

CONCEPT DOCUMENT

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HeartBeat

February 17, 2024

High Concept Statement

A deadly disease has infected the human body that will soon succumb if no action is taken. Aid the lone white blood cell Luko on their mission to deliver precious medicine by navigating through infected areas of the heart and dashing in tune with its beats to avoid danger and defeat pathogens.

Gameplay Sketch

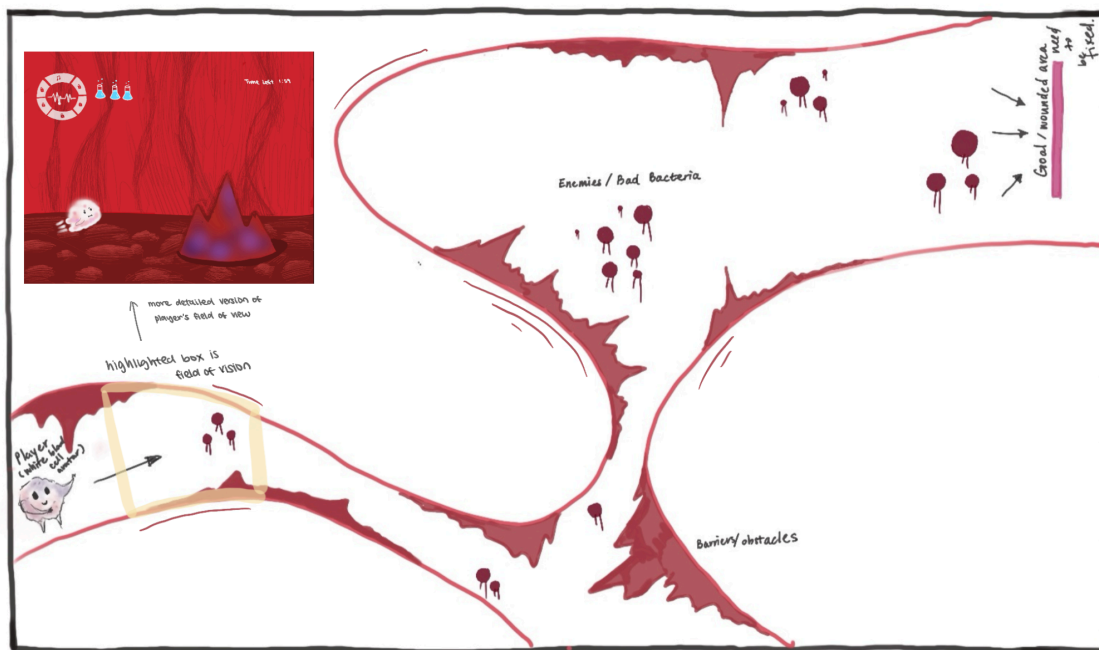


Figure 1. Gameplay Sketch. *The player navigates through a level to deliver the restorative medicine to a wounded area, avoiding various obstacles and fighting infectious bacteria.*

Features

- Flow through the chambers of the heart while carrying your medical vials
- Dash through the bloodstream by syncing your input up with the heartbeat
- Collide with viral cells at high velocities that also sync up with the beat to inhibit your mission
- Swap the heartbeat rhythm to change the movement pattern of you and the world
- Deliver the vials across the heart to gain new abilities and cure the disease

Design Goals

HeartBeat is designed for a rhythm-savvy player with moderate platform gaming experience, preferably ages 8 and above. The player will experience the human heart as a white blood cell, tasked with the challenge of successfully healing the heart by destroying viruses at each level.

Thrill: The player can navigate through a no-gravity environment inside the human heart that is filled with unique challenges. Successfully combating enemies and understanding their movement gives them a sense of fulfillment for healing part of the heart at each level.

Strategy: Whether it's speeding up or colliding with fast enemy viral cells, the player will have to entirely strategize their movement with the heartbeat rhythm for basic navigation and defeating enemies. As heartbeat patterns change at each level, the player must quickly adapt to new rhythms.

Adrenaline: Along with balancing different rhythms, when navigating new-level environments, the player faces off against speedy viral cells whose quick movements can make for an intense experience. Our rhythmic beats in the background also add to the player's suspense.

Market Segment

Genre

HeartBeat is a rhythm and platformer game where the player traverses through different areas of the heart, each corresponding to a different level, to deliver vials of antidote to various healing points. It is a single-player game intended for ages 8 and above.

Platform

HeartBeat can be played on PC and MAC with just a standard mouse/trackpad and keyboard. Earphones/headphones are highly recommended for optimal experience but are not necessary.

Competition

Hi On Rhythm: The main similarity between *Hi On Rhythm* and *HeartBeat* is the player's movements. In both games, the player is able to move freely in the space provided and, on the beat, the player is able to dash and eliminate enemies. Like *Hi On Rhythm*, the enemies in *HeartBeat* would vary depending on difficulty of level and attack according to the rhythm. Both *Hi On Rhythm* and *HeartBeat* also allow the player to choose the song/rhythm to play with.

Crypt of the NecroDancer: *Crypt of the NecroDancer*'s main similarity to *HeartBeat* is that the player moves by synchronizing their input with a beat, with effective utilization of this mechanic proving essential to success. In both, the player moves around its environment by matching the beat. In *Crypt of the NecroDancer* the player moves along a grid when matching the beats while in *HeartBeat*, matching the beat provides the ability to dash at high speeds.

Agar.io: Like *Agar.io*, the player in *HeartBeat* is not constrained by the physics of gravity and is free to move in all directions. In both games, there is a goal of avoiding multiple obstacles. The player in *Agar.io* would be avoiding other cells, while the player in *HeartBeat* would be avoiding built-in obstacles to the map as well as AI-controlled enemies. Another similarity between the two games is that a player has the ability to dash, and this movement is a key feature to effectively maneuver around each map.

Unique Selling Points

Heartbeat Rhythm: *HeartBeat* uses a heartbeat rhythm as a movement feature, where a player needs to move on the beat to be able to propel themselves in any chosen direction. It is necessary for the player to utilize the beat to move around the maps effectively and complete each level, integrating a rhythm into platform-style levels. The use of a heartbeat sound ties into the setting of *HeartBeat* while creating a unique sound that is not found in other rhythm based such as *Hi On Rhythm* and *Crypt of the NecroDancer* which use songs.

Dash on Beat: *HeartBeat's* key feature is the ability to dash when the player matches their movement to the beat. While moving on beats can be seen in other games such as *Hi On Rhythm* and *Crypt of the NecroDancer*, those games only allow the player to move on beat, no movements otherwise. In comparison, *HeartBeat* is unique as it allows the player to freely move slowly in any direction by default, with the beat matching mechanic providing the ability to dash at high speeds. The player can then strategize when to dash and when it is actually more beneficial to move at its original slow pace to succeed. The use of dash mechanics can be seen in other games, such as *Agar.io*, where the character splits in half each time the dash is used. *HeartBeat's* dash feature differs as the ability to dash depends on the player staying on beat.

Zero-Gravity, Timed, Cardiovascular Environment: Set in the heart of a human body, *HeartBeat* has an easily identifiable theme with a unique mix of features tied to its environment. Unlike other side-scroller platform games, *HeartBeat's* map is also zero-gravity, allowing the player to move in any direction without sinking. While games like *Agar.io* also allow the player to move in all directions, the world of *HeartBeat* also includes a timed feature representing the spread of disease to encourage the use of the heartbeat-dashing movement. *HeartBeat* has a unique combination of features that play into its setting, allowing for a unique gameplay experience.

Rhythm Selection: *HeartBeat* has a selection of rhythms a player can move to in each level. For each level, the player starts with one rhythm, and as they meet each checkpoint, a new rhythm is unlocked. The player can then switch between any of the unlocked rhythms throughout the level, a functionality the player can utilize to help traverse different maps and obstacles. Additionally, when the rhythm is changed, the moving enemies on the map also change their movements to match the new rhythm. This rhythm selection feature differs from other rhythm games such as *Hi On Rhythm* where each song can be seen as a level and rhythm selection is done before a game starts rather than switched in the middle.

Additional Details

Character Details

Luko is a leukocyte, or white blood cell, with a unique perspective on life within the human body. At ten days old, they are in the prime of their short 15-day lifespan. Luko's world is the vast and complex environment of the human body, where they play a crucial role in maintaining a healthy heartbeat.

Background & Abilities

Origin and Family: Luko's journey began in the bone marrow, where they were one of 11,000 in their family tree. Their backstory is marked by tragedy as a majority of their kin have been lost to a terrible disease. Driven by the loss of his family members, Luko's primary goal is to fulfill their genetic duty and cure the disease that has devastated their lineage and now threatens their home, the human body.

A Day in the Life: Luko's typical day is a testament to their dedication. They spend all day in relentless combat against the body's enemies, a grueling shift that showcases their commitment to their role. Yet, they find joy in the simplicity of floating around in the bloodstream, moving to the beat of the heart.

Special Abilities: As a leukocyte, Luko possesses the remarkable ability to heal the body. Their life is dedicated to fighting off pathogens and ensuring the well-being of their environment.

Character Design & Philosophy

Luko's character design and narrative arc reflect the ongoing battle between health and disease within the human body, emphasizing the importance of white blood cells. Their quest for revenge serves as an educational medium to learn more about the biology behind our immune system. Luko is one aspect of our thematic focus on the human body, and we hope to further incorporate more informative content within our character and game.

Character Design:



Figure 2. Initial Concept Art for Luko. *Luko is designed to be easily recognizable and unique while being a cute character who is able to emphasize movements such as dashing, which is a key gameplay feature.*

Conclusion

With its unique theme and engaging rhythmic features, we have confidence that *HeartBeat* will be a hit. As we continue to work towards our release at the end of Spring, be sure to support our game by spreading the word and playing it once it becomes available!