# Game Design Document

# Apocalypse

## High Concept

The game is a turn-based resource gathering survival game based in an apocalyptic scenario, pitting players against time, bandits and natural disasters.

## Gameplay

The game is broken down into 'days', each day every player takes a single turn where they can take different actions. On a player's turn they can use as many actions as they like until they either run out of 'energy' or they choose to end their turn early. Once a player is done with their turn, the next player can take actions and once all players are done, the day is over. After each day, bandits will take the actions and all events and updates will happen (natural disasters, food/water upkeep, bandits spawning etc.)

#### Core Game Loop

The core Game Loop for the game is:

Look at the board-> Consider the best Action -> Do an Action -> Look at the board -> Consider the best action -> Do an Action -> End turn

#### Characters

At the start of the game each player chooses 1 character to control in turn, until all 4 have been assigned. Each character has a unique role in the game (detailed further down) and players will need to work together utilising their special abilities. The 4 available characters are: Medic, Soldier, Builder and Scout.

#### Inventory

Each character has an equipped inventory as well as a carrying capacity. There is one inventory slot for each type of item: weapon, armour and vehicle. Carrying capacity represents the amount of resources the character can carry in KG, these resources being: wood, metal, food, water, medicine and fuel.

Actions

Costs will often depend on the character, equipment and modifiers such as being injured.

Action	Cost	Effect	Who
Move	X energy per tile, X fuel per tile with a vehicle	Moves the player	Everyone
Scavenge	X energy	Takes resources from the tile into the player inventory	Everyone
Fight	X energy	Deals damage to a bandit on a tile	Everyone
Scout	X energy	Reveal the amount of resources and presences of enemies in nearby tiles	Scout
Build	XYZ Material costs, X energy cost	Create a new building on the current tile	Builder
Heal	X Energy, Y medicine	Restore Z health to a character	Medic

## Buildings

Energy - Is required for a lot of the different buildings in your city to function. If a generator is disabled/destroyed by bandits and you no longer meet the required amount of energy for your buildings, they will go offline at random no longer providing its bonuses.

Name	Build	Resources	description
	ing	cost	
	level		
Bunker/Town Hall	3	Wood ? Metal ?	The central hub of your controlled zone and your main win condition getting your bunker to level 3 Wins you the game holds your resources.
Photoaccelarato	?	Wood ? Metal ?	Produces an amount of food based on the level of the building. Requires power to function.
Wood burning generator	?	Wood ? Metal ?	Produces Energy.
water purifier	?	Wood ? Metal ?	Produces an amount of water based on the level of the building. Requires power to function.
Watch tower	?	Wood ? Metal ?	Clears the fog of war around the building in a large area. Including the bandits hidden in buildings reveal bandits. Higher levels require power.
Warehouse	?	Wood ? Metal ?	Allows you to store more resources. If it is attacked by bandits, you will lose all the resources stored in

			the warehouse if it is attacked. Is very important to keep protected.
Turret/ gun emplacement	?	Wood ? Metal ?	Requires energy. Automatically attacks a random bandit in range every turn.

#### Items

## Weapons

These Items will help the character in combat with bandits providing stat boosts to attack and, in some cases, increased range as well.

Knife - increases attack by a tiny amount.

Machets - increases attack by a tiny amount.

Baseball bat - increases attack by a tiny amount.

Pistol - increases attack by a Small amount.

Rifle - increases attack by a medium amount.

Automatic rifle - increases attack by a large amount.

Sniper - increases attack by a large amount and increase range.

#### Armour

Armour will reduce how much damage you take from bandits and events making combat easier and getting hit by an event less punishing.

Hard hat - reduces damage from disasters by a medium amount.

Homemade body armour - reduces damage from combat by a small amount.

Bullet proof vest - reduces damage from combat by a medium amount.

Swat equipment - reduces damage from combat and disasters by a medium amount.

Military equipment - reduces damage from combat by a large amount and disasters by a medium amount.

#### Vehicles

Vehicles will add a range of different bonuses to the character mainly movement speed and carry capacity.

Bicycle – Increases speed by a small amount.

Motorcycle - Increases speed by a large amount.

Humvee – Increase armour by a medium amount and speed by a medium amount.

Car - Increase speed and carry capacity by a medium amount.

Van – increase speed by a small amount and carry capacity by a large amount.

#### Combat

Combat in the game is triggered if a prior mentioned bandit steps onto the tile that one of the players is currently occupying, Combat ends when either the player or the bandit is dead. Each Player has a different combat item which has different levels of damage. With the Solider class being particularly proficient at combat he is the only class who can fight without being on the same tile as the bandit.

#### **Events and Disasters**

Throughout the game, random events and disasters will affect the players and the board.

#### **Bandits**

Bandits spawn on a random building. When triggered by a player, the combat start. If bandits will not be killed, bandits will head towards the bunker and move through buildings every turn. When bandits get to the bunker, bunker will be attacked.

#### Tremors

Tremor, a natural disaster that will affect an area of the boardgame where buildings will get damaged and possibly destroyed. Players in the area will get damaged. Petrol station if in the area will cause a fuel explosion.

#### Tornado

Tornado, a natural disaster that will destroy buildings and damage players if met on the path of the tornado. Damaged players will lose health.

#### Hurricane

Hurricane will affect all of the area of the boardgame. Players will be slowed down and there is a chance of a player to be damaged and lose health.

## Avalanche/Tsunami

Avalanche or a Tsunami, a natural disaster that will affect the edges of the boardgame. When a building is in the way, it will be destroyed, and a player will get damaged.

## **Fuel Explosion**

Petrol station explodes which it will destroy the building, damage the player if in the area and there is a high chance of a fire to spread to surrounding buildings.

## Wildfire/Fire

Wildfire will ignite at a random building, caused by a lightning strike or extremely hot weather. Bandits will have the ability to set the buildings on fire. When fire is ignited on one of the building, it will have a chance of spreading into adjacent building.

#### Server Client system

## Feedback (possible changes):

- When players are finding their feet in a game it should kick them too hard when they are down.
- More actions per turn felt needed
- Also clearly define stages of play, when you can discuss tactics etc.
- Bigger information representation on tiles is needed and some additional effort with supporting rulebook

#### Fog of war?

More of a focus on combat? Xcom style combat.

Building up your base to defend reassures?

Bandits try to attack your base.

More items focused around combat allowing for more scavenging for gear.

#### CO-OP

Fog of war

Scavenging takes time, more time the more resources you scavenge

Random number of resources in each building

Carrying capacity

Turn/Day system, turn progress bar

Action point system

Scout – reveal bandits, number of resources and building in the area, ability on turn cool down

medic, sniper, builder class

Items – add vehicles, weapons, armor

Bandits in the buildings, chance of spawning in each one

Bandits takes their turn

One tile