CART 353 - Research Evidence and UML
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Concept

A rigid time-management game in which the player has to decide what facets of their life they want to thrive, by dispensing their given time on those selected facets. The player begins with a random amount of time within the range of an average life span, and may decide to allocate that given time to whatever personal element they wish. The types of activities the player must balance are: education, physical wellness, work, relationships, relaxation, hobbies. If the player fails to nurture any one element listed, it will have subsequent impact on the other elements. For example, if the player invests considerable time in relaxation, they're ability to invest in their hobbies will become more challenging.

The game will use two forms of currency. The primary currency being the time span they are given at the beginning of a game which is used in all transactions. This currency is consistently decreasing and is meant to last roughly a day long. The second being energy, which generates back as time passes but prevents the user from playing if it has run out. Energy exists to prevent the user from playing too quickly.

The game elements will be characterized by 3D symbols reflecting their respective element. Before the game begins, players will be prompted to input their own respective titles for each element in order for these facets to behave as symbols for different parts of the players own life. With time, the visuals of each element will mutate in respect to the amount of attention they were given.

Inspiration

My main inspiration for this project was drawn from my own conflicts and sentiment toward time management. I hoped to create an experience that encourages players to be mindful of how they spent their time, in whatever way works best for them. Learning to properly invest our time is a difficult process that requires a good amount of testing and thought. I hope this game is able to reflect the essence of that learning process and encourage players to lead the most fulfilling life for them. Part of my inspiration stems from my addiction to video games that I experienced in my youth. I feel that video games are an easy way to lose sight of our truest objectives and desires and that it could be interesting (and ironic) to try and demonstrate this through a game. I have also drawn some inspiration from a resource management game I played as a child called Pandemic II.

http://www.crazymonkeygames.com/fullscreen.php?game=pandemic-2

Scope

I believe finding an ideal balance may be a little out of my reach, but I hope to come as close as possible to a healthy system. I feel a good portion of the work for this project may be allocated to creating reasonable relationships between elements. As I am not yet so strong with processing I do believe I will face challenges in creating relationships between all elements although I intend to begin development early in order to have a head start on understanding what my challenges will be.This way I can quickly tackle those challenges. I believe my biggest challenges with this project will be designing 3D objects in processing that animate elegantly over time and balancing this game properly. I am very concerned with the visual elements not looking good and aim to put in the work to ensure a polished project.

Best Guess

My best approximation for building this game would be to set a class for each element with their own dependencies. I will need to create relationships between each element in order to create interesting dynamics between them. I will equally need to create a sort of instructional/intro page in which players can input all the string information used to title each element. I will need to program a timer that randomly generated and then declines by seconds over time. I am not sure if Processing has any built in libraries for time but I will either replicate it or find a library to help me out. I have made the assumption that the time class will depend on the energy value as without energy the time currency should not be allowed to be used.

Hobbies

+xLoc: int
+yLoc: int
+food: float

+mutate()

Work

+xLoc: int
+yLoc: int
+food: float

+mutate()

Physical Wellness

+xLoc: int
+yLoc: int
+food: float

+mutate()

Elements

+timeAllocated: float
+food: float
+xLoc: int
+yLoc: int

+timeGiven()
+kill(food)
+feed(food)

Relaxation

+xLoc: int
+yLoc: int
+food: float

+mutate()

Education

+xLoc: int
+yLoc: float
+food: float

+mutate()

Relationships

+xLoc: int
+yLoc: float
+food: float

+mutate()

Time

+timeAllocated: float = random
+timeSpent: float

+timeCounter(timeAllocated: float)
+timeCheck()
+decreaseTime()

Energy

+energy: float = 10 minutes

+checkEnergySpent()
+resetEnergy()