# 1. Introduction

Tiny rogues leave no treasures behind. After the king decreed that all tiny people would be subjugated to a tiny tax, this group of tiny rogues decided to storm the royal halls, stealing all the treasure they could in retribution. Avoid swordsmen, arrows, and bombs. Progress through different rooms by killing key carrying guards. Fight a boss at each level to gain a lot of treasure. Purchase upgraded weapons and stats from a shady merchant. Kill the king and become the tiny royal rogues!

# 2. Overview

## Description

In Rash Rogues, players will fight their way through the halls of the royal tower.

As the team progresses through each room, enemies will grow more numerous and powerful. Every fourth room the team comes across will induce a boss fight – a climactic battle against a foe possessing unique behavior and abilities. Upon completion of each boss fight, players will be afforded an opportunity to spend their riches on upgrades to their armament and abilities; riches they obtained from scavenging treasure, destroying enemies, and defeating bosses.

Rash Rogues is chaotic, and the players will have to learn to work together. This is especially important as the game progresses and players pursue divergent but complementary upgrade paths. The team will encounter a wide variety of enemies, such as archers, swordsmen and bombardiers.

## Genre

Rash Rogues is a cooperative action-adventure game with rogue-like elements.

Players will view their character from a top-down perspective.

## Gameplay

Your goal is to defeat the king (and take his treasure!), the only way to accomplish this is to defeat his minions first.

As mentioned in the game description, Rash Rogues is meant to be chaotic, with many enemies on screen at once. This means enemies will be inconsequential on their own, but deadly as a collective. Don’t expect damage from a single enemy to take you own but be weary of becoming overwhelmed by attrition.

Each player possesses ranged and melee weapons, consumables (think potions, health packs), and special abilities (such as dash). All of which can be enhanced/purchased from the merchant.

Visual entities include the player, enemies (such as swordsmen, archers, and grenadiers), the merchant, chests, bombs, and arrows.

The user will see a health bar somewhere on the screen, accompanied by icons for their abilities. Their abilities can have cooldowns, which will be indicated by graying out the ability icon. The player’s character is centered on the screen. The camera following the player character lags behind just a little. Interacting with the merchant pulls up a shop for powerups specific to each player. There are general powerups next to the merchant which any player can purchase, but each of those powerups are one-time purchases. So, whoever gets to the powerups lying next to the merchant could just purchase all of them, or they could be generous and wait for the others to come and purchase them.

This game features charming characters and animations, a humorous plot and leans into the chaotic nature of bullet hells. The player will have a blast bobbing and weaving through projectiles, overcoming difficult enemies, and customizing their character upgrades.

## Entities

There are three basic enemies throughout the rooms leading up to the boss rooms: the swordsman, the archer, and the grenadier. The swordsman is a slow melee unit that deals heavy damage and has a large health pool. Best not to get too close. The archer is a frail ranged unit which rapidly shoots arrows from a safe distance. The grenadier is a medium health, medium ranged unit which lobs bombs at a slow pace, but each bomb deals massive damage.

The boss room contains a large amount of treasure guarded by a dragon. The dragon has a lot of health and attack power. The dragon can use a flame breath ability as a medium ranged attack, covering a wide area. The dragon can also use its claws to perform melee attacks. Enemies will be streaming into the boss room to put pressure on the players and add to the chaotic boss battle.

Once the players defeat the dragon, they can progress to the merchant room, which is a resting place where the players can purchase upgrades and prepare for the next level of

the castle.

## Development Strategy

We created a new libgdx project, but much of the code used in our previous projects can be quickly reused for this project; animation snippets, basic movement, the HUD, and other small things that may come up throughout the project. We have 3 milestones: Alpha Demo, Group Status Report, and the Final Presentation. Below are the features we expect to be completed in each milestone, color-coordinated to represent who we plan on having own that feature. Cade is blue, Elijah is green, Max is red.

**Alpha Demo (11/13):**

* All necessary sprites created (not including animation sheets)
* Camera follows the player
* Enemies that spawn with a key
* Enemies can damage the player
* Advance to a new room after obtaining the key
* Basic Networking
* Player can dash and throw smoke bombs
* Merchant system UI mock-up completed

**Group Status Report (11/17):**

* Polishing previously finished features
* Animation sprites completed
* Animations completed
* Room progression
* Basic SFX
* Server/Client interactivity
* Basic enemies completed
* Merchant system prototype

**Final Presentation (12/6):**

* Polishing previous finished features
* Music
* Finish SFX
* Smooth networking
* Host/Join UI fully integrated
* Clean UI
* Bosses completed (dragon and king)
* Finish player abilities
* Merchant system finished

## High Bar Items

More Stages:

Our low bar is having two stages, each comprising of three normal rooms, one boss room, and one merchant room. One high bar goal is to have more of these stages, each one with a unique boss like the dragon.

Settings:

Having a settings screen where you can adjust things like volume and do other things like change your class or the way attack vectors are calculated

Multiple classes:

Create a few different classes who have different abilities and looks compared to the default Rogue; for example, a Ninja might have a special throwing star attack instead of a smoke bomb.

Alternate Firing Mode:

Allow an option where projectiles shot by the player will be shot towards the player’s mouse rather than the direction the player is facing.

## Low Bar Checklist

Pathfinding:

Swordsmen will move straight towards the player’s position. Archers will move away from the player if the player gets too close. Grenadiers will try to keep a medium range from the player.

Collision Detection:

Player will get hurt when colliding with projectiles, explosions, and enemy hitboxes. Enemies will get hurt if damaged by a player’s damaging projectiles.

UI:

The player’s health bar will be visible, as well as their ability icons. The shop will open when a player interacts with the merchant.

Enemies:

Swordsman: slow melee unit, deals heavy damage, large health pool

Archer: fast ranged unit, rapidly shoots arrows, frail

Grenadier: medium ranged unit, slowly lobs bombs with delayed explosion

Player Movement/Interaction:

Use WASD or Arrow keys to move the player. Press SPACE to attack enemies or interact with the merchant. Attacks will fire off in the direction the player last moved. Press ESC to stop interacting with the merchant.

Press E to activate an ability. Press Q to use a consumable (potion,

health pack, etcetera). Press ~ to open the HUD.

Merchant:

Select an upgrade specific to the user from interacting with the merchant.

Upgrades include: smoke bombs, throwing knives, daggers, cloaks, gloves,

lockpicking tools, and more.

Difficulty Increase:

The longer the players stay in any given room, the more enemies spawn behind them to pressure the players. Each level of the castle also spawns more and

tougher enemies.

Custom Animations:

All assets in the game (at least the entities) will be custom made,

including animations.