



Game Design Document
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Intro

Brain Gains is a mobile IQ level up game featuring your own brain as a character. As you play the various puzzles and solve problems, your brain will grow stronger and more confident, and you can even gather "neurobucks" (good job Bryan) to buy decorations for his brain cavity home.

Character Bio

"Brain" [user-given name]: The protagonist of the game.

- Backstory:

[Brain] is a small, frail brain who lives a lonely, sad life wishing the girl he loves, Neura, would love him back. Neura, on the other hand, does not even know [Brain] exists and instead is wooed by the jerk of the town, Beefcake, a large, manly brute of a brain with a horrible, boorish personality.

One day, at the peak of his heartsick and lonesome life, he trips at the edge of a cliff, falling and rolling down the hill until he lands at the bottom, scraped up and weeping. This is where the user, [You], finds him. [You] ask him what's wrong with him, and he blubbers out his sad, woeful story in between sobs. "Wait," he whimpers, "you look strong. Do you think someone like you could help me become a beefcake like Beefcake? Neura might love me then!" [You] decide to help him reach his goal of becoming buff.

- Physical Description:

Brain starts out as a small, feeble anthropomorphic brain (has eyes, arms, legs). He has no strength and can barely get around without getting tired. As he 'exercises', he becomes more buff and brawny, gaining muscle, strength, and stamina.

- Character Description:

In the beginning, Brain is very mentally and emotionally weak with low self-esteem. As he works out, he becomes happier and more confident in himself.

"Neura": The sweet and beautiful brain that Brain is in love with.

"Beefcake": Brain's burly love rival that has won over the heart of Neura, much to Brain's despair.

Gameplay Description

Brain Interaction + Growth

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"Fit Fruit" Fill Shapes Puzzle

- A silhouette is shown at the top of a screen, and at the bottom of the screen is an assortment of shapes that may or may not fill in the shape at the top. The player will tap on shapes at the bottom to figure out which ones will fill in the silhouette. Upon completion, the shape will reveal itself as a fruit. The player is timed, and once time has run out, a score screen will be triggered that will outline the player's score and the amount of neurobucks that they have earned.

"Mighty Memory" Memory Card (like Concentration)

- Player is given a set number of cards face down and must flip two cards over at a time in an attempt to match them over and over until all the cards are successfully paired.
 - Additional ideas:
 - Vary the number of cards in the set for different 'levels' (e.g. 10, 20, 50)
 - Timer - complete matching by a certain amount of time
OR time how long it takes to complete the game (=> turns into 'points'/bucks)
 - Name Ideas:
 - Macho Matching
 - Mighty Matching
 - Mighty Memory (*won the poll!*)
 - Memory Match
 - Powerful Pairs/Pairing
 - Combo Cards
 - Conscious Concentration

Inspirations:

- [Big Brain Academy](#)
- [Brain Age](#)

Artistic Style Outline

**** Please refer to the art bible in addition to this document.**

Brain Gains features vector art and puppet style animations. The art is made at a 16:9 aspect ratio, fitting for iPhone 5 and up, Android, Samsung Galaxy, and other devices.

- Cell shaded brain cavity background
- vectors for brain cavity decorations

Inspirations:

- [Giant Turnip Game \(iOS + Android\)](#)

Music Style Outline (see [Music/SFX folder](#) in Drive for uploaded files)

Inspirations:

- [Wii theme store](#)
- [Nintendo 3DS Mii Maker](#)
- [Rhythm Heaven Bossa Nova](#)
- [Super Mario Sunshine Sky & Sea](#)

Systematic Breakdown of Components

Code

- Autosave
- UI
- Fill shapes puzzle

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Art + Animation

- The Brain + animations
- Brain cavity background art
- Cavity decorations
- UI
 - Menus (start, shop, settings)
 - Individual puzzles
 - Dialogue
 - Tutorials
 - Buttons
- Items
 - Clothing/Accessories
 - Food?
 - Exercise equipment

Writing

- Introduction story
 - [see "Backstory" under Character Bios]
- Tutorial(s) [dependent on puzzles; visual/animated tutorials with little to no words]
- Opening brain dialogue, changing as the brain gets stronger
 - "Uugghhhh..."
 - "I'm still sore from yesterday~"
 - "Oh, you're back!"
 - "Oh, I'm feeling it now!"
 - "Wait for me!"
 - "Ready to go?"
 - "Let's get pumping!"
 - "Nothing like a good morning jog!"
 - "It's leg day!!"
 - "She'll be mine soon!"
 - "Check out these muscles!"
 - "I ran three laps before you got here!"
 - "Like my new [item]?"
 - "Wanna see me do ten push-ups?"
- Random brain dialogue that may change as the brain gets stronger
- Brain dialogue after a good score, changing as the brain gets stronger
 - "I think I'm gonna throw up/pass out...."
 - "I can barely breathe..."
 - *wheezes*
 - "Phew! Good job!"
 - "Wow!"
 - "That was a fun one!"
 - "I'll show him!"
 - "We're pumping now!"
 - "Feels good!" *flexes*
 - "Beefcake's got nothing on these muscles!"
- Brain dialogue after a bad score, changing as the brain gets stronger
 - *collapses*

- "I'm so tired~"
- "Maybe I'll never win her over..."
- "Ouch..."
- "Let me catch my breath first!"
- "I think we can do it this time!"
- "Let's try again!"
- Brain dialogue at different screens (puzzle, decorating, shop, and settings/options)
 - Shopping/Decorating:
 - "Make me look good, okay?"
 - "Can you see my muscles in this?"
 - "I like that one!"
 - "Do you think this looks nice?"
 - "Great choice!"
 - You think I need a new [item]?"
 - "This'll impress her!"
 - Decorating:
 - "Do you like this one?"
 - "Wow, that's fancy!"
 - "Oooh~"
 - "Great choice!"
 - "I think a[n] [item] would like nice in my place."
 - Puzzle: (*could also use opening brain dialogue ↑ ↑*)
 - "Let's see if these muscles are up for it."
 - "I'm ready to sweat!"
 - "You think we can do it?"
 - "Ooh, these look fun!"
 - "This one's my favorite!" (the hardest puzzle)
 - Settings/Options:
 - "Hmmm..."
 - "Fix it up!"
 - "Are we too loud?"
 - "Turn up the jams!"
 - "I love my workout music."

Asset Breakdown

The Brain

- Weak brain + multiple expressions with animations
- I sure do love a good morning jog brain + multiple expressions with animations
- Beefcake brain + multiple expressions with animations
- The brain cavity (his home)
- Animations
 - Talking
 - Idle
 - Lifting weights

UI

- Story illustrations + buttons
- Main menu (start, continue, options, animated logo)

- Pull up menu (puzzles, decorating, shop, options)
- Dialogue bubbles
- Back + next buttons

Brain Cavity

- Background (with animated eye as a window)
- Designated areas for items (which can be bought on the shopping menu)

Shopping

- Blinds
- Curtains
- Window outline
- Dumbbell
- Gym bag
- Jump rope
- Bike
- Mirror
- Treadmill
- Blue rug
- Green rug
- Pink rug
- Bottles on shelf
- Brain power poster
- Hang in there poster

"Fit Fruit" Puzzle

- Background
- Score screen
- Home button
- Timer
- Fruit (x6)
- Fruit silhouette (x6)
- Fruit slices (differs per silhouette)

Suggested Game Flow Diagram

Main menu > start > story dialogue > brain cavity

Main menu > continue > brain cavity

Main menu > settings > main menu/music/SFX sliders

Brain cavity > puzzles > choose puzzle > (tutorial) > play game

Brain cavity > decorate > choose items menu >

Brain cavity > shopping > shopping menu

Suggested Project Timeline

January 29: Elevator Pitch due in class with one pager

January 31: GDD + TDD due

February 7: Art bible due

February 21: Presentation (vertical slice)

February 28: Pre-production due; finished vertical slice

- Art Bible
- Game Design Document

- Technical Design Document
- One pager
- Finished vertical slice
 - UI (menus)
 - Puzzle game

March 14: Milestone 1 due

April 4: Milestone 2 due

April 18: Alpha

April 25: Beta

April 27: Final

April 30: Project execution

Additional Ideas and Possibilities (outside the scope of the main game)

- Decorate your brain cavity! The player is able to gain currency from playing the main game and may be able to purchase decorations to place in the brain cavity.
 - Possible decorations: weight training equipment, treadmill → brain can 'use' it when app is not open
- Ask the player for the color of their eyes and the brain cavity's eye windows will be stain glass in that color.
- Sudoku
- Dress up the brain
 - Use neurobucks to buy Brain accessories (e.g. hat (retro sweat headbands!!), tie, faster shoes, workout towel)
- Interacting with the decorations in the brain cavity
- Design a line of brain gains exercise equipment
- When you first start the game, the brain is weak and on the ground
- Post to social media??? /Share progress with friends
- You can buy a mirror so you can look at your brain's buff booty
- Can interact with the brain while viewing the brain cavity (says something when you tap on him)
- Small, simple animation in the corner of the screen of Brain exercising while User completes a puzzle (e.g. running, lifting weights, stretching)
- Modifier items? that temporarily increase your progress rate or gives you a slight increase in the progress bar (e.g. buying/drinking Powerade gives you 20 'exp' (or whatever the unit is) or gives you x2 the progress during the next puzzle you complete)

Memorize Ascending Numbers/Colors

- Numbers or colors appear on the screen, must remember their order. Advanced version will have colored numbers appear on screen, and you will be prompted after shown if colors or numbers are asked to be told what order.

Memory Card (like Concentration)

- Player is given a set number of cards face down and must flip two cards over at a time in an attempt to match them over and over until all the cards are successfully paired.

Simon Says-type Music Game

- Game plays a note and player must match that note. The game responds by playing the same initial note and then a new note, and the player follows, increasing the amount of notes with each successful round until the 'song' is complete.
 - Each 'level' can be a longer song/faster response time?

Word Jumble/Scramble Game?

- Player must make as many words as possible from a given assortment of letters before the timer runs out

Word Search?