**THRASHOLD**

Game Design Document

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[1](#_heading=h.3fwokq0) Overview 1

[1.1](#_heading=h.1v1yuxt) Intro 1

[1.2](#_heading=h.4f1mdlm) Genre 1

[1.3](#_heading=h.2u6wntf) Platform, Minimum Specs 1

[1.4](#_heading=h.19c6y18) Target Audiance 1

[2](#_heading=h.3tbugp1) Game Mechanics 1

[2.1](#_heading=h.28h4qwu) Core Gameplay 1

[2.2](#_heading=h.nmf14n) Modes Of Play 1

[2.2.1](#_heading=h.2s8eyo1) Gathering thrash 1

[2.2.2](#_heading=h.17dp8vu) Boss fight 1

[2.3](#_heading=h.37m2jsg) Game Flow 2

[2.3.1](#_heading=h.1mrcu09) Loading Sequence 2

[2.3.2](#_heading=h.46r0co2) Gathering 2

[2.3.3](#_heading=h.1ksv4uv) Crafting 2

[2.3.4](#_heading=h.44sinio) Boss Fight 2

[2.4](#_heading=h.2lwamvv) Gameplay Elements 2

[2.4.1](#_heading=h.111kx3o) Player 2

[2.4.2](#_heading=h.3j2qqm3) Thraslord 2

[2.4.3](#_heading=h.3l18frh) Garbages 2

[2.4.4](#_heading=h.4i7ojhp) Resources 2

[2.4.5](#_heading=h.2xcytpi) Items 3

[2.5](#_heading=h.206ipza) AI Features 3

[3](#_heading=h.4k668n3) Story Overview 3

[4](#_heading=h.2bn6wsx) User Interface 3

[4.1](#_heading=h.2zbgiuw) Menu Screen 3

[4.2](#_heading=h.3as4poj) Level selection screen 3

[4.3](#_heading=h.1egqt2p) Game Screen 3

[4.3.1](#_heading=h.49x2ik5) Gathering 3

[4.3.2](#_heading=h.3ygebqi) Crafting 3

[4.3.3](#_heading=h.2p2csry) Boss fighting 4

[5](#_heading=h.2dlolyb) Media 4

[5.1](#_heading=h.sqyw64) Art 4

[5.1.1](#_heading=h.3cqmetx) Overall Goals 4

[5.1.2](#_heading=h.1rvwp1q) Game Art 4

[5.1.3](#_heading=h.4bvk7pj) Marketing and Package Art 4

[5.2](#_heading=h.2r0uhxc) Sound and Music 4

[5.2.1](#_heading=h.1664s55) Overall Goals 4

[5.2.2](#_heading=h.3q5sasy) Sound Effects 4

[5.2.3](#_heading=h.25b2l0r) Music 4

1. **Overview**
	1. ***Intro***

Thrashold

The game can be considered a combination of survival, crafting, puzzle and turn based strategy with recycling theme.

The main objective of the game is to save nature by defeating Thraslords. To defeat thraslords player should collect and recycle garbage for resources and craft necessary items from resources gathered.

The better items player get, the tougher Thraslords can be defeated. If player cannot collect enough materials or becomes too greedy for better items and skips crafting to collect more resources it may result of characters dead which means waste of a day. This balance is the main strategy to always keep in mind through the game

At gathering phase player can enjoy beautiful natural environment and calm music while collecting garbage. At boss fighting however things turns around and game becomes intense by fight to the dead with Thraslord.

Game shows importance of recycling by getting player into an exciting gameplay

* 1. ***Genre***

Thrashold is best classified as "Survival game."

Thrashold also gets features from time management, Crafting and turn based strategy.

* 1. ***Platform, Minimum Specs***

Thrashold will run on any android based mobile platform.

* 1. ***Target Audiance***

Thrashold is for the gamer who seek challenges on survival with crafting and boss fights

1. **Game Mechanics**
	1. ***Core Gameplay***

All of the actual gameplay consists of the player trying to survive boss fights at night per collecting garbage at day.

Collecting garbage, crafting items and boss fight is cycling sequence which start with garbage collecting at day and ends with boss fight at night.

Each cycle of day corresponds to a level.

* 1. ***Modes Of Play***
		1. **Gathering thrash**

The player can gather resources by recycling garbage scattered on game field. To do that player should move to location where garbage is located then gather the garbage and choose correct type of recycle box per garbage type on pop-up screen. If correct box is chosen then related resource increases by one, If not then none of the resource increase.

 Gathering part lasts 180 seconds with daylight settings to visualize remaining time.

* + 1. **Boss fight**

The second mode is after gathering thrash mode ends. The player must fight boss in order to advance next level. Fight is turn based which player can choose between 3 types off attack mainly quick, normal and heavy. After attack is chosen, timed puzzle pops-up with difficulty level matching the attack type per quick is the easiest and heavy is the hardest. If player solved puzzle within given time character attack enemy boss according to attack type as, quick is least and heavy is most damage. If player cannot solve puzzle then character misses.

* 1. ***Game Flow***

LOADİNG 🡪 GATHERING 🡪 CRAFTING 🡪 BOSS FIGHT 🡪 GATHERING …

* + 1. **Loading Sequence**

There is a loading sequence that can be thought of as the "boot up." It will consist of a black screen.

* + 1. **Gathering**

This is the gathering thrash mode, as described in section 2.2.1 above.

* + 1. **Crafting**

When gathering part ends, crafting screen will be displayer which player can see total resources collected and combine them with recipes to make various weapon, armor and equipment.

* + 1. **Boss Fight**

When crafting part ends, Boss fight mode starts as described in section 2.2.2 above.

* 1. ***Gameplay Elements***
		1. **Player**

The player is represented by 3 different characters according to current phase of game which are, Gatherer in Gathering phase, Professor in Crafting phase and Warrior in Boss fight phase.

Gatherer and warrior have 3D models.

* + 1. **Thraslord**

Thraslord is the enemy which tries to kill player in turn based battle.

With each level Thrashlord’s health and damage increases to make the gameplay harder for the player.

Thrashlord has a golem like appearance.

* + 1. **Garbages**

These items are scattered randomly around game world for us to recycle.

After collection, garbage disappears. Garbage types are as following;

Plastic: If recycled correctly increases plastic resource by one

Glass: If recycled correctly increases glass resource by one

Paper: If recycled correctly increases paper resource by one
Metal: If recycled correctly increases metal resource by one

Battery: Increases battery resource by one

* + 1. **Resources**

There are 5 types of resources which are plastic, glass, paper, metal, and battery.

These resources can be used to craft various items.

* + 1. **Items**

Items are things that makes our characters more powerful as written at their description

* 1. ***Camera***

Camera mechanic changes per game phase as following.

* + 1. **Gathering**

In gathering phase camera follow player character from 3rd person view.

View is from behind of character and elevated higher from character elevation

* + 1. **Crafting and Boss fighting**

In Crafting and Boss fighting phases, Camera movement is disabled.

* 1. ***AI Features***

Thraslord does not have an AI as it only performs simple attack.

1. **Story Overview**

In the Thrashold game world, humanity lost the battle against Thraslords because of high pollution. Three heroes, gatherer, professor and warrior, chosen for time travel to past to prevent pollution by recycling. However some of the Thraslords travel with same machine just after our heroes to prevent this mission.

1. **User Interface**
	1. ***Menu Screen***

On this page gatherer or warrior character shows up with in game screen. Player can choose to start, change settings or exit game.

* 1. ***Level selection screen***

On this page player can choose any level that is available by completing previous level

* 1. ***Game Screen***

Consist of three different screen one per each phase of the game as;

* Gathering
* Crafting
* Boss fighting
	+ 1. **Gathering**

In gathering part, resources shown in top left as;

Plastic symbol and quantity of plastic at the right of the symbol

Paper symbol and quantity of paper at the right of the symbol

Metal symbol and quantity of metal at the right of the symbol

Glass symbol and quantity of glass at the right of the symbol

Battery symbol and quantity of battery at the right of the symbol

Remaining time shown in top right as seconds and number format, decreasing from 180.

Information about last action shown in top center. If trash collected successfully “Successful” will be seen and if trash collection failed “FAILED” will be seen.

At bottom left here is a virtual knob that can be dragged by player pushed finger on it and swipe to a desired direction.

Directions related to character movement as following;

Swiping to upper part of screen moves character to forward of itself

Swiping to left part of screen moves character to left of itself

Swiping to right part of screen moves character to right of itself

Swiping to bottom part of screen moves character to back of itself

At bottom right there is two buttons which functions as following

Upper right one takes space as much as one tip of a finger and makes character jump one times

Bottom right one takes space as much as one tip of a finger and makes character run which increases movement speed as long as it is pushed

In crafting part, craft able items shown in right part of the screen while own items shown in left. Crafting is done by craft button while related item is selected.

Whenever thrash is collected a pop-up screen comes at the middle of the screen as big as half of the screen. While screen is up character movement are disabled.

In thrash pop-up screen there is four quarters which designed as following;

1)Each quarters should be bigger than tip of a finger.

2)Each quarter includes symbol of one of the thrashes as plastic, paper, metal and glass

3)Pushing each quarter increases number of resources corresponding symbol if symbol and thrash are the same.

After pushing any of the four quarters, pop-up screen disappears and character movement are enabled.

* + 1. **Crafting**

In crafting part, craft able items shown in right part of the screen while own items shown in left.

Crafting is done by craft button while related item is selected.

* + 1. **Boss fighting**

In boss fighting part, character’s health shown as a red bar at bottom left which outlines are stable and inner parts red part shortens from right to left as player health decreases.

Thraslord’s health shown as a red bar at top right which outlines are stable and inner parts red part shortens from right to left as Trashlord’s health decreases.

Three attack types are at bottom right with three buttons as following;

The upper one has a text as “Heavy Attack”. When pushed hard puzzle opens as a pop-up screen. If player solves puzzle correctly Thrashlords health decreases three times of the total player damage

The middle one has a text as “Normal Attack”. When pushed normal puzzle opens as a pop-up screen. If player solves puzzle correctly Thrashlords health decreases two times of the total player damage

The bottom one has a text as “Fast Attack”. When pushed easy puzzle opens as a pop-up screen. If player solves puzzle correctly Thrashlords health decreases one times of the total player damage

1. **Level Design**

Level design will be analyzed as;

Environmental design

Thrash algorithm

Enemy algorithm

* 1. ***Environmental design***

Level consist of;

Mountains which surrounds game world and acts as a barrier to limit boundaries of level.

River and waterfall to increase visual diversity of the game

Forest as a general landscape of the level

* 1. ***Thrash Algorithm***

For player to collect desired thrash with most fair way number of every type of a thrash is equal to each other

Thrash is spread across the level with a random distribution. By making distribution random, every play through becomes different.

* 1. ***Enemy algorithm***

Enemy health and damage has a base value which player will confront at the first level of the game. As player gets upper levels enemy health and damage increases by a percentage from the base values. By this difficulty change balancing between levels does not get out of control and each consecutive level has same difficulty difference.

1. **Media**
	1. ***Art***
		1. **Overall Goals**

Thrashold should capture the natural environment with cartoonish drawings.

* + 1. **Game Art**
* 2 player characters as 3D models and one as 2D picture
* Thraslord as 3D model
* 5-10 item pictures and 3D models
* 5 garbage 3D models
* 5 resource symbols
* 3D environment consist of lakes, waterfalls, trees and bushes.
* Cartoonish text used in-game
	+ 1. **Marketing and Package Art**

Marketing will consist of followings;

* screenshots
* trailer video
	1. ***Sound and Music***
		1. **Overall Goals**

The music and sound for Thrashold should convey two different phases of game that are gathering part and boss fight part

* + 1. **Sound Effects**
* Gathering sound effects

Short sound which gives approval for successful selection of thrash and rejection for failed selection of thrash

* Fight sound effects
	+ 1. **Music**
* Gathering music:

Soft and calming music

* Boss fight music:

Tense music