



Shema & Jessica

About

- Cosmic Cafe is a game simulating the experience of being a barista in a fantasy world of otherworldly mysteries

Genre

- Visual Novel
- Crafting
- Gacha



Re!

Game Mechanics

Inscribed

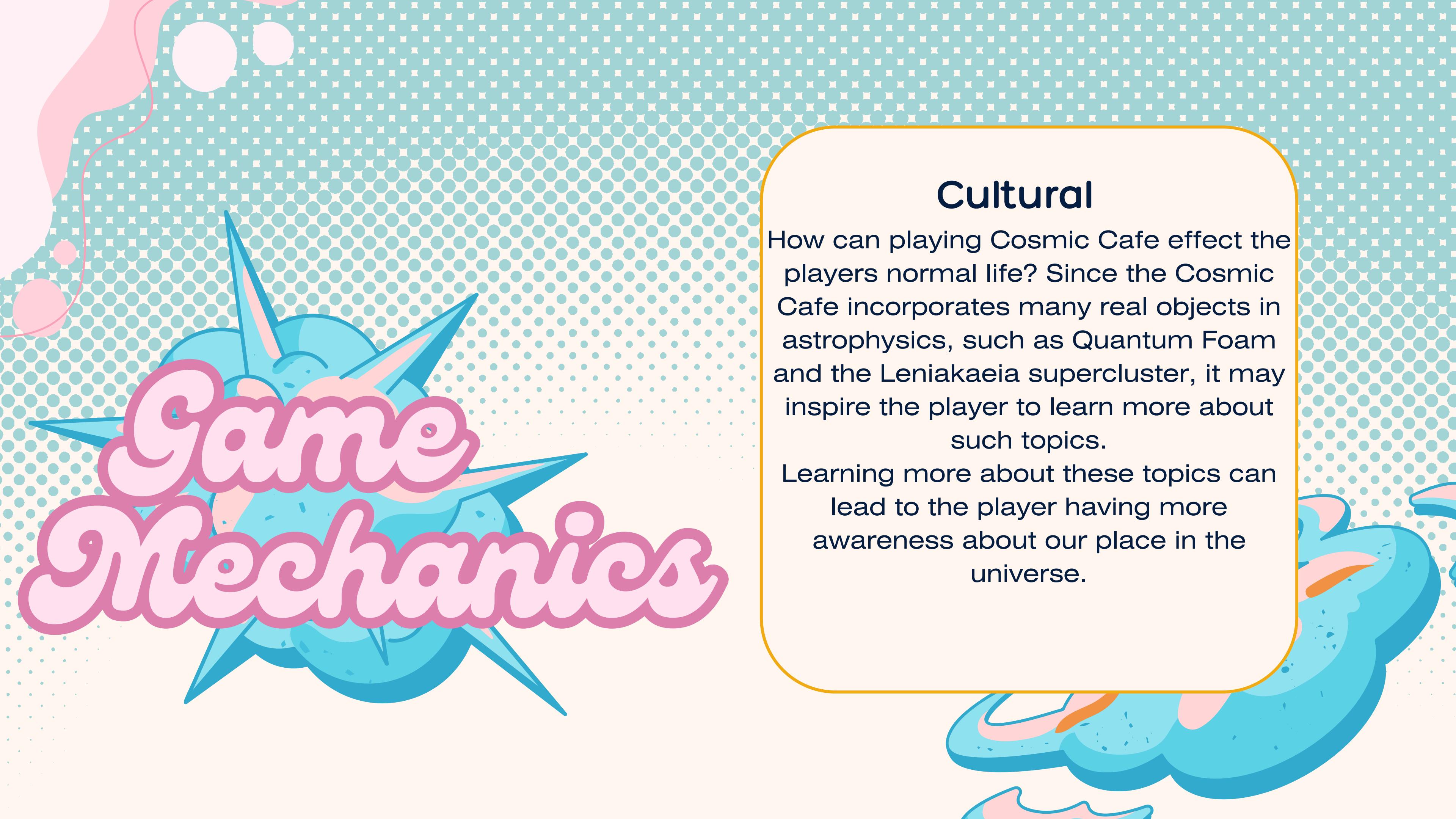
A computer game set in a fantasy world, players must earn money for their cafe business on Galactica st. by discovering recipes either through crafting or gacha. Players are driven to explore more recipes through an implemented rarity system.



Game Mechanics

Dynamic

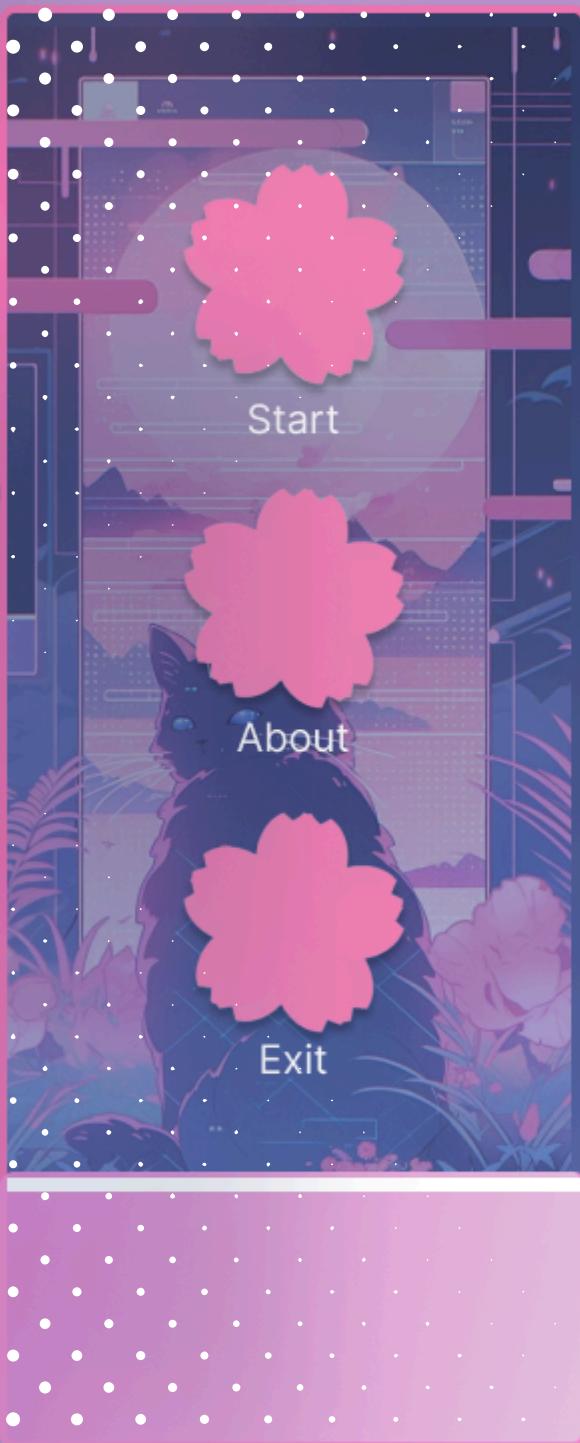
The player can find their in-game actions to be meaningful by the progression of their cafe, like making enough money to buy a ticket that gives them a chance to learn a new recipe. For discernable meaningful play, the player knows that if they satisfy a customer, they will earn money.



Cultural

How can playing Cosmic Cafe effect the players normal life? Since the Cosmic Cafe incorporates many real objects in astrophysics, such as Quantum Foam and the Leniakaeia supercluster, it may inspire the player to learn more about such topics.

Learning more about these topics can lead to the player having more awareness about our place in the universe.





Game Aesthetic

Lofi

Space

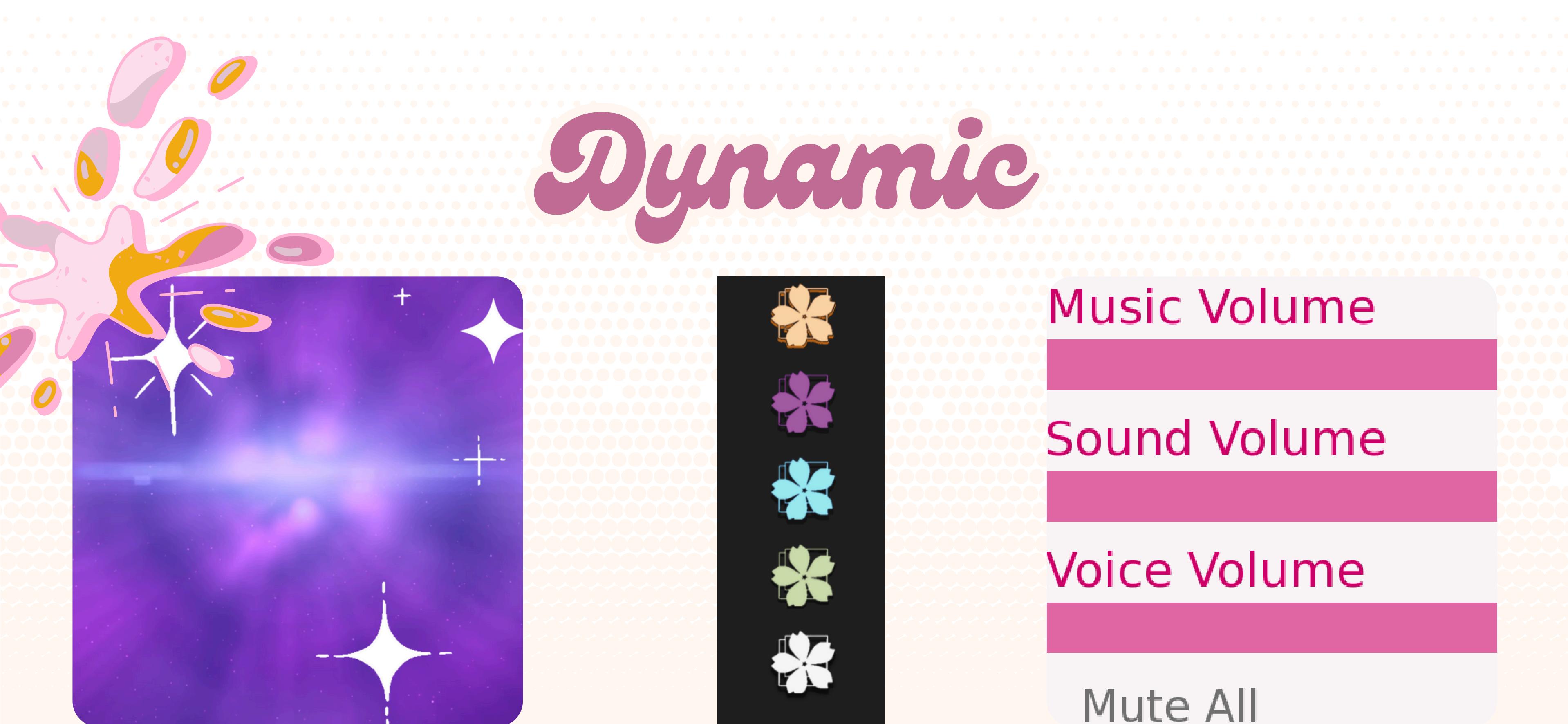
Cartoon

Inscribed



Our game appeals to the user's sight, and hearing
Lofi, anime, bright, and space themes and visuals
Colour based Rankings

Ambient music, positive rewards sound effects (chimes make the player feel calm)



Dynamic

Music Volume

Sound Volume

Voice Volume

Mute All

Procedural Aesthetics for the Gacha system in the form of particles and generated images for the recipes.

Colour based popup notifications of crafted items (gold makes players feel happy...grey not so much)

Sound effects triggered for the user when they purchase items or summon or complete an order

Players can mute sounds and music in settings

Cultural



There is a lot of opportunity for a game community around Cosmic Cafe to create their own fan art - maybe they could even mod the game to include their creations! They could come up with their own ingredients, recipes, lore, or even regular customers.

Text Editor Visual Studio Code

Renpy Engine

Figma and Canva

Pinterest

Good ol' pencil and paper





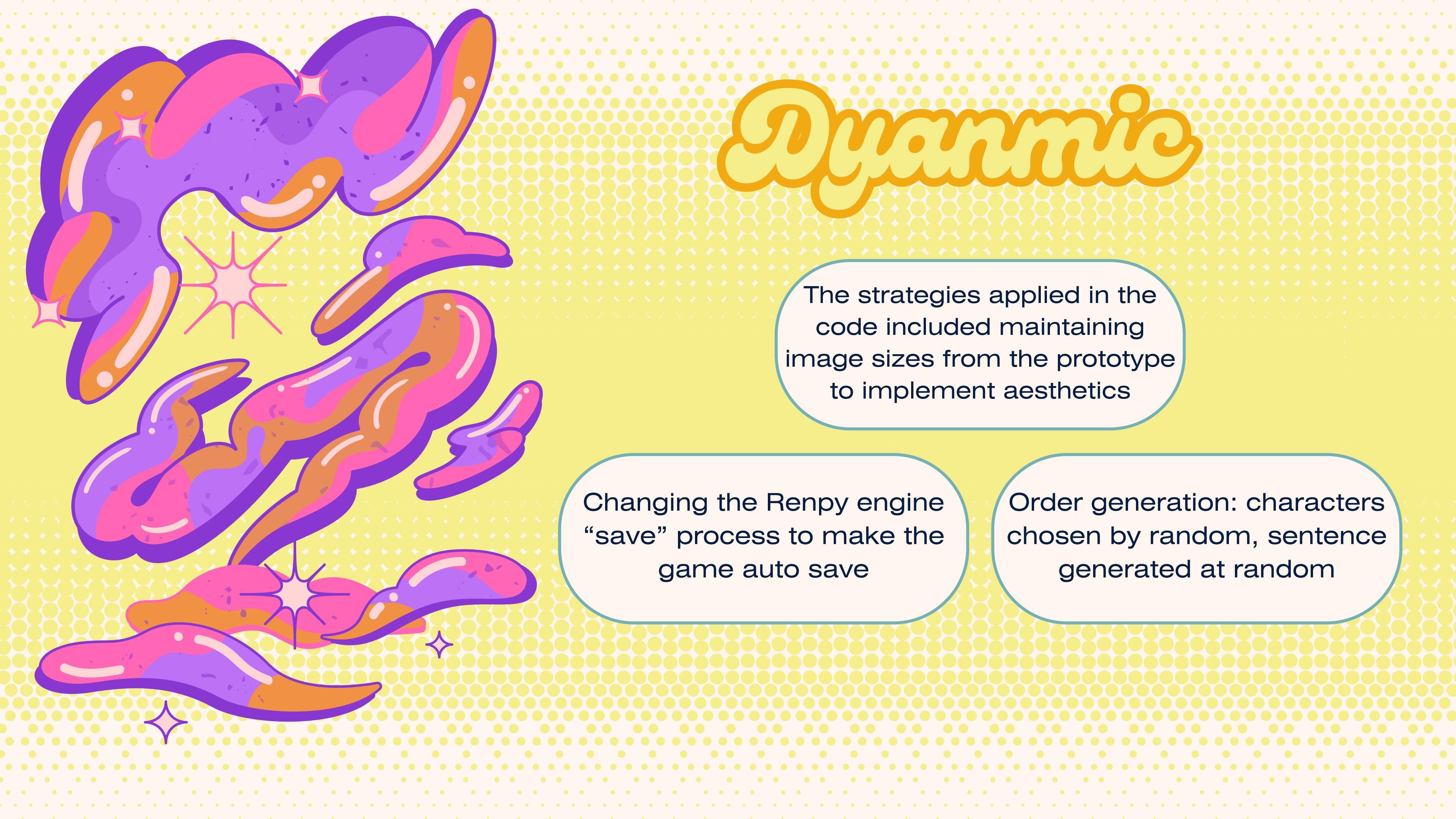
Inscribed

Code infrastructure that supports:

Auto saves to keep progression such as money earned, recipes learned, and inventory.

Random order generation for serving customers.

Recipe creation and the rarity system



Dynamic

The strategies applied in the code included maintaining image sizes from the prototype to implement aesthetics

Changing the Renpy engine “save” process to make the game auto save

Order generation: characters chosen by random, sentence generated at random



Cultural

Recipe book within the game that helps the player know which recipes they have

Added animations to bring more life into the game, helping the player be immersed

Ingredients sorted by rarity in the inventory, store, and recipe book



Development

```
def generate_order():
    character = random.choice(characters)
    characteristic = random.choice(characteristics)
    sentence = random.choice(sentences_1)

    index = sentence.index(' - ')
    sentence_list = List(sentence)
    sentence_list[index] = characteristic
    order = "".join(sentence_list)
    return [character, order]
```

```
def gen_order():
    character = random.choice(characters)
    multiple = random.randrange(1, 4) # Generate randomly how many characteristics each order has
    c = []
    recipe_selected = random.choice(recipes)
    profit = recipe_selected["price"]

    Generate multiple characteristics
    for x in range(multiple): # Changed to `range(multiple)` to avoid extra
        c.append(random.choice(characteristics))

    order = " - ".join(c)
    order += " " + str(profit)
```

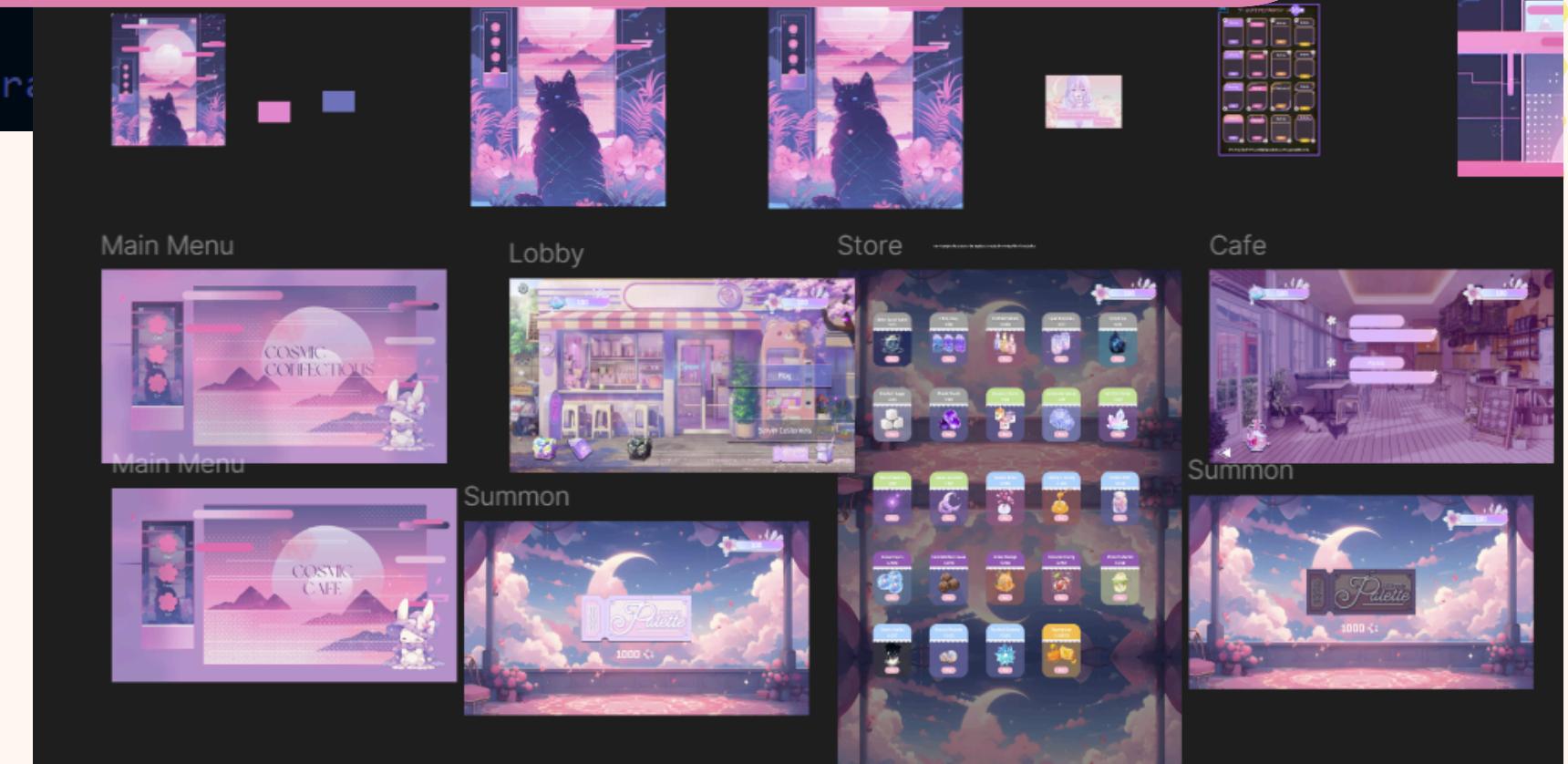
Figma for hi-fidelity prototyping, allowing a guide for how to create the code for game aesthetics

Pinterest for gathering art to use for drinks, ingredients, and decals

Tech Used

Renpy Engine - A visual novel engine that was modified to support the Cosmic Cafe game mechanics

Visual Studio Code with Github extensions



Scripts



```
screen cafe():
    $ renpy.transition(dissolve)
    tag menu
    add "ui/cafe.png"
    #text "[persistent.orders[0]['character']]"
    if len(persistent.orders) <= 0:
        $ check_and_generate_orders()
    imagebutton idle "ui/Kitchen_icon.png" hover "ui/Kitchen_icon.png" at hover_kitchen_transform action

frame:
    background "gui/cafe_menu/Cafe Menu.png"
    xalign 0.5
    yalign 0.7
    xsize 601 # Set the frame size to match the background image size
    ysize 832
    padding(60, 150, 20, 0)
    has viewport id "cafe":
        xmaximum 601
        ymaximum 400
        spacing 5 # Adjust spacing between the frames, if you need to reduce it further you can use a smaller value
        vpgrid :
            cols 1
            spacing 90
            draggable True
            mousewheel True
            scrollbars "vertical"
```

Each screen within the game has a hard-coded script that contains the layout of the page as well as any events that happen within the game, responsive to player choice.

Animations

```
on hover:  
|   linear 0.1 zoom 1.05  
on idle:  
|   linear 0.1 zoom 1.0
```

```
transform hover_ticket_transform:  
on hover:  
|   linear 0.1 zoom 1.05  
on idle:  
|   linear 0.1 zoom 1.0
```

```
transform hover_recipe_transform:  
on hover:  
|   linear 0.1 zoom 1.05  
on idle:  
|   linear 0.1 zoom 1.0
```

```
transform hover_inventory_transform:  
on hover:  
|   linear 0.1 zoom 1.05  
on idle:  
|   linear 0.1 zoom 1.0
```

```
transform hover_settings_transform:  
on hover:
```

- Transformations to create animations
(hard coded)
- Importing animations
- Sending in animation file in place of an image

```
game  
└── animated  
    ├── background_night.webm  
    ├── background.mp4  
    ├── background.webm  
    ├── splash_screen.mp4  
    ├── splash_screen.webm  
    └── summonanim.webm
```

```
image lobbybg = Movie(channel="movie_dp", play="/animated/background.webm")  
image lobbybg2 = Movie(channel="movie_dp", play="/animated/background_nights.webm")
```

```
transform hover_kitchen_transform:  
on hover:  
|   linear 0.1 zoom 1.05  
on idle:  
|   linear 0.1 zoom 1.0
```

Shamgar

The word "Shamgar" is written in a large, stylized, bubbly font. The letters are primarily pink with white outlines, and they are partially obscured by various colorful, abstract shapes. These shapes include: a large, light blue cloud-like shape on the left; several orange and yellow butterfly-like or flower-like shapes scattered around; a yellow starburst shape with radiating lines; a pink and yellow lightning bolt shape; and a small yellow star with a trail. The background is a light pink color with a subtle halftone dot pattern.



Thank
you

[itchio](#)

[github](#)