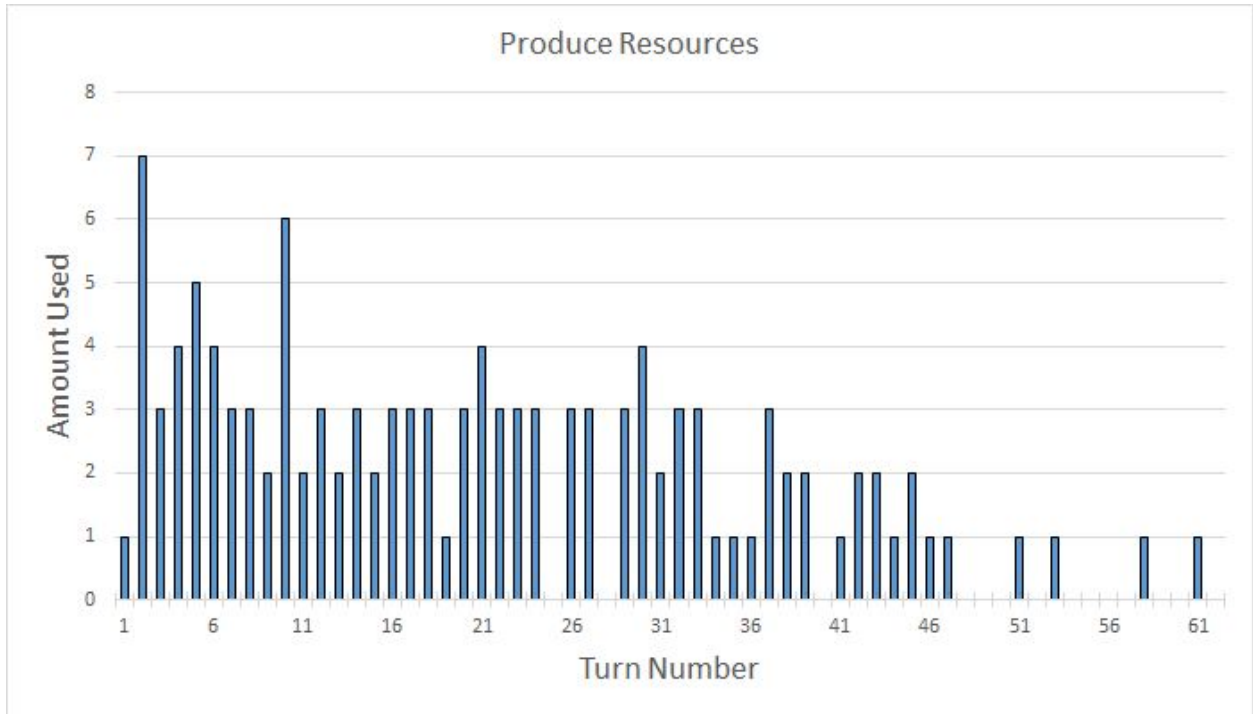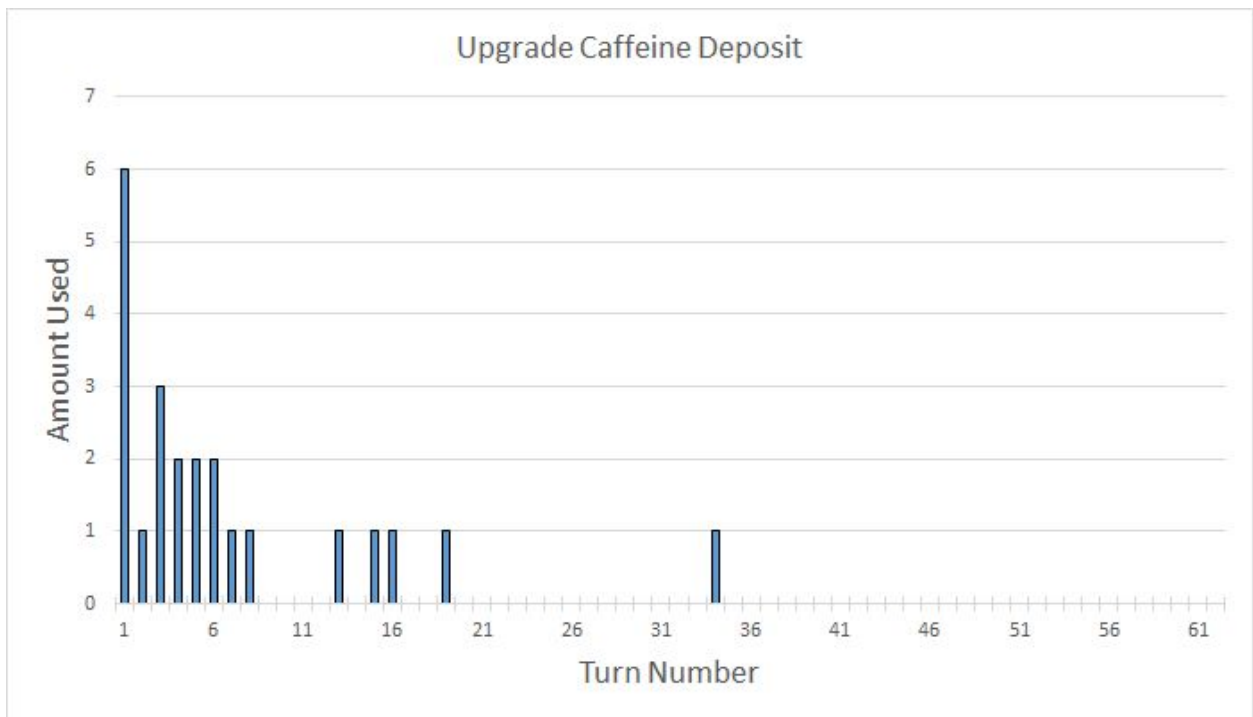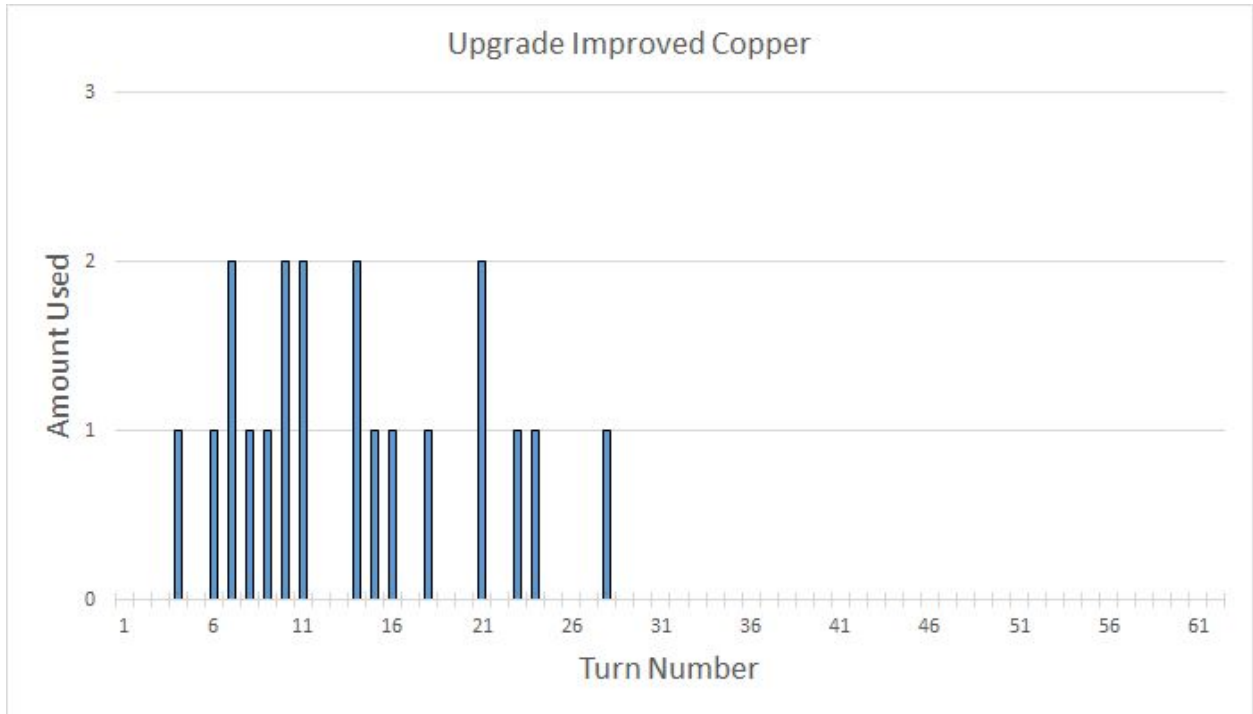
Playtest Data

Playtest data is displayed below. These graphs represent the amount of usage of the various options the player had to play in the prototype. Each graph is a different option (purchase and place trap or upgrade) the player had. In these graphs, the y-axis represents the number of people that used that option and the x-axis is the turn number. By using these graphs we were able to easily analyze the usage of the various items.

Guardian

Lava Crawler

Fledgling

Flaming Arrow Trap

Produce Resources

Upgrade Magical Alignment

Upgrade Improved Copper
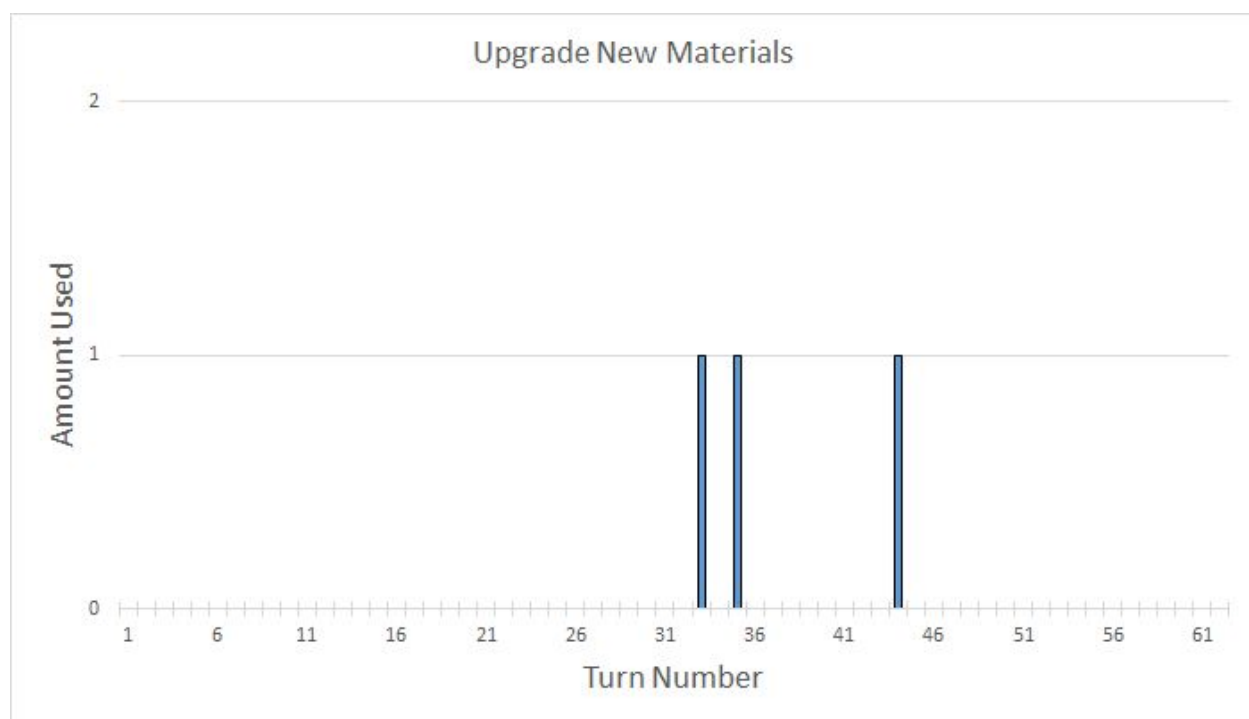

Upgrade Caffeine Deposit

Upgrade New Materials
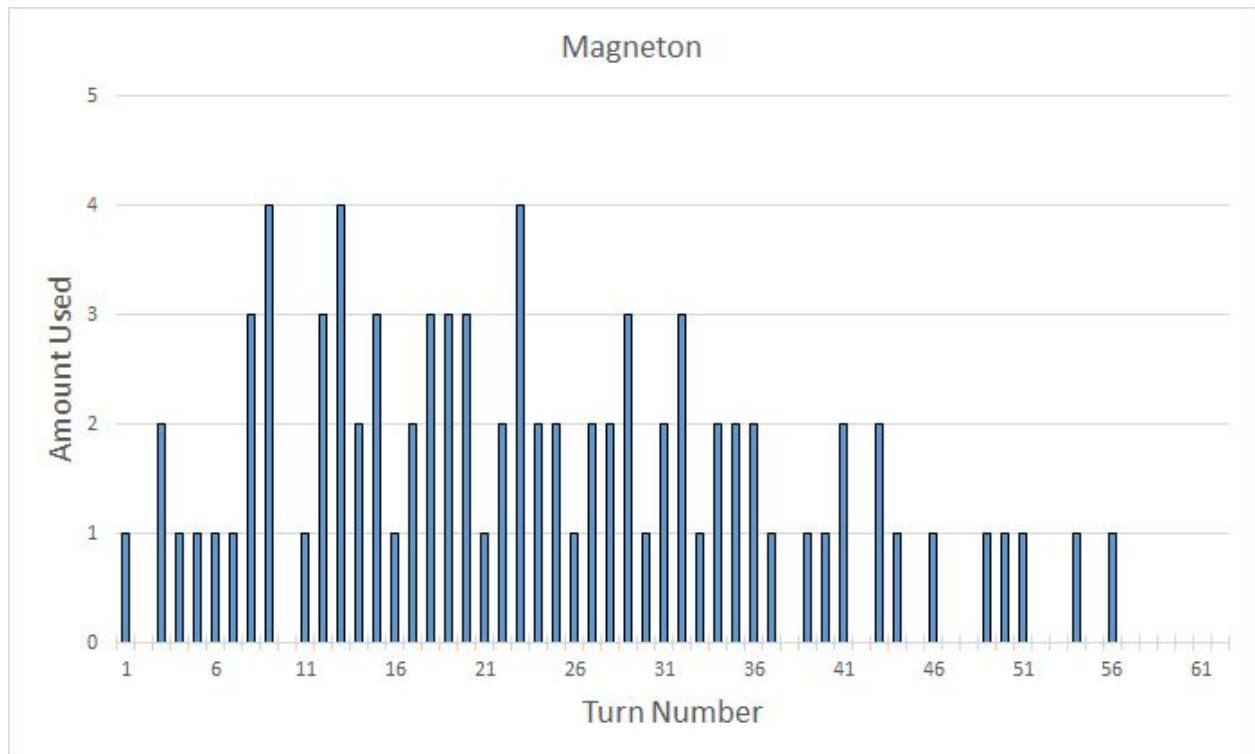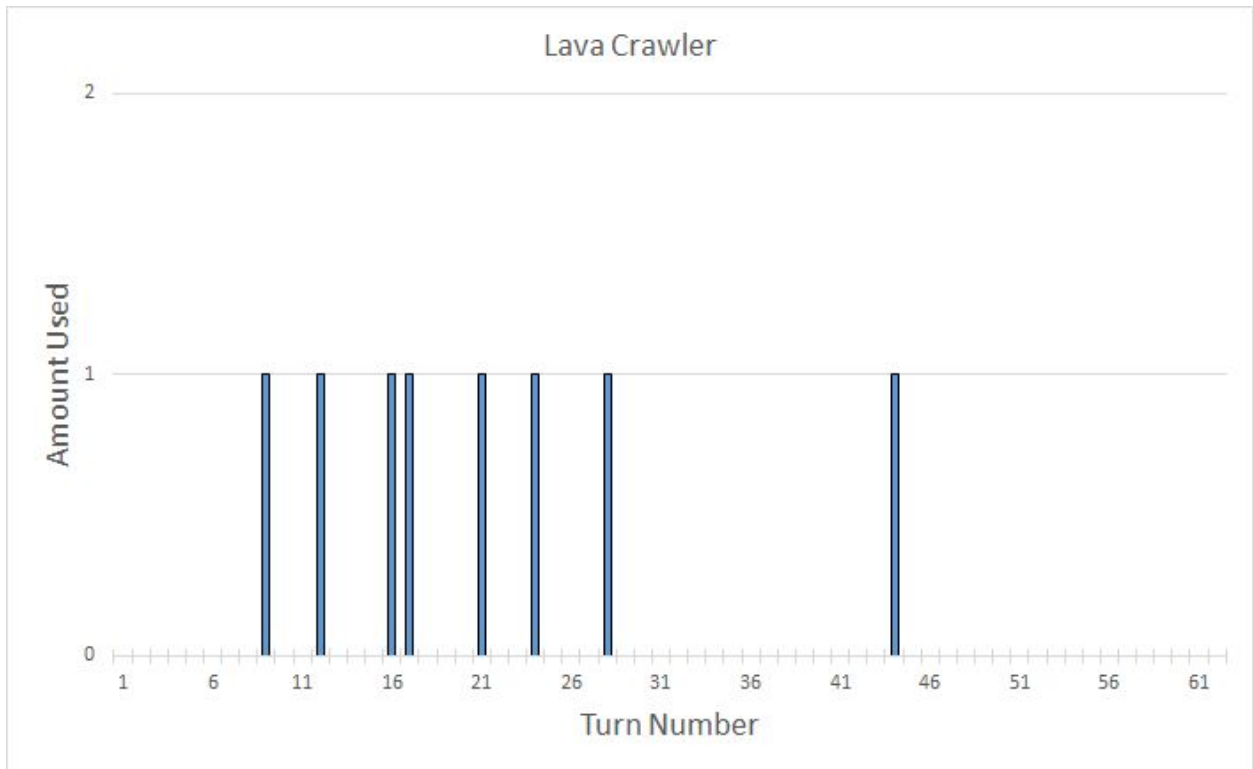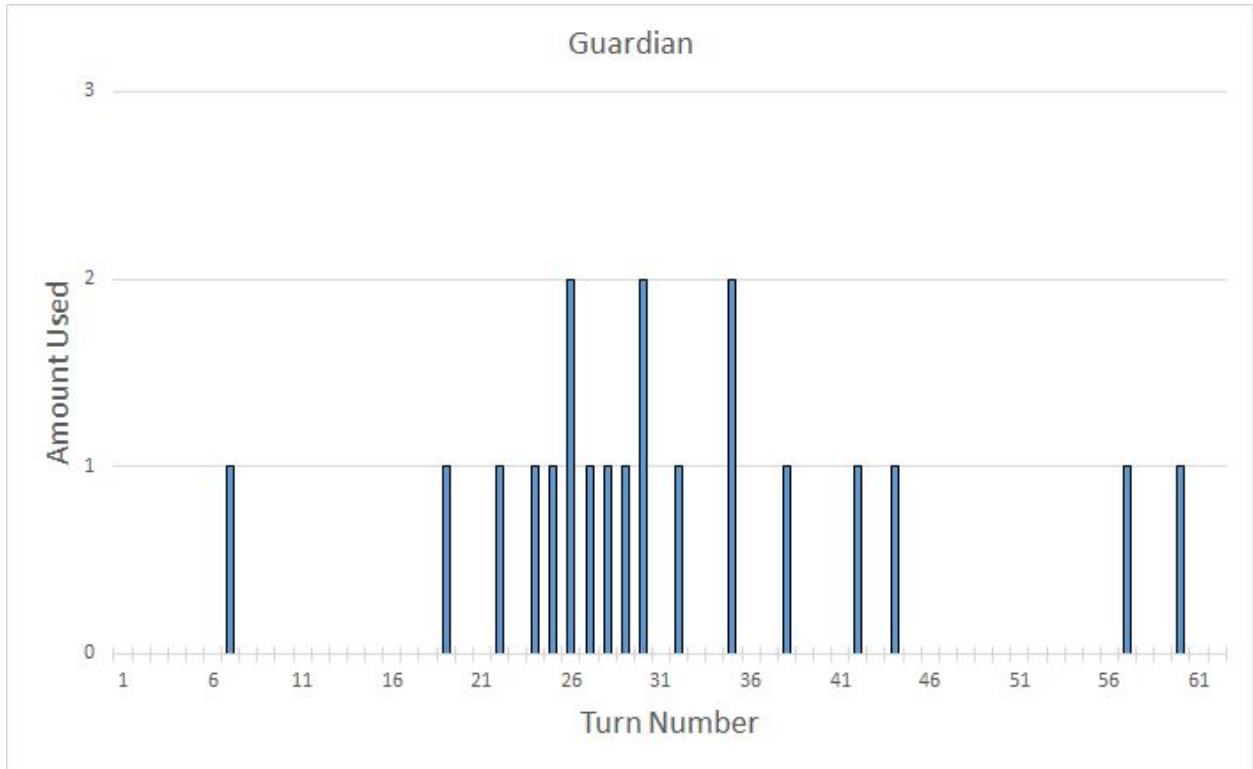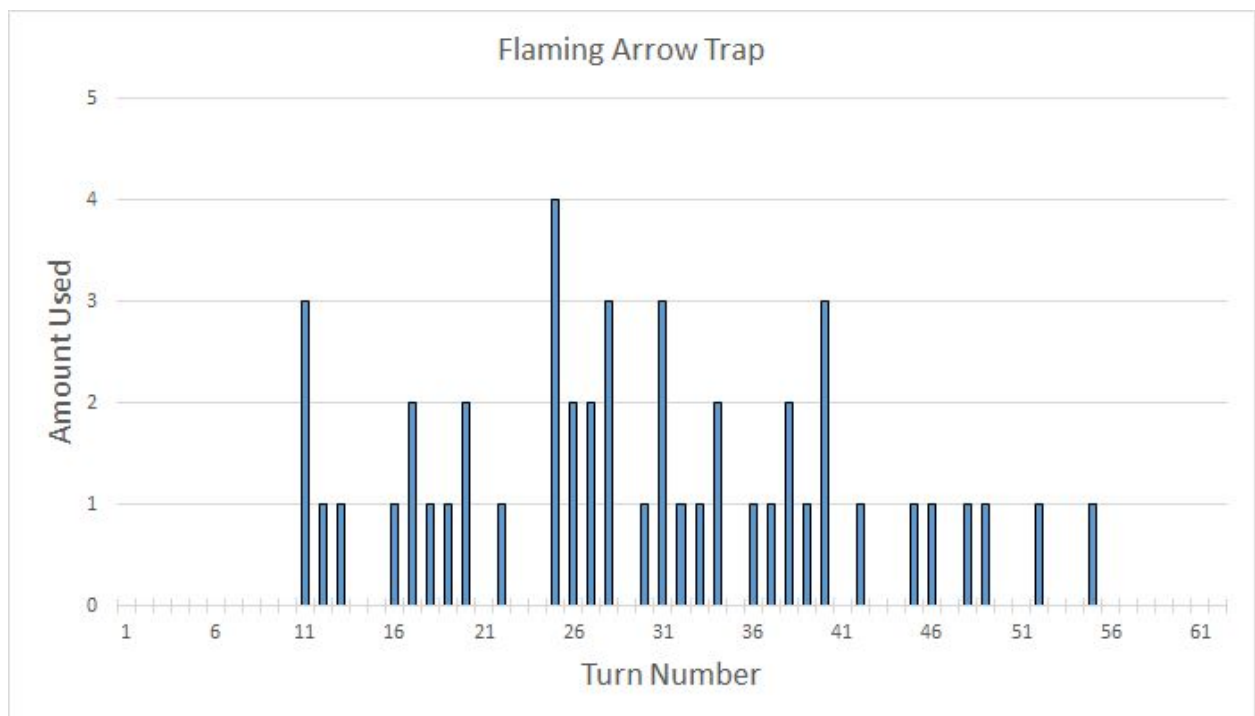
Playtest Survey

After their playtest, each participant was asked to complete a google forms survey that would be submitted anonymously. Below are the survey questions:

1. What was your approach?
2. Were you successful (Yes/No)
3. Would you be interested in playing a full game of what you just tested? (1-5 where 1 is not interested and 5 is very interested)
4. How original does the game concept feel? (1-5 where 1 is not original and 5 is very original)
5. What aspects of the playtest did you enjoy most?
6. What aspects of the playtest did you enjoy least?
7. Did the traps/upgrades seem to match the theme of the game?
8. What aspects of the play test did not seem to match the theme of the game?
9. Are there any suggestions you have for improving this game mechanic/the game?

Playtest Results and Reflections

This playtest gave us a lot of information on our game design. For the playtests, we had a 50% win rate. This was very surprising to us because we expected the win rate to be either heavily in favor of winning or heavily in favor of people losing. This, and other factors and results point to our prototype having an optimal strategy with limited error. Since our demographics included people that are on the programming team, we know
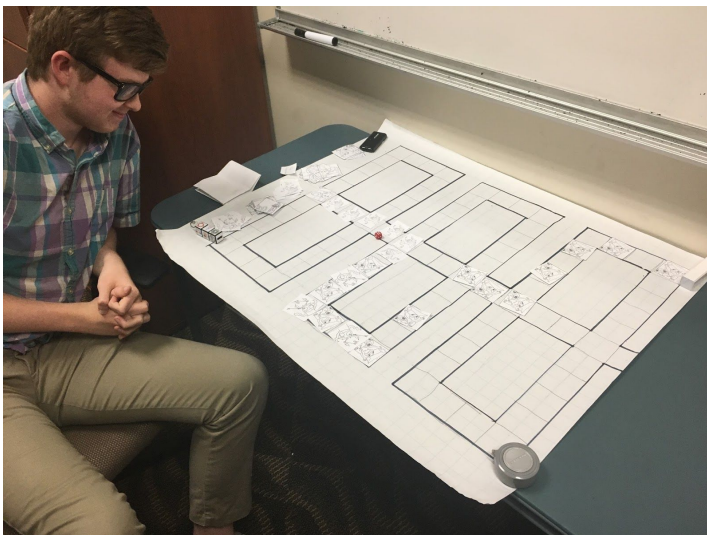
that they would come in prepared to find an optimal strategy given the constraints they have within the prototype. Many of them found the same effective strategy very quickly, as seen in the graphs above. The emergent gameplay we found in the playtesting was that playtesters would start the game with focusing on using the Magneton trap to slow down the enemies and also upgrading a few of their attributes, specifically, the Caffeine Deposit and Improved Copper upgrades. And they would have to produce resources when they run out of resources. The Caffeine deposit and Improved Copper upgrades were both highly utilized very on in the playtesting then virtually become unused towards the middle and end of the playtest. This is because playtesters found it most beneficial to first be upgrading resource collection rate and then start placing traps and keep using the megaton and then focus on other things such as Upgrading Magical Alignment. This strategy was also noted in survey responses.

In placing traps, playtesters usually first utilized the Flaming Arrow Trap. This was in order to try to defeat the healer of the adventurers' party first. In the final fight the healer would heal their team a lot and would thus cause great issues for the playtester so our playtesters found it prudent to defeat the healer before the adventurers reached the playtester. In the graphs you can see the trend of a spike in usage of the healer and then a drop off when the healer got killed.
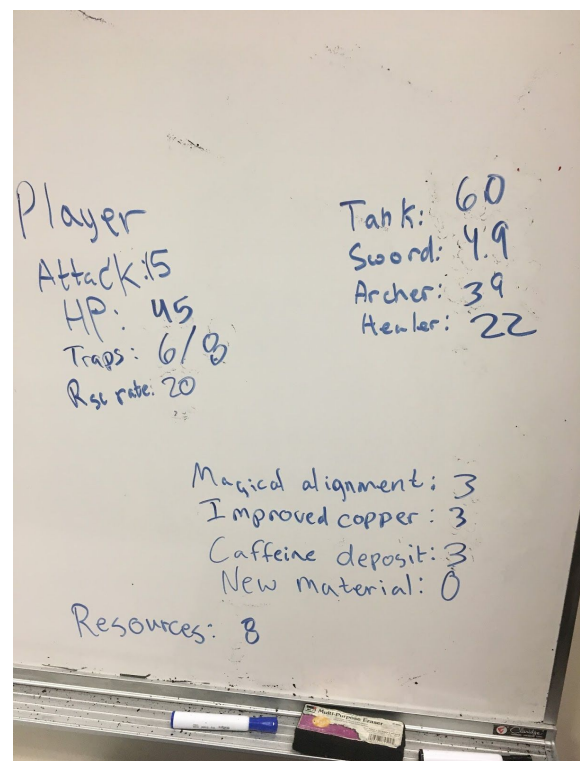
In each playtest, the adventurer party would reach the playtester, albeit with the healer either dead or dead within one or two hits of the playtester. In the final fight, the playtesters' win would be decided by the playtesters damage that they got on the adventurers before the adventurers got the playtesters' lair and what the playtester rolled on the dice in the final fight. However, the damage to the adventurers was the primary factor in a playtester's chance of winning.

Business considerations

For business considerations, we have to consider the costs of creating this game compared to the potential profits that could be made from this game. For potential costs, we need to consider the cost of hiring animators, programmers, a marketing team, artists, writers, and many more people if this is a large production. We also have to consider the costs of putting the game on digital distribution platforms such as Steam. Valve takes 30% of the sales from Steam and leaves 70% to the developers, so it's important to consider this when planning what platforms to release the game on.

The size of the team is a consideration as well. With a smaller team, the game is expected to be smaller and therefore less expensive than a major AAA game. A larger team has its own share of problems, such as getting all the members organized and creating a product that doesn't feel unfinished for the player. For example, Electronic Arts has sold over 100 million copies of Madden games life to date, generating over $4 billion in revenue. However, this comes at the cost of large licensing fees. EA pays the National Football League and NFL Players Association $50 million to be the exclusive video game licensee and John Madden an additional $2 million to use his name.

The developers of a popular indie game *Shovel Knight* broke down the development costs and sales figures of their game, and we can use some of their data to estimate how much the game would cost if it were an indie game. According to Yacht Club Games, the development team that made the game, ". . . most studios will put the average cost of a developer on a game at around a $10k man month". So each

developer will cost the company $10k due to salary, health insurance costs, and other company costs such as electricity, water, and rent for the building. This will have to be taken into consideration with development of the full game.

Depending on the team size, we would expect this game to be sold anywhere between $20 and $60. Using the team behind *Shovel Knight* as an example, the 6 man development team over a one year development period released a game that is currently selling for $25 on Steam. So if we were to keep our current group size without hiring any extra help, we would expect to sell our game for about the same price.

The target audience for our game consists of gamers between the ages of 14 and 30 with the gamers being people who enjoy games that train pattern recognition, resource management, and action combat. *A Tale of Villains and Scoundrels* trains these specific skills. In the lair building phase, the player must be able to recognize patterns that form in the adventurers' behaviours and in utilization of resources. This skill also will be trained with resource management wherein the player will have to be able to plan their actions and be able to balance reacting to all the input they will receive from the game. In this game, action combat becomes important for when the adventurers reach the player and the player will have to combat the adventurers in order to defend themself.

In reaching our audiences, we plan to advertise our game through advertisements on game-play sharing sites such as YouTube and Twitch, along with various websites created by gaming communities for their respective communities.

Appendices

Appendix A - Art

Avarin Lair UI Concept Art

Original drafts and polished versions of Avarin Bronzeclaw's lair during the trap
phase.

Avarin First Level

A PDF with all the images that represent the progression of the first tutorial level
for Avarin Bronzeclaw.

Avarin's Traps

Original concept art for Avarin Bronzeclaws's first 5 traps.

Character Concept Art

This folder includes the original and more polished concept art for the villains and
heroes we designed.

Decorative Art

Art intended to decorate powerpoints and the document.

Appendix B - Storytelling

World Overview.pdf

This document provides an overview of the world the game takes place in in an
easy to read bullet-point format.

Map of Tscarra.png

This document gives the map of Tscarra.

Additional Narrative (Nicrofia).pdf

This document is a short story that further explains Nicrofia's backstory.

Appendix C - Prototype and Playtesting

Playtest Recorded Moves.xlsx

The recorded moves from the playtest games.

PrototypeInstructions.pdf

The instruction set for the prototype given to the playtesters.

Prototype Survey (Responses).xlsx

The survey questions and answers from the playtesters.

PlaytestPhotos.pdf

A PDF that holds pictures from the playtesting session.