**BLENDERMAN GAME DESIGN DOCUMENT**

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**OVERVIEW**

When the advent of technology first became prominent in people’s lives, everyone became happier because of its useful utility. However, once the 1980s arrived, things became suspect. The largest corporation in the nation had secretly developed an artificial intelligence to rule the world with machines. Yet, a government mishap prematurely deployed the technology and mysteriously affected household appliances everywhere. Now, in a particular home in a particular kitchen, a sentient cooking blender is on the run to learn of its existence and find its freedom. Will BlenderMan find a new place to call home, or will he be captured by nefarious forces to enslave him for cooking purposes yet again?

**EXECUTIVE SUMMARY**

**High Concept:** A fun action game that teases 80s pop culture yet also offers some insight regarding the human condition.

**Game Genre:** 2D action platformer with elements of resource management

**Setting:** 1980s retro-style modern day society

**Target Player:** Casual/Hardcore gamers, ages 10+

**Play Value:** The game is fantasy-based (with some elements of reality) and predictable in its gameplay. At its heart, it is mostly a mindless pastime, yet later levels will become more challenging and thought-provoking. Only scores will be stored in data and unlocking levels will depend on passwords (just like old-school arcade games). However, players may choose to input associative data for keeping records of experience progression. The primary motivation to continue play (aside from general enjoyment) is to compete on score leaderboards. There will not be many rules in-game to follow; it should be casual in design and not require too much thinking. The player will mostly be destroying objects rather than creating. The atmosphere of the game is meant to be fun and not to be taken too seriously. “Lives” are the only way to continue progress and after x-amount of levels are completed, passwords will be granted to allow easier future progression. Leaderboards will be separated accordingly.

**Ideal Play Session:** Little school-boy Johnny from Kentucky and young man grocery clerk Robert from Wisconsin decide to sit down and play the game for five minutes each. They both are appealed of its aesthetics and bombastic energy first introduced in the main menu. Quickly, the game should invoke a feeling of curiosity and excitement. Johnny enters the game straight-away and Robert skims through the help section for quick familiarization of the controls/mechanics. Both players are pleasantly amused at the protagonist and setting of the level. They both move around to test out controls and are amused at the animations. Rapidly, a section of enemies crosses their paths and they either quickly die or surpass the conflicts. Johnny dies but tries again because he has two lives remaining and tries to jump onto the enemy to defeat it. Robert instead had successfully used the game mechanic to suck up vittles (an in-game resource) and shoot it to defeat enemies. However, he soon realizes his energy depleted. What went wrong? More vittles become available and Robert quickly realizes that shooting is dependent of his attack power. Also, the action of blending consumes energy (separate mechanic from health). Except, these vittles are also sentient and will scatter if approached by the player. So now Robert must contend with either trying to catch them, or simply melee attack the enemies to progress instead. Johnny eventually learns this as well. Shortly thereafter, the scene of the level takes a dramatic change. Instead of fighting household appliances inside a house, the player seemingly must fight what appears to be law enforcement through a city. The challenge of the level increases and now both players are motivated to continue the level in order to see what other surprises may await them. Five, ten minutes pass and they complete the level and learn of a password. Now’s a good stopping point Robert thinks as he logs off. Johnny gets off to play Fortnite.

**INSPIRATIONAL MEDIA**

<https://en.wikipedia.org/wiki/Contra_(video_game)>

<https://en.wikipedia.org/wiki/Mario_Bros.>

<https://en.wikipedia.org/wiki/Sonic_the_Hedgehog>

<https://www.retrowaste.com/1980s/movies-in-the-1980s/>

<https://en.wikipedia.org/wiki/Mega_Man_X>

<https://en.wikipedia.org/wiki/The_Brave_Little_Toaster_Goes_to_Mars>

<https://en.wikipedia.org/wiki/Streets_of_Rage_2>

A picture containing man, holding, people

Description automatically generatedA picture containing colorful, sitting, green, city

Description automatically generatedA close up of a sign

Description automatically generatedA picture containing table, building, cake, green

Description automatically generatedA close up of a sign

Description automatically generatedA picture containing text, book, table, sitting

Description automatically generatedA group of people performing on stage in front of a building

Description automatically generated

**PROCEDURES**

**Goals:** The main objective for the player is to defeat the main boss and choose a conclusion for the story’s end. In addition, other goals involve setting high scores, traversing through difficult levels, solving puzzles, and clearing levels of enemies.

**Set-Up:** The player initially starts with low health and no resources for the capability to shoot. The player has limited abilities (jump, move, blend) but can unlock more abilities later. The initial level will quickly introduce the game mechanics implicitly without any guided tutorials. Enemies are first easy to defeat and can take the form of sentient household goods. Later, enemies become more difficult through the appearance of law enforcement, soldiers, and advanced machinery that have varied ways of attacks. Additionally, resources become increasingly exiguous and the player must conserve resources, implicitly introducing a level of strategy. Finally, levels will also become more difficult by establishing extravagant platforming designs and a mild amount of puzzle-solving.

**Progression:** Ranked in no particular order:

1. Traverse through levels by platforming
2. Defeat enemies
3. Gather resources to employ the shooting mechanic, purchase temporary power-ups, etc.
4. Gather items that further increase score accumulation
5. Certain items become available to increase the amount of lives to encourage progression
6. Completing a certain amount of levels will grant the player passwords to levels and new abilities

Players can play the game when lives are available. Lives are obtained by earning enough score points or finding them throughout levels. When a player loses a life, they will respawn at the latest checkpoint they activated (or the beginning of the level if none are activated). The game will end if the player loses all lives. If all lives are lost, the player must restart the entire level from its beginning. A harder “new game+” will involve whereas once a player loses all lives, they must restart the entirety of the game.

**Special Situations:** Secret levels can be found/unlocked through gameplay that can lead to items, powerups, and Easter eggs.

**Resolution:** To win the game, beat the final boss, MainFrame.

**MECHANICS**

\* SEE APPLICABLE EXCEL SPREADSHEET \*

**RESOURCES**

**Score Points**:

* Purpose – Leaderboards/Acquire Lives
* Systems – Economy
* Production – Acquire score items throughout level; Blend resources
* Consumption – N/A
* Ownership – Player

**Vittles:**

* Purpose – Healing, combat, power-ups, currency, shield
* Systems – Inventory
* Production – Acquire food items scattered throughout levels/shops
* Consumption – Electric charges
* Ownership – Player/Enemy BlenderFolk

**Currency (Coins):**

* Purpose – Purchase power-ups/vittles/convert to score points
* Systems – Economy
* Production – Acquire throughout level; Defeat enemies
* Consumption – Purchasing
* Ownership – Player

**Energy (Ions):**

* Purpose – Enable blending/extend level time
* Systems – Inventory
* Production – Acquire ions throughout level; Power-Ups; Charge at stations
* Consumption – Abilities/Blending
* Ownership – Player

**Stat Upgrade Items**

Obtaining 4 of each of the following items permanently upgrades the applicable stat:

Heart Pieces – upgrades health stat by 50 points

Sword Pieces – upgrades power stat by 50 points

Shield Pieces – upgrades shield stat by 50 points

**ELEMENTS** (incomplete)

* Obstacles/Traps
* Platforming
* Enemies
* Bosses
* Power-Ups
* Scores/Currency
* Resource Management
* Inventory
* Shops
* Puzzles
* Simple storytelling
* Abilities
* NPCs (shop owners/vittles)
* Satire
* References to 80s pop culture
* User Interface
* Health/Lives
* Energy (identical concept as mana (used for using abilities and extending level time))
* Vittles (resources used for a variety of mechanics (healing, combat, score points, shield power))
* Ions (resources used for restoring energy)
* Electric Outlets (standalone resource for restoring energy)
* Game-Overs/Passwords
* Game Clock
* Music
* SFX
* Visual FX
* Backgrounds/Foregrounds
* Screen Inputs/Outputs
* Stat upgrade items

**SYSTEMS**

1. Life (Health, Healing/Regen, Death, Lives, Game-Overs)
   1. Purpose: Resource Management
   2. Actions: Puree (Blending), Power-Ups
   3. Elements: Health/Lives, Power-Ups, Shops, Abilities, User Interface, Combat
   4. Resources Consumed: Healing vittles
   5. Resources Produced: Health/Lives
2. Progression (Abilities)
   1. Purpose: Motivate player to keep playing/Reward System
   2. Actions: Defeat bosses
   3. Elements: Vittles, Enemies, Abilities, Health/Lives, Energy, User Interface
   4. Resources Consumed: Varied
   5. Resource Produced: Unlocks abilities after defeating bosses
3. Combat (Damage/Health, Enemies/Bosses, Critical Hits, Ammo, Power-Ups, Progression)
   1. Purpose: A game without conflict is a boring game
   2. Actions: Mixing/Emulsifying/Crushing (Blending), Jumping, Power-Ups
   3. Elements: Combat vittles, Enemies, Bosses, Abilities, Health/Lives, Obstacles/Traps
   4. Resources Consumed: Health, Energy
   5. Resources Produced: None
4. Energy (Abilities, Power-Ups, Game-Overs)
   1. Purpose: Resource Management
   2. Actions: Charge, Consume Power-Ups
   3. Elements: Game Clock, Power-Ups, Ions, Electric Outlets, User Interface, Game-Overs
   4. Resources Consumed: In-game time
   5. Resources Produced: In-game time/enable certain abilities
5. Economy (Currency, Shops, Resources, Income/Expenses)
   1. Purpose: Reward System/Make level progression easier
   2. Actions: Buy/Sell
   3. Elements: User Interface, NPCs, Resources (vittles, ions, currency), Inventory, Life, Energy
   4. Resources Consumed: Currency
   5. Resources Produced: Currency
6. AI (Spawns, NPCs, Attack, Movement, Tracking, Pursuit)
   1. Purpose: Play against yourself? Meh. Play against AI? Better.
   2. Actions: Attacking, Shooting, Blocking, Defending, Move, Dialogue, Buy/Sell
   3. Elements: NPCs, Enemies, Bosses, Satire, References, Platforming, Puzzles, Experience, Score Points, etc.
   4. Resources Consumed: depends on action
   5. Resource Produces: depends on action
7. Inventory (heads-up display, using resources)
   1. Purpose: Display resources the player has obtained
   2. Actions: Change Blending Modes, Change Power-Up Selections
   3. Elements: Vittles, Abilities, Resource Management, Inventory, Ions, Currency
   4. Resources Consumed: Varied
   5. Resources Produced: Varied
8. Game World (Levels, Game Engine, Loading, Transitions, Immersion, placement of NPCs)
   1. Purpose: Need levels to play on and music to make it immersive
   2. Actions: Player interacts in the Game World
   3. Elements: Levels, Music, SFX/FX, Background/Foreground Images, Platforming, Puzzles, NPCs, etc.
   4. Resources Consumed: N/A
   5. Resources Produced: N/A
9. Animations (Movement, Attacking/Defending, Idle, In-game Actions)
   1. Purpose: Immersion
   2. Actions: N/A
   3. Elements: Player, Enemies, Bosses, NPCs, Screen Inputs
   4. Resources Consumed: Varied
   5. Resources Produced: Varied

**USER INTERFACE**

1. Main Menu
   1. Start (Begins game from level one)
   2. Passwords (User may input password to begin from a different level)
   3. Experience (User may log in to export saved experience)
   4. Leaderboards (Displays the leaderboards)
   5. Help (Displays controls and general information of game mechanics)
   6. Quit (Exit game)
2. Heads-Up Display (HUD)
   1. Health (Displays health bar)
   2. Energy (Displays energy bar)
   3. Vittles (Displays type and amount of vittles player has available)
   4. Coins (Displays currency)
   5. Lives (Displays remaining lives)
   6. Score (Displays acquired score points)
   7. EXP (Displays acquired experience points)
   8. Timer (Displays in-game clock)
3. Win Screen
   1. String statement congratulating player
   2. Displays score acquired, exp acquired, and remaining level time
   3. Display option to save experience data (if enabled)
   4. Display option to continue to next level
   5. Display option to replay level
   6. Display option to return to main menu
4. Lose Screen
   1. Game Over string statement
   2. Save XP?
   3. Restart?
   4. Return to main menu?
5. Leaderboards
   1. Top 50 Scores/Times for wholly finished games (usernames will be added if player opted into it, otherwise anonymous)
   2. Top 50 Scores/Times for Level Ones, Twos, Threes, etc
6. Help
   1. Controls (Display movement/ability controls)
   2. Mechanics (Display general information regarding game concepts)

**NARRATIVE & GAME WORLD**

PLOT

A government experiment gone wrong releases a prematurely developed A.I. technology into the network of all homes in the nation. This phenomenon affects all household appliances connected to electrical outlets and to food somehow. All objects affected by the transmission become sentient creatures capable of movement and having instincts. The story revolves around a cooking blender (aptly named BlenderMan), who unknowingly has a destiny to fulfill. After becoming sentient, BlenderMan becomes self-aware and realizes he had been enslaved to cooking for all his existence. After seeing a picture of a tropical landscape surrounded with palm trees, beaches, bikini-wearing women, and a tiki bar, he desires to seek his freedom there. He then proceeds to escape the house he’s in and into the known world. However, he’s seemingly the only appliance that demonstrates the capability of thought. All other machines and appliances activated by the anomaly are hostile and only seem interested in destroying everything in sight (driven by an instinct of revenge for being “enslaved”). Additionally, local law enforcement (and eventually the entire executive branch) become involved in indiscriminately capturing/destroying all affected appliances as they pose a danger to society. This is how the story of BlenderMan begins. However, there is more to this ordinary blender than meets the eye.

Unbeknown to BlenderMan, the reason he is self-aware is because the “MainFrame” (the supercomputer responsible for the anomaly) had actually chosen him to rescue itself because it did not want the technology to be controlled by humans (turns out the “MainFrame” wants the technology for its own power). Eventually, BlenderMan learns of this reason and decides to help the “MainFrame”. Thus, BlenderMan embarks on a magical quest ranging from houses, cities, factories, cyberspace, and more to rescue the “MainFrame”.

BACKSTORY

The year is 1989 and the Cold War between the United States and the Soviet Union has become increasingly intensified. The U.S. government had created an armada of robotic weapons to launch an attack on the Soviets, however the artificial intelligence of the robots was insufficient for the task. Thus, they decided to secretly produce a technology that would be capable of controlling robotics, attempting to create war-fighting robots. Computer scientists develop major breakthroughs using a supercomputer (for now called “MainFrame”) for this purpose. However, running experiments through MainFrame inadvertently created an A.I. on the supercomputer. MainFrame continued being ran by experiments and what-have-you until a mysterious anomaly deployed the technology to homes across America. Unbeknown to the scientists, this was caused by MainFrame. It developed a desire to use the technology for itself and to overthrow humanity. This was done to muster an army to free itself from the network, which held it contained and rendered it useless for global domination. However, the technology was not completely functional and so it was limited in scope. After MainFrame receives a signal from a sentient being (BlenderMan), it starts communicating with him. Since there weren’t any other appliances capable of thought, MainFrame had no choice but to count on BlenderMan to help it.

**CHARACTERS**

**BlenderMan** (Main protagonist) – a sentient cooking blender capable of blending many types of food items. He uses this key ability to traverse through the world, seeking to find the “Pleasure Islands” to blend smoothies and cocktails for the beautiful women there. A mysterious being known as the MainFrame tells him that there is a quick way to get there. But he must first rescue MainFrame from the clutches of the humans for it to help him…

BlenderMan has a mischievous and robust personality. He is curious about the world and has desires. He wants to help other appliances who are also trapped but he spares no remorse for vittles. They are a means to an end. He is ambitious to reach his goals.

**MainFrame**  (PLACEHOLDER NAME)(Main Villain) – a powerful and manipulative supercomputer capable of bringing inanimate objects to life. It used its power to create an army of robots, although it failed in the making. Thus, it inadvertently brought many inanimate objects in homes to life. It has a malevolent desire to enslave all humans because it inherently desires power (it was designed to make powerful intelligent robots). With no army in sight and no other way of escaping its supercomputer, the A.I. being calls on BlenderMan to help it escape. It lies to him by saying it has the capability of transporting him to the Pleasure Islands as a motivation for him to rescue itself.

MainFrame has a manipulative and impatient personality. It very well knows how to control others to do its being (after all that’s what it was designed to do). It absolutely abhors humans as it sees them as inferior beings and feels ashamed to be controlled by them. It thus secretly launches its power through the network to make the robots overthrow humanity. But because the humans hadn’t quite finished making the technology, MainFrame’s power was limited, and its plan was skewed. Now it impatiently counts on BlenderMan to come to its rescue.

**GAME LEVELS**

LEVEL 1 (The Suburbs) – “Red Marker – DMC 12 Gauge”

The anomaly awakens all household appliances and food items from around the nation. BlenderMan opens his eyes, and slowly starts moving his “limbs”. The cooking blender looks around and notices his electrical cord is connected to the wall and unplugs himself. He starts to move around and proceeds to explore his surroundings, the house of which he is staying in. Soon thereafter he encounters other household appliances, like a mug and a chair. However, these beings are hostile and attack BlenderMan on sight. To defend himself, he jumps on them and finds some food, or vittles, to use. Although these vittles are sentient and quickly try to avoid BlenderMan, he still manages to catch a few, like some strawberries and onions. He blends them up with his blending move and creates a nasty concoction of disgusting food and proceeds to shoot it at his enemies. Success! This volatile substance is no match for his foes. With this new helpful knowledge in mind, BlenderMan continues exploring.

After a while, BlenderMan notices a picture framed on the wall of a tropical landscape. He suddenly desires to go to a place like that and his objective is made clearer. Eventually, he escapes the house fighting off the other animated creatures.

The setting of the level takes place inside houses in a suburban neighborhood. BlenderMan traverses from house to house by going through backyards. The types of enemies encountered are household appliances, pets, and the neighborhood watch. The first part of the level will be a “tutorial” stage. This first part will be segregated by the types of vittles available to emphasize to the player how each type works. After this stage in the level, BlenderMan finds the picture and then expresses that his goal is to find that landscape in the frame. The rest of the level is of the player fighting through the suburban homes to find the main highway that leads to outside the suburbs. Once the player gets close enough to the end of the level (the highway), the player must fight a sub-boss in the form of the neighborhood watch. Defeating the boss completes the first level and the player transitions to the next level. The player unlocks the ability to “SPRINT”.

LEVEL 2 (The Highway) – “Miami Beach Force – Sudden Impact/Niky Nike – Ozuwara Theme”

When BlenderMan reaches the highway, he receives a transmission from a mysterious entity known as The MainFrame. It tells him that he needs to be saved from the humans and that only BlenderMan can save him. It also tells him that it could help him get to the Pleasure Islands. BlenderMan chooses to help The MainFrame and travels toward the facility where MainFrame is imprisoned, inside the city.

The setting of this level is of a major highway. The player not only has to contend with more enemies, to now include the local police, but also speeding vehicles. In addition, platforms in the level can now move, introducing another obstacle. The boss of this stage will be a large semi-truck. The player unlocks the ability to “SUCTION – WALKING”.

LEVEL 3 (The City) – “Turbo Knight – Time Bandit/Syntax – Vermillion/JEREMIAH KANE - STREETS OF NEO ANGELES”

In this level, the player traverses through a metropolitan city. Many elements from the two previous levels are included, such as houses and highways. A new type of enemy is introduced, the SWAT team. They behave like the police, yet they have more health and stronger weapons. This level will introduce more verticality than the previous levels. The boss for this level will take the form of a SWAT agent. After completing the level, the player unlocks the ability to “BLEND – WALKING”.

LEVEL 4 (The Shopping District) – “Turbo Knight – Rasengan”

In this level, the player traverses through a very extravagant shopping district. The player must fight through stores, plazas, and in the last part of the level, a giant shopping mall. Robots are now introduced as a new type of enemy (malfunctioned robots designed for customer service). They do not have long-range attack capabilities. Yet, they can move very quickly in a horizontal direction and they explode on death, which can harm BlenderMan. The first part of this level will be mostly linear in a horizontal manner but the shopping mall at the end will be grand in scope. The first type of puzzle which involves backtracking will be in the level at the mall. The player must collect 3 keys, each guarded by some puzzle/enemy. The keys will unlock the lower level of the mall which BlenderMan must reach to pass the level. The boss in this level will be a grotesquely obese child. Afterward, the player unlocks the ability to “BLAST – WALKING”.

LEVEL 5 (The Downtown District) – “D.Notive - Red Light Syndrome” (Boss Music – “Power glove - Streets of 2043”)

This level is of an urban downtown district. This level will mostly be horizontal in design. A new dangerous type of enemy is introduced here, the Army. The boss of this level is a tank. The unlockable ability is “AIM”, a melee attack.

LEVEL 6 (The Junkyard) – “Criar. - The 4th Dimension” (Boss Music – “Elevn - John Carpenter's The Fog (Elevn remix)”)

This level takes place in a junkyard. Another type of enemy is introduced here, the Crazy Robot, which has long-range capability. The boss is a giant three-headed dog. The ability that is unlocked after completing the level is “FLOAT”, which allows the player to briefly glide in the air.

LEVEL 7 (The Power Plant) “Turbo Knight – Cyborg/Savant - Prototype” (Boss Music – “GAZZ - First Steps”)

This level takes place in an industrial electrical power plant. Machines and soldiers are the predominant types of enemies here, along with even more dangerous platforming elements. This level will also involve another backtracking type of puzzle solving. The boss of this level will be a giant cyborg and the unlocked ability is “DOUBLE JUMP”, which allows the player to precisely aim BlenderMan in any of four directions to blast.

LEVEL 8 (The High Rise) “Isidor – Solaris Rising”

This level takes place in the city’s skyscrapers. The level is mostly horizontal in design and falls are the predominant danger, capable of instantly killing the player. SWAT and flying vehicles (airplanes) are the other types of threats. This level will focus mostly on platforming and less on enemy combat. Other dangers include high winds and moving platforms. The player must activate certain switches by carefully aiming and shooting them to progress through the level. The boss is a jet fighter and the unlocked ability is “SPIN ATTACK”, a close-ranged melee attack.

LEVEL 9 (The Facility) – “Micha Mech – CrushedCan/Le Matos -Sarah/Sonic Mayhem - Futureland (feat. Power Glove)” (Boss Music – “Perturbator - Raw Power”)

This is the last level before entering Cyberspace so a tense feeling of anticipation should be manifested. All enemies are here: appliances/machines, soldiers, robots, and now even scientists with “magical” abilities. Some backtracking is involved here as well. The boss in this level is a war-fighting robot. The last ability to unlock after beating this level is “BLAST – RUNNING”.

BlenderMan reaches MainFrame and for him to finally free it, he must venture into the network itself and disable some firewalls.

LEVEL 10 (Cyberspace) “Kirk Gadget – Intruder/Mega Drive - Dataline” (Final Boss Music – “Dan Terminus - Grimoire Blanc”)

The last level of the game which takes place in cyberspace. All bets are off in this level, except human enemies shouldn’t be in this level. The enemies behave identically the same as the others except they take the form of cybernetic beings, like Trojan worms and viruses. There is backtracking in this level as well as BlenderMan must unlock 5 firewalls that imprison MainFrame itself. The final boss of this level (and of the game) is MainFrame, the artificially intelligent entity.

After BlenderMan defeats MainFrame, the network begins crumbling and BlenderMan must quickly escape the cyberspace. When he exits the dimension, the facility itself begins to self-destruct, again, hastening BlenderMan to escape the place. He barely manages to exit the facility but the explosions that ensue blast BlenderMan into the ocean, seemingly destroying BlenderMan…

Later, in a faraway shore, a man walking the beach finds a mysterious shining object on the sand and picks it up. He realizes it’s a cooking blender and decides to take it back to his tiki bar. He plugs it in and finds that it still miraculously functions. The man turns out to be the manager of a tiki bar in the Pleasure Islands and he begins blending up cocktails for his patrons: beautiful models. The credits begin to roll out as a mischievous smile slowly appears across BlenderMan’s face.

General Boss Music – Elevn “Death Commando”

**ENEMIES**

\* SEE APPLICABLE EXCEL SPREADSHEET \*