**Player Motivation/Experience:**

The main motivation for the player will be challenge. I want to make an exciting and compact experience.

**Game Structure:**

It is a single player game which needs the player to take care of a naughty baby fish in order to let it grow up healthily. The main challenge for the player is to know what resources the baby fish needs now by the current state of it. For example, if the baby looks pale, it might mean that it needs water now. At the same time the baby fish will run around so the player has to chase it and give it the resource it needs. Once it touches some dangerous items like fire or spikes, it will die and the game will end.

**Narrative:**

You are a housemaid who works in a huge house of a master fish. Taking care of the naughty baby fish is one of the hardest tasks for you. If the baby fish accidentally hurts itself, you will be fired. So the goal for you is to make sure the baby fish is safe before the master fish comes back.

**Core Mechanic:**

The core mechanic of this game is to catch the baby fish and keep it safe. At the same time the player has to feed the baby fish with food and water. The map and resources will be generated randomly so the player has to explore the map and look for resources.

**Game system overview:**

* Baby fish:
  + Attributes:
    - Sprite: The sprite of the baby fish will look like a small, cartoon fish.
    - Color: The color of the baby fish will be light yellow.
    - Health: The health bar of the baby fish will reduce through time or hitting the sharp things. When the health bar runs out, the baby fish will die and the game will end.
    - States: There are 3 states for the baby fish: hungry, thirsty and exciting.
    - Food & Water bar: The food and water bar will decrease through time. They can be filled by giving food or water to the baby fish. If the food or water bar gets too low, the baby fish will change states.
  + Behaviours:
    - Running: The baby fish will keep running until the health bar runs out or is caught by the player.
    - Change states: The baby fish will change the states if the water or health bar is getting too low.
    - Struggling: Once the baby fish gets caught, it will start to struggle. It makes the player can only hold it for about 5 seconds.
* Food:
  + Attributes:
    - Position: The position of the foods will randomly change every time.
    - Color: All the foods have the color of orange.
    - Sprites: There are 2 sprites for the foods: cookies and candy.
  + Behaviours:
    - Increase the food bar: The foods will increase the food bar of the baby fish once they get eaten.
    - Send out smell: The food will send out some smell so the player can see them easily.
* Water:
  + Attributes:
    - Position:The position of the water will randomly change every time.
    - Color: All the water will look blue inside the game.
    - Sprites: The sprites of the water will look like a bottle.
  + Behaviours:
    - Increase the water bar: The water will increase the water bar of the baby fish once they get eaten.
    - Send out lights: The water will send out some lights so the player can see them easily.
* Sharp things:
  + Attributes:
    - Position: The position of the water will randomly change every time. Most of them will appear at the edge of the map.
    - Color: All the sharp things will be highlighted with red color.
    - Sprites: Some of them will be the spikes, pisces of glass and rocks.
  + Behaviours:
    - Hurting the baby fish: Once the baby fish hits the sharp things, it will get hurt and reduce the health bar.
    - Highlighted: All the sharp things will be highlighted in order to let the player see them clearly.
* Mater fish:
  + Attributes:
    - Position: The position of the master fish will be outside the house. Once the master fish reaches the house, the player will win.
    - Color: The master fish will be orange.
    - Sprites: The sprites of the master fish will look like a big fish with a suit.
  + Behaviours:
    - Returning to home: The master fish will start running back home from the beginning of the game.
    - Ending the game: Once the master fish reaches the house, the game will end.
    - Giving evaluation: The master fish will give different evaluations to the player according to the health bar of the baby fish.
* Housemaid:
  + Attributes:
    - Avatar: the player controls the house maid as the avatar.
    - Sprites: The sprites of the house maid will be a fish in a dress.
    - Color: The color of the house maid will be light bule.
    - Strength bar: The strength will decrease when the house maid is running or catching the baby fish.
    - States: There are 2 states for the house maid: tired and normal.
  + Behaviours:
    - Hold the objects: the housemaid is able to hold the items and the baby fish for a while.
    - Changing states: The housemaid will change its states if the strength bar is too low.
    - Destroy the sharp things: The housemaid is able to destroy the sharp things by using the broom in hand.
    - Catch the baby fish: The housemaid is able to catch the baby fish in order to prevent it from running around.
* Broom:
  + Attributes:
    - Sprites: It will look like a broom.
    - Color: The color of the broom will be brown.
  + Behaviours:
    - Noon
* System diagram

