# Disposomania Concept Document

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### **Working Title**

Disposomania

### **Project Thumbnail**

Our goal is to help those affected by disposophobia (compulsive hoarding) to reform by teaching them how to gradually make space by having them throw out unnecessary items in a virtual environment.

### **Delivery Platforms**

A 2D web-based Flash game would be the easiest and most time and cost effective way to reach our target users. The platform would reach anyone who has an internet connection, and it could be accessed at the user's house or at therapy.

### **Needs Analysis**

#### **Problem Statement**

- Compulsive hoarding is a problem that affects over 3 million people in the US alone
- Poses a serious health problem for people afflicted with compulsive hoarding
  - o Fire hazards due to the amount of clutter

- Uncleanliness of the house leading to illness
- o Other mental disorders such as OCD, anxiety disorders, etc. may be cause
  - As a result, people afflicted don't usually actively seek help.
- Public awareness of Compulsive Hoarding is lacking
  - Adds problems to the patients trying to reform as people they know don't know how to help.

#### **Target Users**

The target users for this game are compulsive hoarders.

#### **Learning Objectives**

- 1. To help people identify what they don't need.
- 2. To get people comfortable with the idea of throwing away objects that won't be used again and teach them to become less emotionally attached to objects.
- 3. Promoting organizational skills
  - Sorting things into categories
- 4. Gradually throwing away items
  - Start cleaning up one room at a time

### **Hypothesis**

By teaching methods and skills used to overcome compulsive hoarding we can lessen the probability of others getting this condition and can help those that already have it.

### **Task Analysis**

#### **Objective**

- 1. Identify that they have a problem
- 2. To help people identify what they don't need.
- 3. To get people comfortable with the idea of throwing away objects that won't be used again and teach them to become less emotionally attached to objects
- 4. Promoting organizational skills
  - Sorting things into categories
- 5. Gradually throwing away items
  - Start cleaning up one room at a time
- 6. Teach them to not buy/keep items they don't need in the future

### **Steps to Take**

#### 1. Show Problem

- i. Show them pictures of their houses and other people's houses
- ii. Rank the photo of their house on a scale of 1-10
  - 1. 1 being not cluttered, 10 being extremely cluttered

#### 2. Identify Junk

i. Objects that haven't been used

#### 3. Get Comfortable with throwing stuff away

- i. Start with smaller objects
  - 1. Old receipts, papers, other miscellaneous paper objects
  - 2. Trinkets
  - 3. Broken/damaged products
- ii. Start distancing themselves with objects by hiding them

#### 4. Promoting organizational skills

- i. Group things into categories, throw away duplicates.
  - 1. E.g. filing papers
  - 2. Grouping damaged and undamaged stuff

#### 5. Gradually throwing away items

- i. Start will damaged/broken, non-used, duplicates
  - 1. Start small
  - 2. Focus on one room at a time.

#### **User Interface & Environment**

The game would use photographs of rooms filled with cutout photographs of horded items to be sorted.

This would emphasize the grunginess of the rooms and thus the undesirability of having rooms in a disorganized state. The HUD would use vector-based art.

### **Interactivity**

- Point and click

- Spotlight mechanic
  - Spotlight slowly moves across the room in a predictable pattern
  - o Can only sort with things in the area illuminated by the spotlight
    - Promotes focusing on one area at a time to prevent being overwhelmed (baby steps)
    - Acts as timer mechanic (speeds up on later levels)
  - Different bins to keep things in
    - Trash can
    - Bin for things to put in a different room
  - Every object in the spotlight shows a brief description upon which the player bases his or her keep/throw/move decision
- Rooms get less grungy and gross and more bright and pristine as players clean up
- Get point for correctly sorted items
  - Points given for
    - Throwing away useless items
    - Throwing away duplicate items
    - Placing objects that belong in another room in the designated bin
    - Throwaway chain bonus! (more points as you throw away things correctly in a row)
  - Points taken for
    - Keeping useless items
    - Keeping duplicates
    - Incorrectly sorting
    - Throwing away items that are clearly important

o Beat level if your score is high enough

**Gameflow/Narrative** 

You are a hoarder and you are trying to get rid of some of your junk. The player character has to start

clearing out various rooms in their dwelling. A questionnaire could gather information about the player

before starting to determine what the rooms look like and what kind of things they have. As the player

cleans out their house, certain events could happen, such as friends or family visiting or uncovering

items that are actually useful to have.

Questionnaire

Male/Female

Age

- What kinds of things that you have in your home

Newspapers, collections, broken things, etc. (check all that apply)

O How much stuff is in each room?

The results of the questionnaire determine the contents of the rooms.

**Tutorial Level: The Closet** 

1. Teach mechanics

a. Item descriptions explicitly state where each item goes

b. Will explain if a player puts an item in the wrong bin.

i. Item will go back to closet if incorrectly selected

2. Explain scoring mechanic afterwards

3. Let them skip if they want for multiple play-throughs

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#### **Level 1: The Bathroom**

- Player needs to use the bathroom but there's a pile of stuff in the way!
  - o Rocks in the sink
    - Who knows why?
  - o A lot of flat toothpaste tubes
    - Kept around because you think you can squeeze a little more out of them
  - Way more toothbrushes than you need
  - Lots of Soap Bars
  - o Books piling up in the bathroom that you've finished reading
    - Old magazines

- Newspapers
- Tub is full of laundry
- Old calendars on the walls
- Hundreds of toilet paper rolls
- Water Bottles everywhere. (Empty or not)
- Coat-hangers
- Stuffed Animals
- o Fake Plants
- Unused light bulbs
- o Etc.
- Player gets points for keeping toiletries in reasonable numbers
  - o E.g. shampoo, soap, toothpaste
- Loses points for keeping stuff that don't belong
  - o E.g. the rocks, the coat-hangers, the water bottles, the calendars, etc.



### **Level 2: Bedroom**

- The player wants to sleep but can't see their bed anymore under the sea of trash!
  - Clothes everywhere
  - o Coat-hangars should go here
  - More old calendars
  - More rocks
  - o More empty water bottles
  - o Etc.
- Player gets points for keeping clothes, blankets, and things you'd find in a bedroom in reasonable numbers



### **Level 3: Living Room**

- The player's family is coming over!
  - Old food containers
    - Lots of Takeout
  - Broken furniture
  - Broken TVs
  - Miscellaneous Broken stuff
  - o Picture frames everywhere
  - o Trash bags/Plastic Bags everywhere
  - O Light bulbs, dozens of them
  - o Etc.

- Player gets points for throwing away trash, putting picture frame pictures into album, throwing away broken furniture, etc.



### **Level 4: The Kitchen**

- The player is hungry, but nothing can be cooked with junk on the stove and blocking the refrigerator!
  - Trash everywhere
  - Empty Bottles
  - Millions of Calendars
  - Broken electronics
  - Stuff pouring out of fridge
  - Empty Cans, Jars, Tupperware
  - Food lying about

- Miscellaneous papers lying about
- o Etc.



### **Example of Gameplay**

The scene starts off with a room full of junk. The player is given descriptions of each of the items and must decide whether or not to keep them or throw them away. As the player throws more useless stuff away, the room goes from being dark and grungy to being bright and pristine. There is a spotlight that moves around the screen highlighting parts of the room. The player interacts with the objects in the spotlight, deciding whether the item should be thrown away, kept, or moved. Throwing away the right items rewards the player with points, while throwing away things that are actually useful subtracts points. When the spotlight finishes scanning the room the level ends, and if the player has gotten enough points, the player beats the level.

### **Instructional Design**

- Point and click
- Spotlight mechanic
  - Teaches the ability to focus on a small area of the room rather than being overwhelmed
    by the whole room.
- Item Descriptions
  - o Keywords in description that help the user identify whether or not an item is useful
    - E.g. "Unused Item", "Broken Item", "Item In good condition"
    - Hopefully will translate into real-world ability to generalize item usefulness
- Different bins to keep things in
  - Reinforces organizational skills
    - Sorting items into different bins that determines what should be done with them will translate to sorting items in different categories
      - E.g. paper items in a filing cabinet
- Rooms get less grungy and gross and more bright and pristine as players clean up
  - o Positive reinforcement/reward for player to keep at the task.

### **Paper Prototype**

#### Construction

- Background image = empty room
  - o Four pieces of A4 paper taped together.
- Items
  - o Paper cutouts of items
    - Have short one line descriptions
  - o Flashlight
    - Used as the spotlight
      - In a dark room, everything inside the ring was where the player could select items from
  - Post-it Note Bins

#### **Iterations**

- 1. Random flashlight movement in slow-ish speed (2 inches per second)
  - Items randomly placed, overlapping
  - Bins were roughly the same size as the items
    - Put the items on top of them, caused problems because players couldn't read the labels anymore
- 2. Changed flashlight mechanic so that it went through a predetermined path
  - Travelled along a serpentine pattern at around the same speed (constant 2 Inches/sec)
  - Added a "Keep" bin for convenience and to get stuff off of the screen.
- 3. The Flashlight would move to an item and stop until they sorted the item.
  - Too easy, no challenge.
- 4. Changed the bins, added another post-it note underneath the ones with the labels on them.
  - Let the players see what the bins were after they placed the items
- 5. Moved it to a darker room, changed how we defined what was inside the spotlight
  - Everything inside the ring as opposed to the burry light in the middle
- 6. Item would move to a specific spot and wait there for about 3 seconds before moving.
  - Started at the top-left, moved to the top-middle, then to the top-right and then to the middle-left
    - i. Players thought this was the most fun.

#### **Scoring system**

- 1 point for correctly sorting
- -2 points for leaving an item in the level
- -0.5 a point for incorrectly sorting

## **Pictures**









