



15th May - 30th June

Internship in
COSMIC, Singapore

Summer **Project**

Designing &
Conceptualising
Gesture based game

Presented by

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IDC Bombay

About COSMIC



- COSMIC is a collaborative initiative between three centers of excellence.
Nanyang Technological University
National University of Singapore
Indian Institute of Technology Bombay, Mumbai
- Three strands presently taken up for building social media solutions/interventions are
Agriculture, Healthcare, and Infrastructure

Design brief

- Concept development
- Character design
- Environment design
- Story development
- Game design
- UI design

Synopsis

On the high hills of the Himachal, there lives a boy named Tobu with his scientist Grandpa named Dr Spider. Dr Spider has a walking disability. For years he carried on endless experiments in order to get his leg back, but failed every time.

One day he gets to know from a source that by adding a secret ingredient to his medicine will make the experiment successful. This secret ingredient is the Divine Water (100 % distilled water) from a temple situated in a remote island, named Mayadwip. He asked his grandson Tobu to get a bottle of that divine water for his experiment. He also gives him a GPS activated flying bot named ISAC-Intelligent Surveillance Autonomous Computer through which he can keep a track of his grandson and guide him to reach the destination.

Game Description

- Two player game
- Player 1 - Tobu
- Player 2 - ISAC
- The 2 players have to complete a given task to complete each level
- They both have to complete all the levels to reach the temple and get a bottle of that divine water to finish the mission.
- Along the way, Tobu's grandfather will guide them to solve the task through Projection.
- As the game runs, the players will learn scientific properties and principles related to water which are essential in order to conquer Specific levels.

Basic Game details

This game is classified under education based adventure game.

Platform

It is set to run on Android based operating systems, specifically for tablets and Smart televisions having front camera.

Minimum Specs

(yet to be determined)

Target Demographic

Our target audience primarily kids between the ranges of ages 6 – 10 years. We aim to engage children in an educational fun game and interact with physical activity.

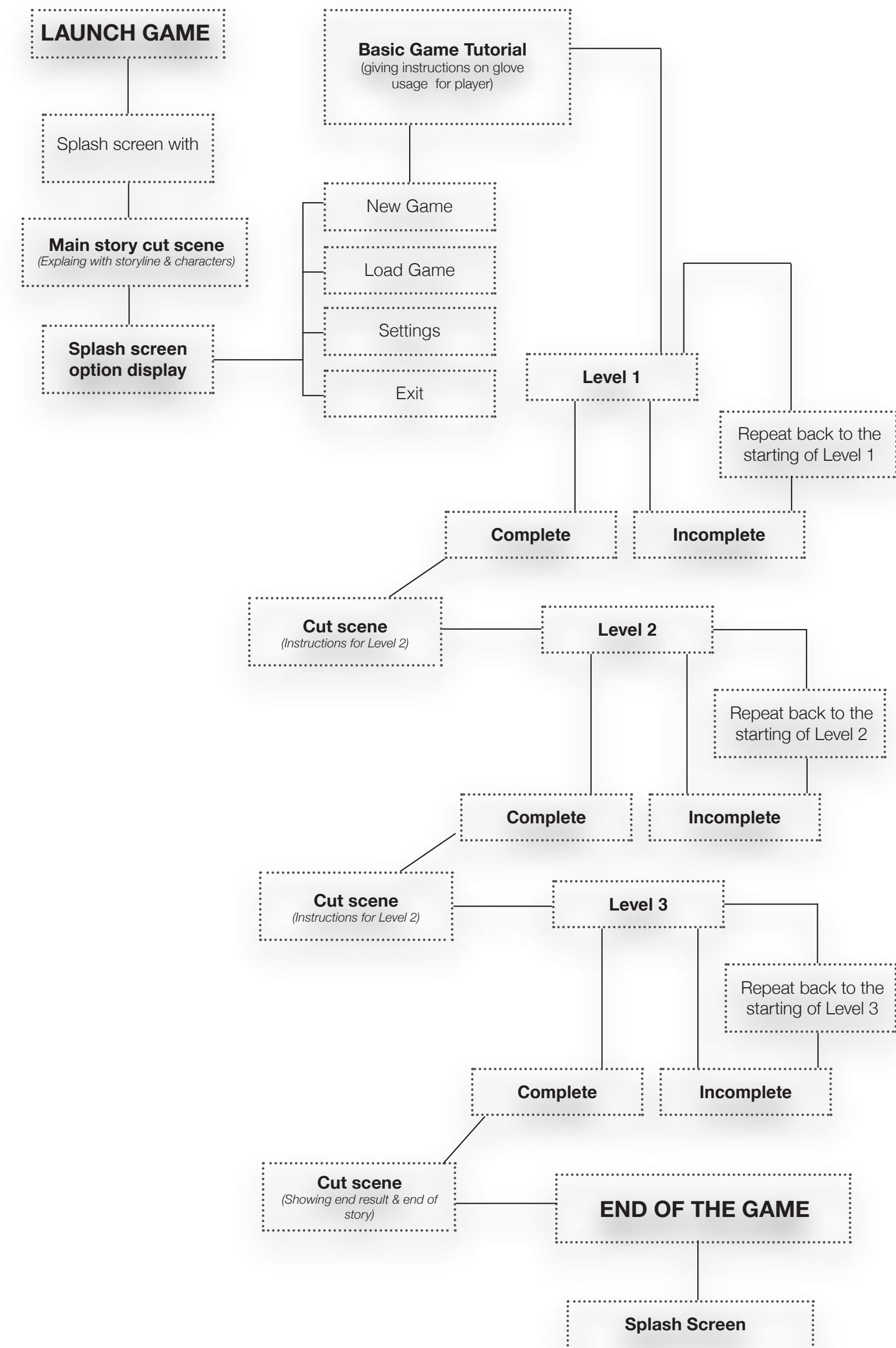
Perspective

The game is played primarily as a side scroll 3rd person perspective. The format of the game is 2D.

Look and Feel

The visual style is colorful and vibrant which is pleasing for younger audience.

Front End Flowchart



Level 1: Game play

Storyline: Tobu and ISAC reach a village that is deprived of electricity, their ultimate motive is to generate electricity by the end of this level.

1. Tobu and his friend ISAC are stuck in the middle of a city without electricity.

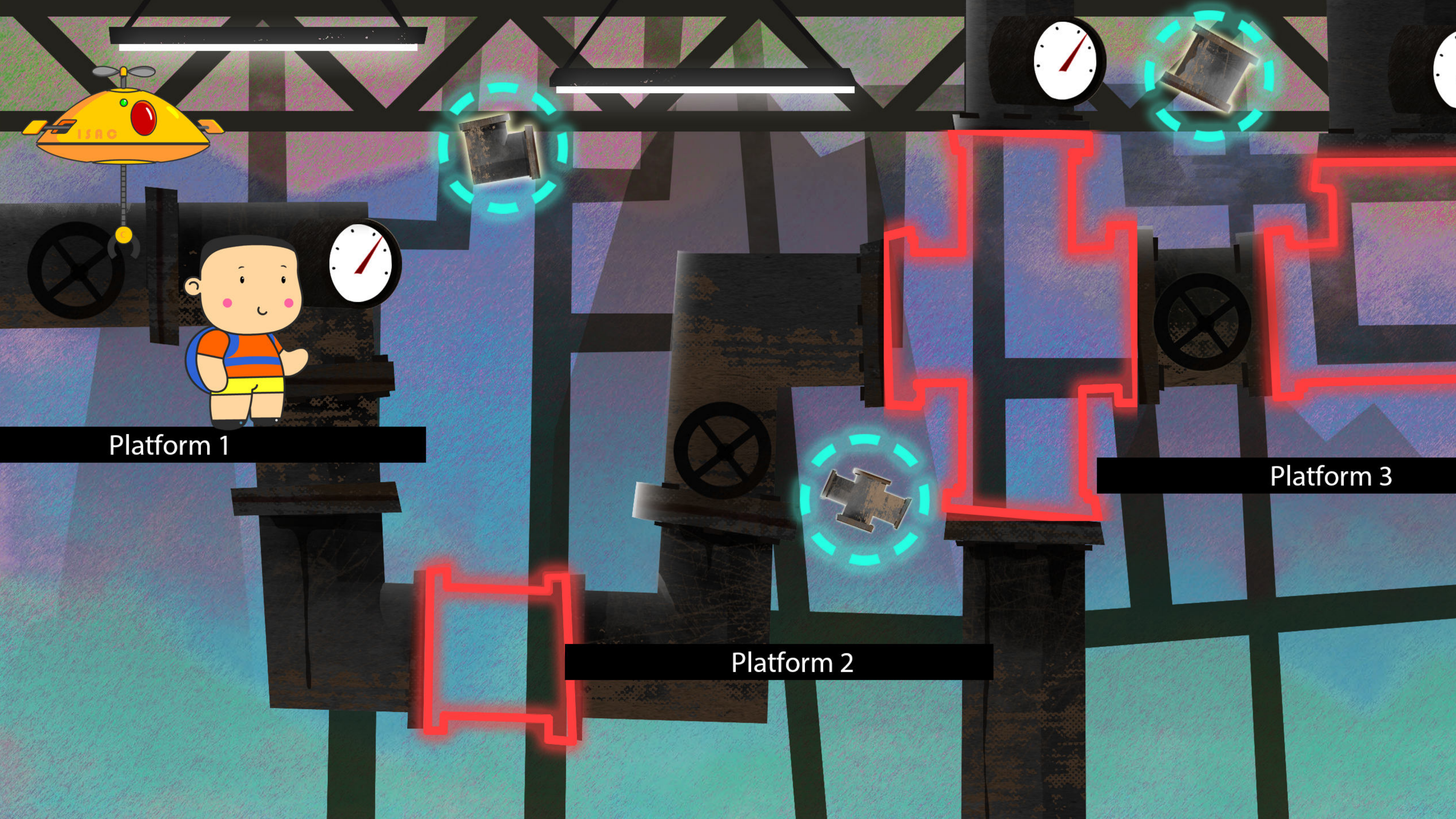
Their main aim is to get the turbine working which will be used to generate electricity.

2. The game scene consists of a broken maze of pipelines which have missing joints because of which water keeps leaking at the wrong places. In order to get all this water running over the turbine, the broken pipe joints must be fixed together. The game scene displays pipe size and shape options, each of which will fit somewhere into the broken maze.

3. Tobu's companion ISAC is responsible for selecting the right fit for the broken pipeline network from the given options. Once the pipeline network is completely joined, water starts flowing in the right direction towards the turbine.

4. Even though the water has started flowing in the right direction, the turbine still doesn't move, because the pipeline outlet is closed. In order to open this pipeline outlet, TOBU must pull a lever placed at the pipeline outlet so that the water starts flowing over the turbine.

5. Once Tobu has pulled the lever, the water starts flowing over the turbine and a cut scene depicting electricity generation follows.



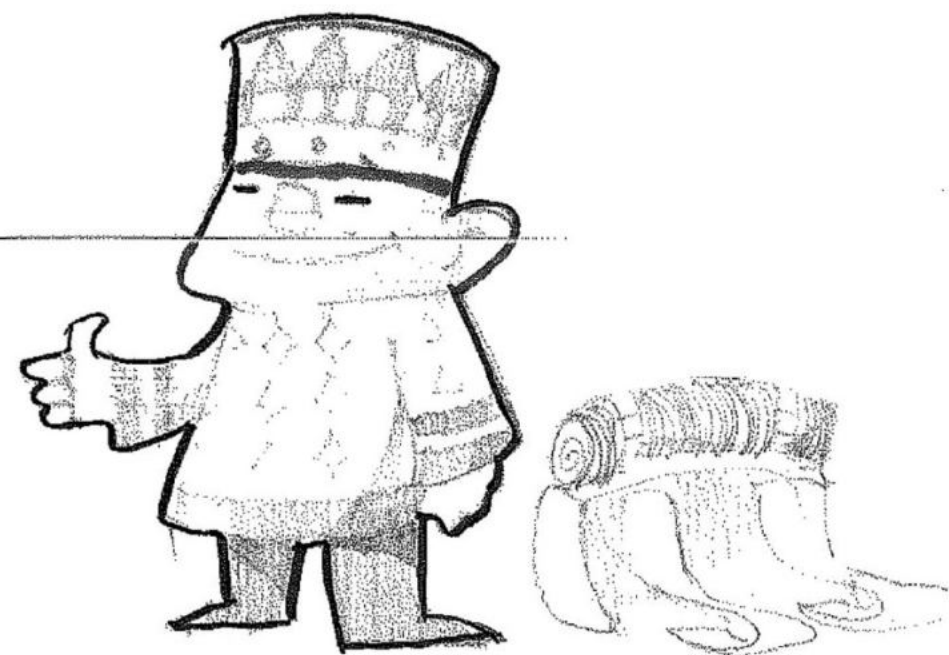
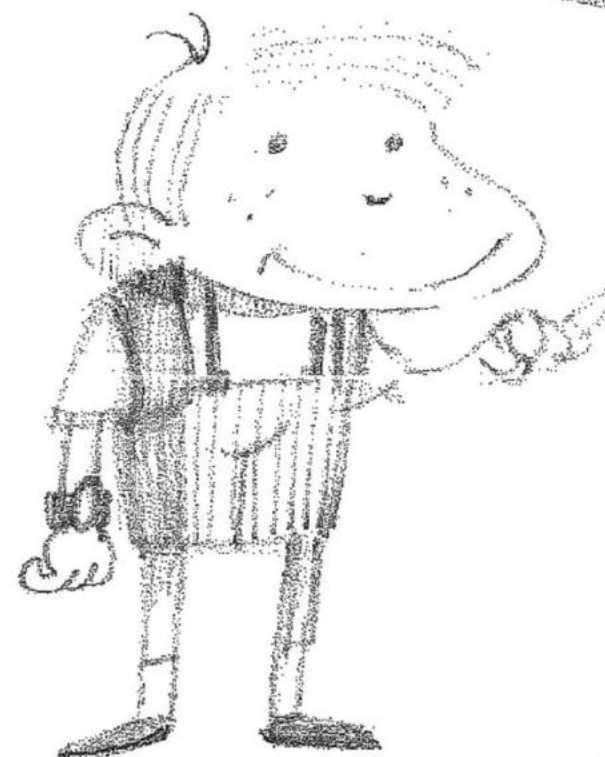
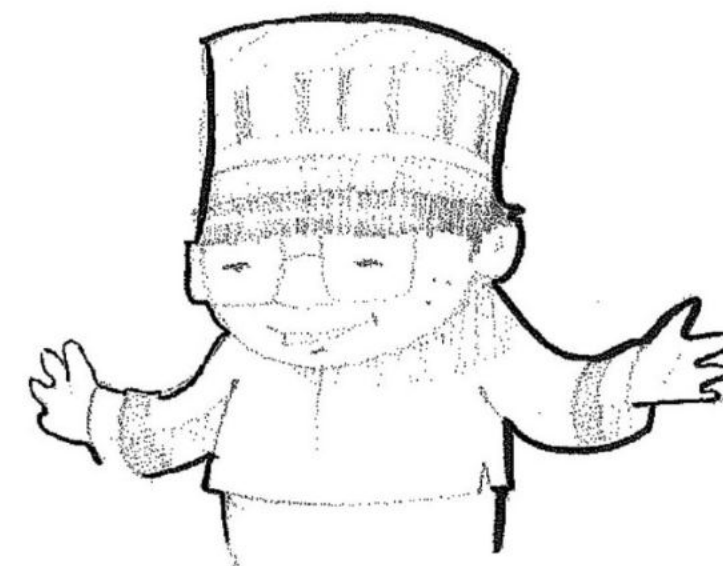
Characters



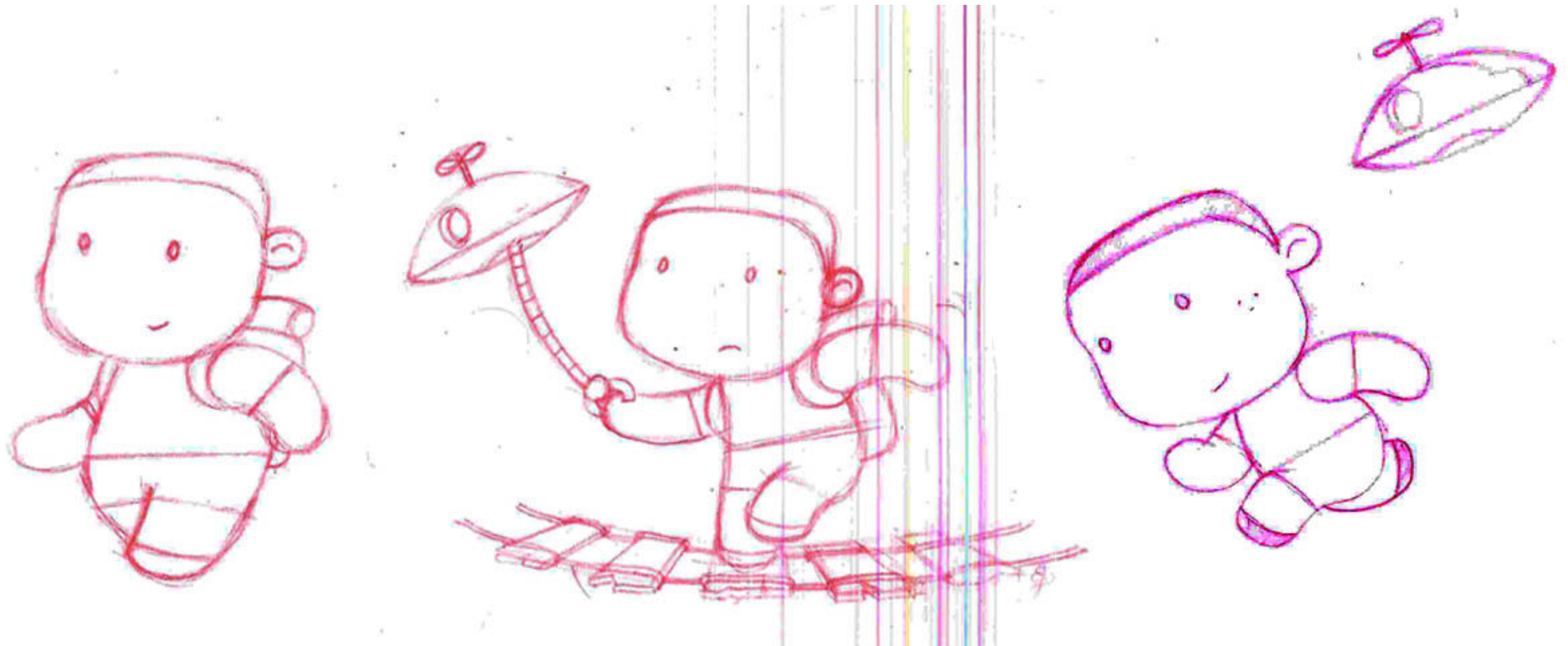
Playable Characters

Tobu, the boy (main character 01)

- Gender – Male
- Age - 6 to 8 years old
- Body color – Light Pink
- Eye color – Black
- Costume- Orange Tees with Yellow pant
- Likes – loves to solve mystery, loves to play with ISAC and loves his grandpa a lot.



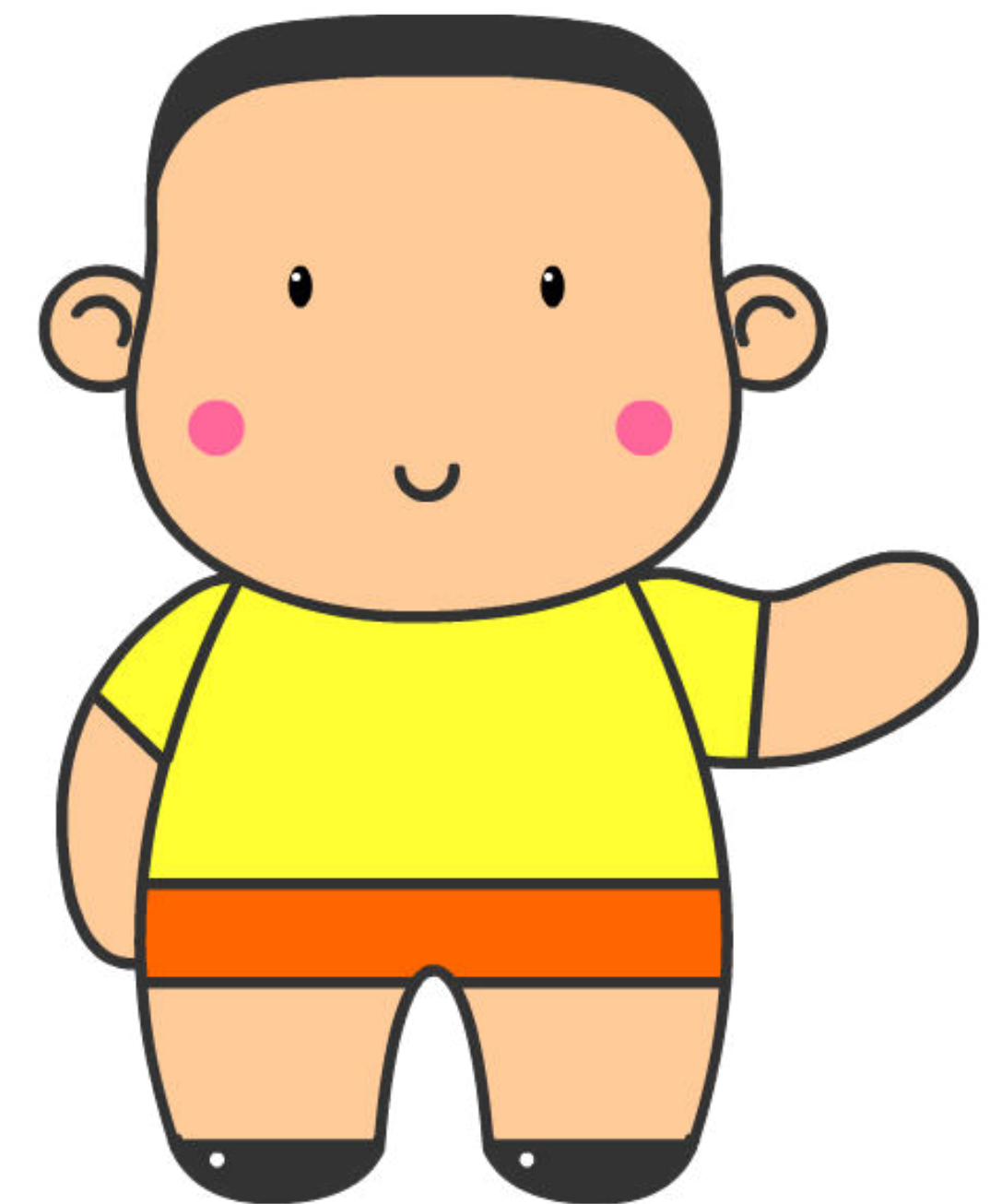
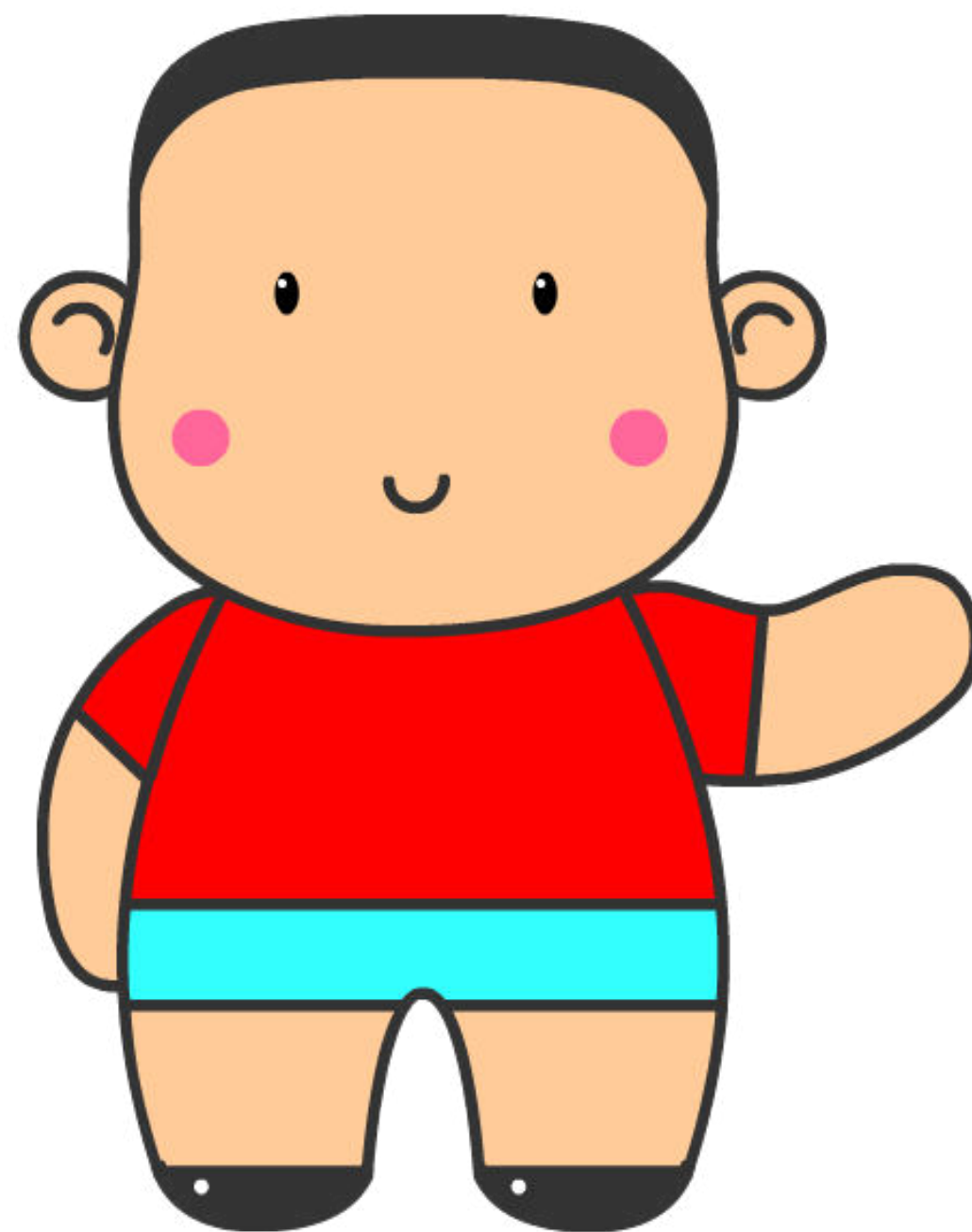
Character Exploration



Selected Character : “Reductive”

(reduce the characters and entities in the backdrop to a few lines and points)

Costume Variation



Eye-Brows Variation

Round Eye-brows



Square Eye-brows



No Eye-brows



Character Model Sheet

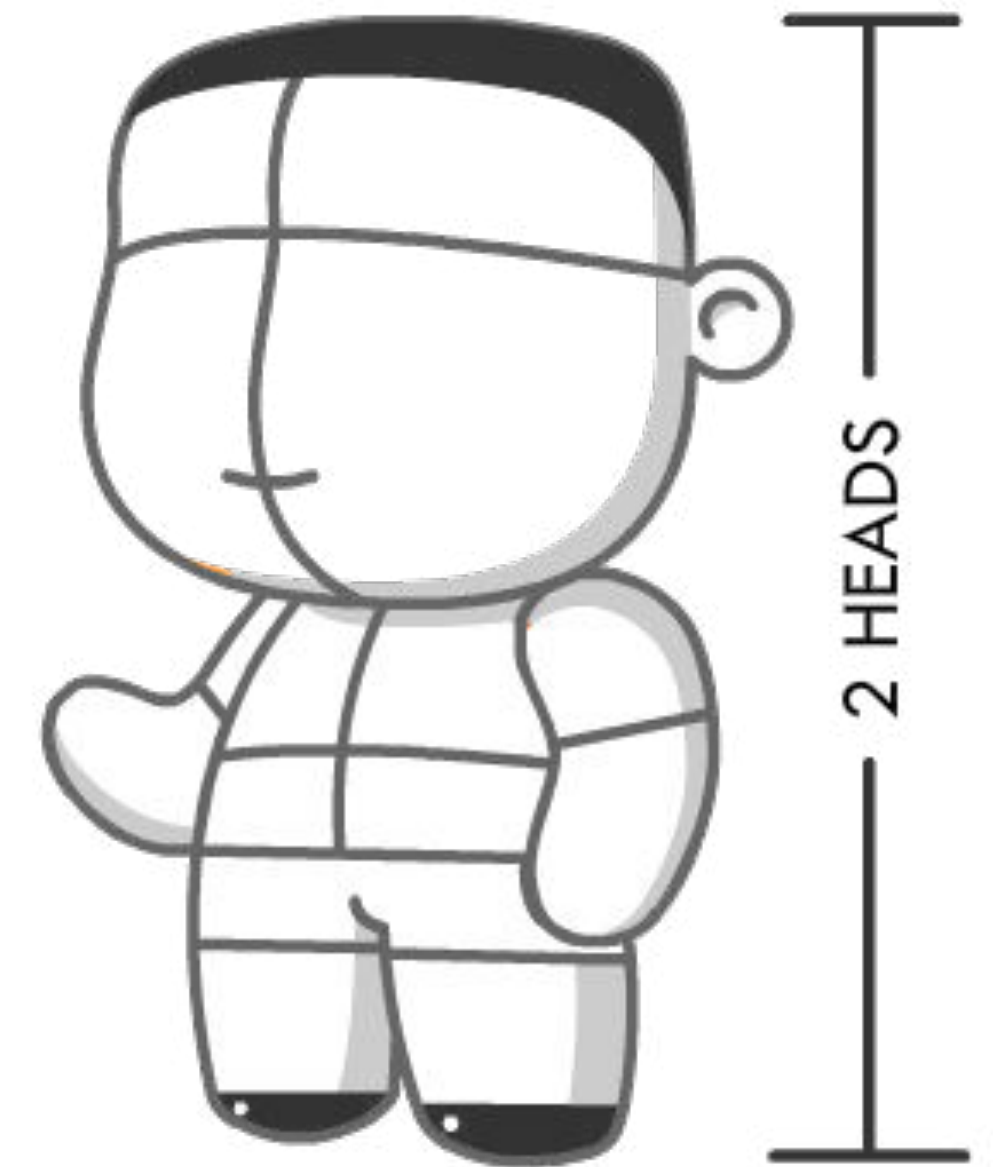
3/4TH



FRONT



BACK

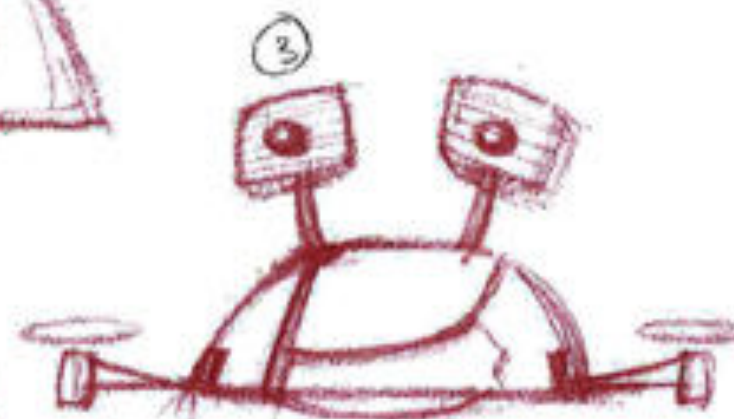
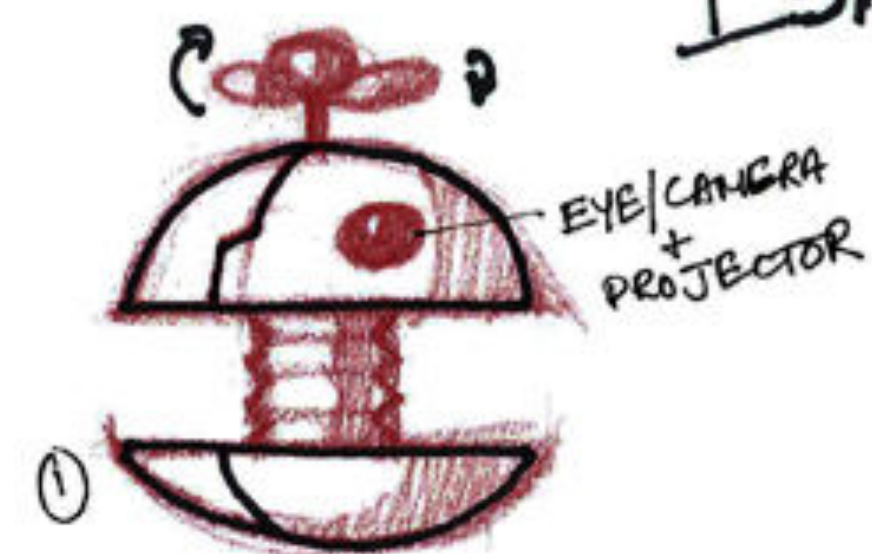


Playable Characters

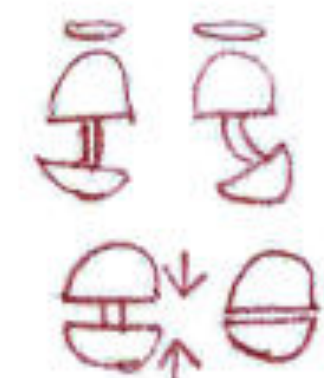
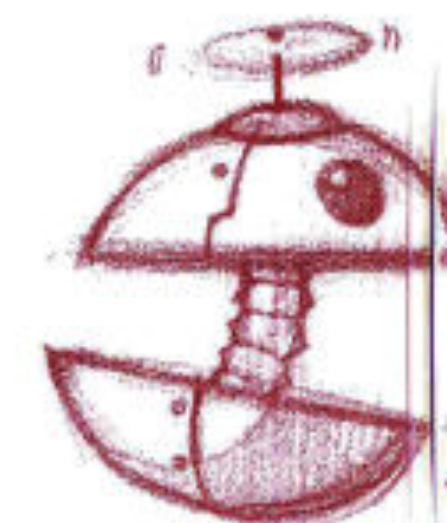
Isac, the flying bot (main character 02)

- Category – New generation flying robot
- Body color – Yellow
- Eye color – Red
- Likes – enjoys fun with Tobu and helps him whenever in need.

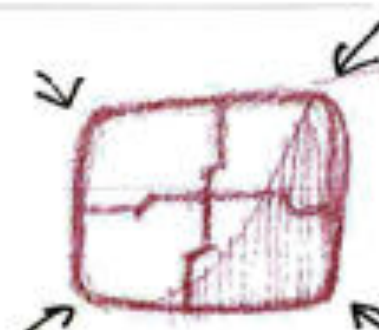
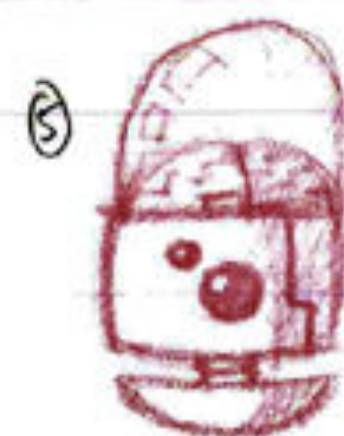
ISAC EXPLORATION



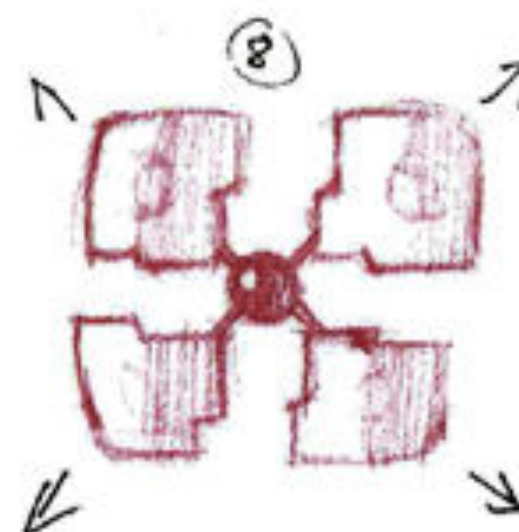
- Simplistic
- Adorable
- Animatable



Follow through

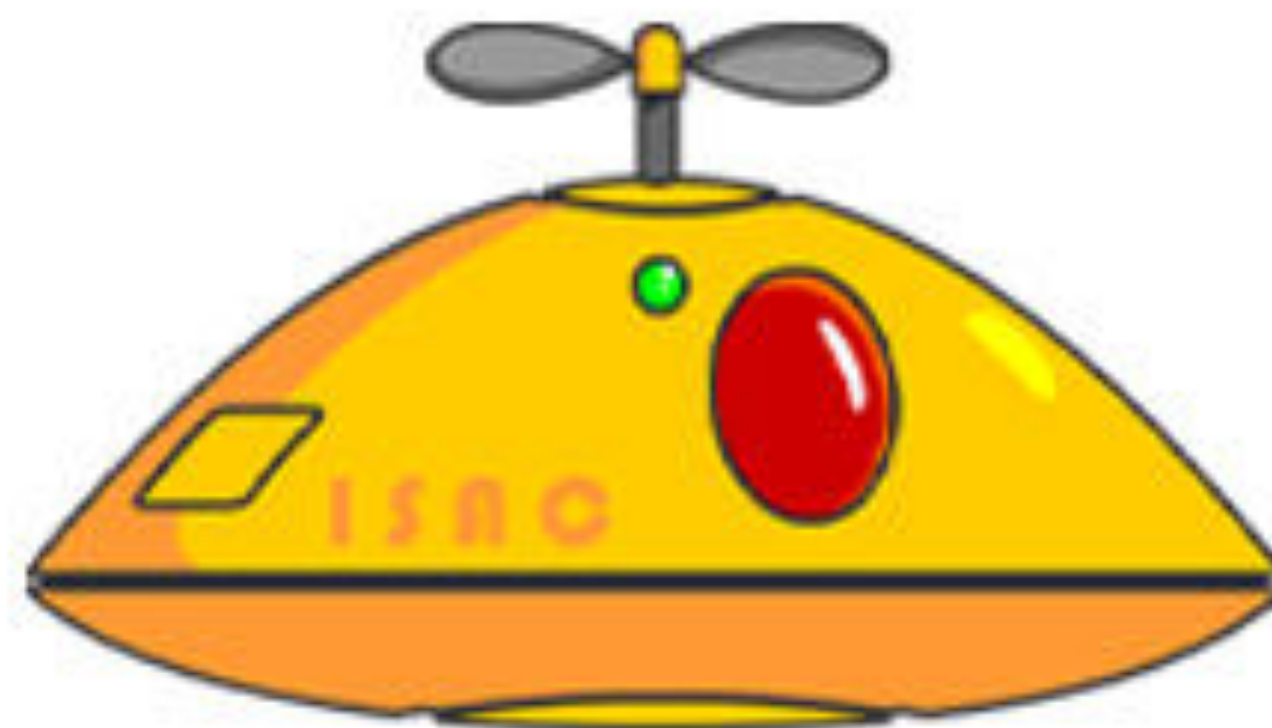


Inside



Character Exploration

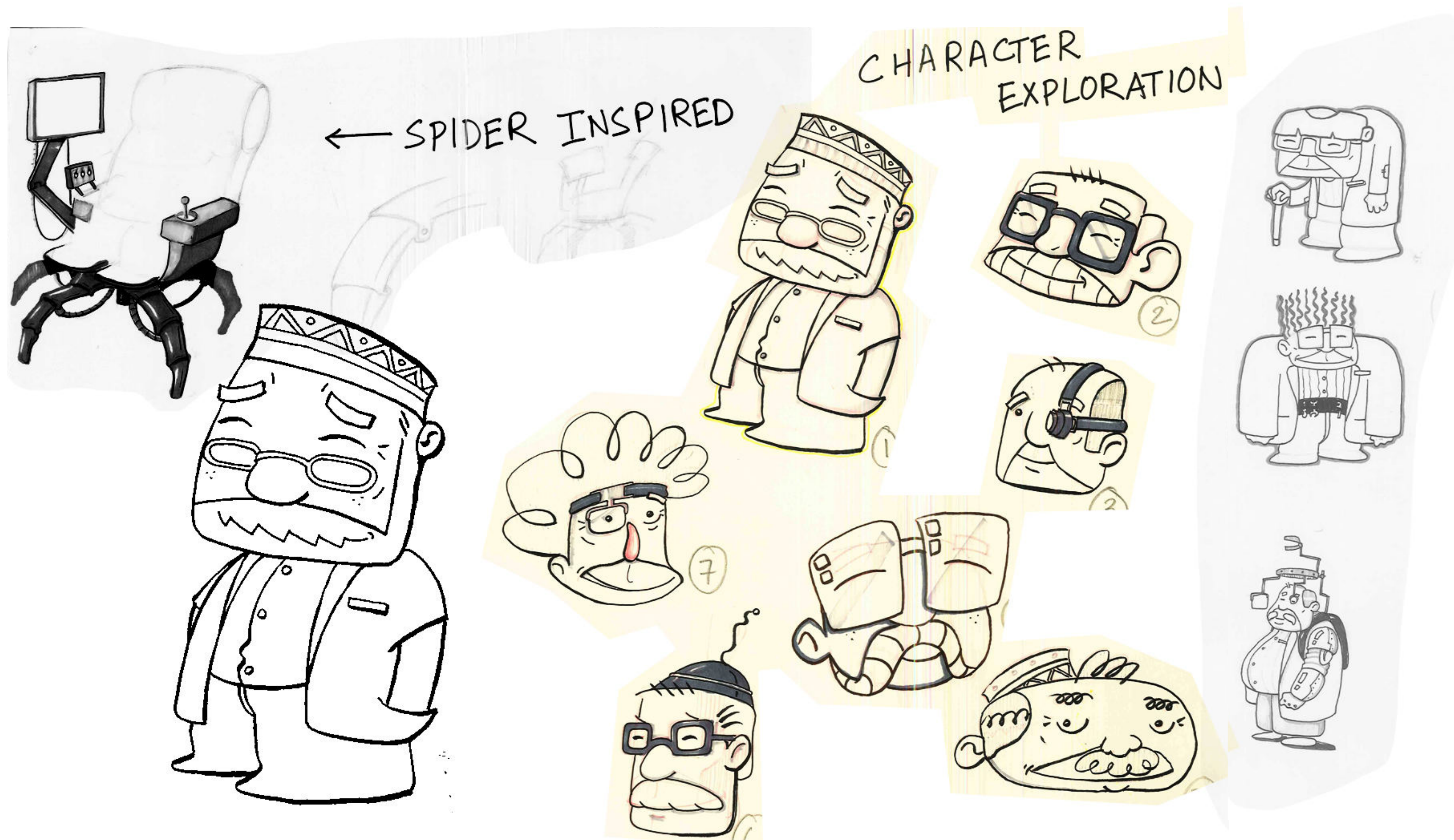
Selected Character



Non-Playable Characters

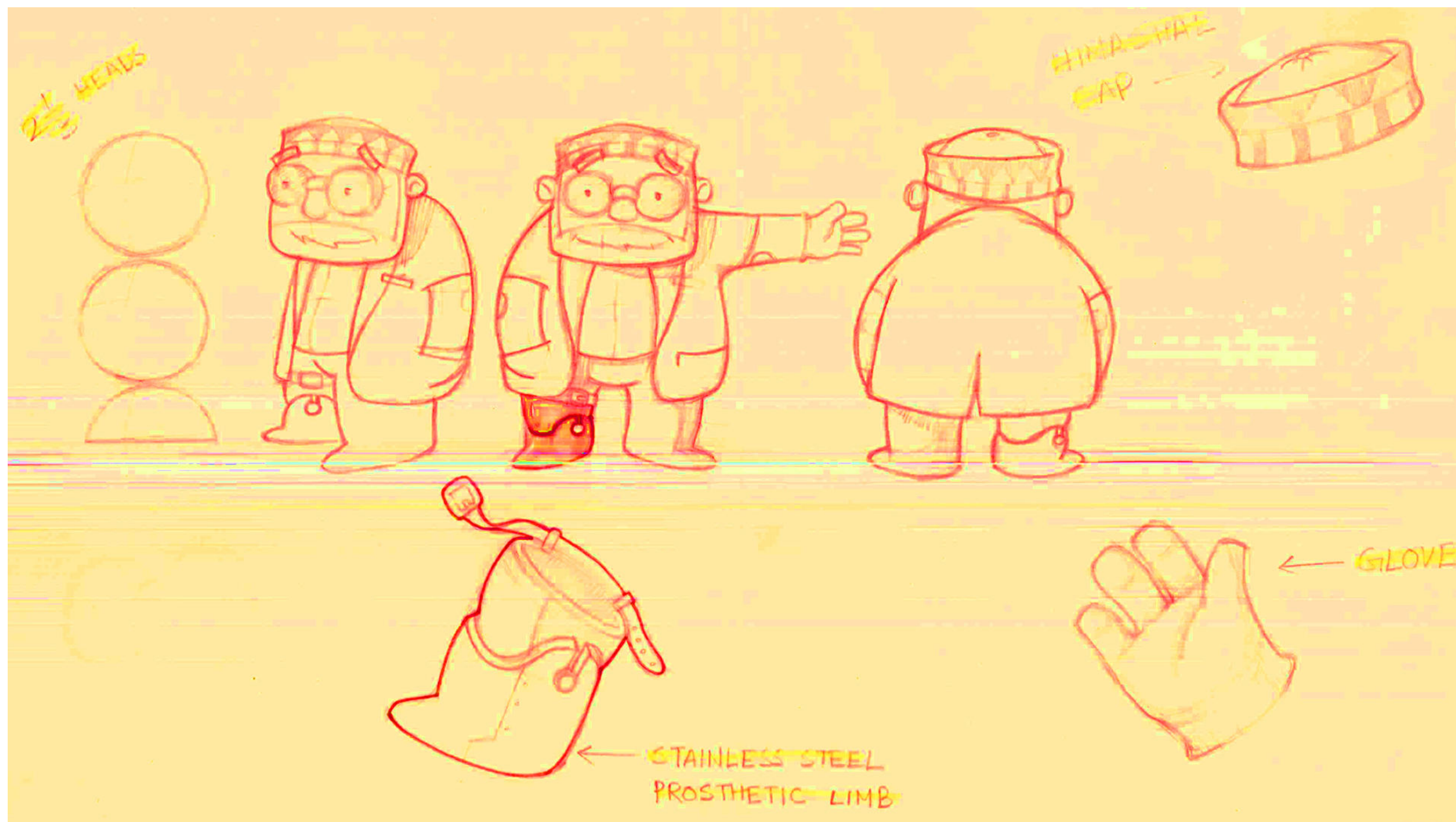
Dr. Spider, Grandfather of Tobu & Inventor of ISAC

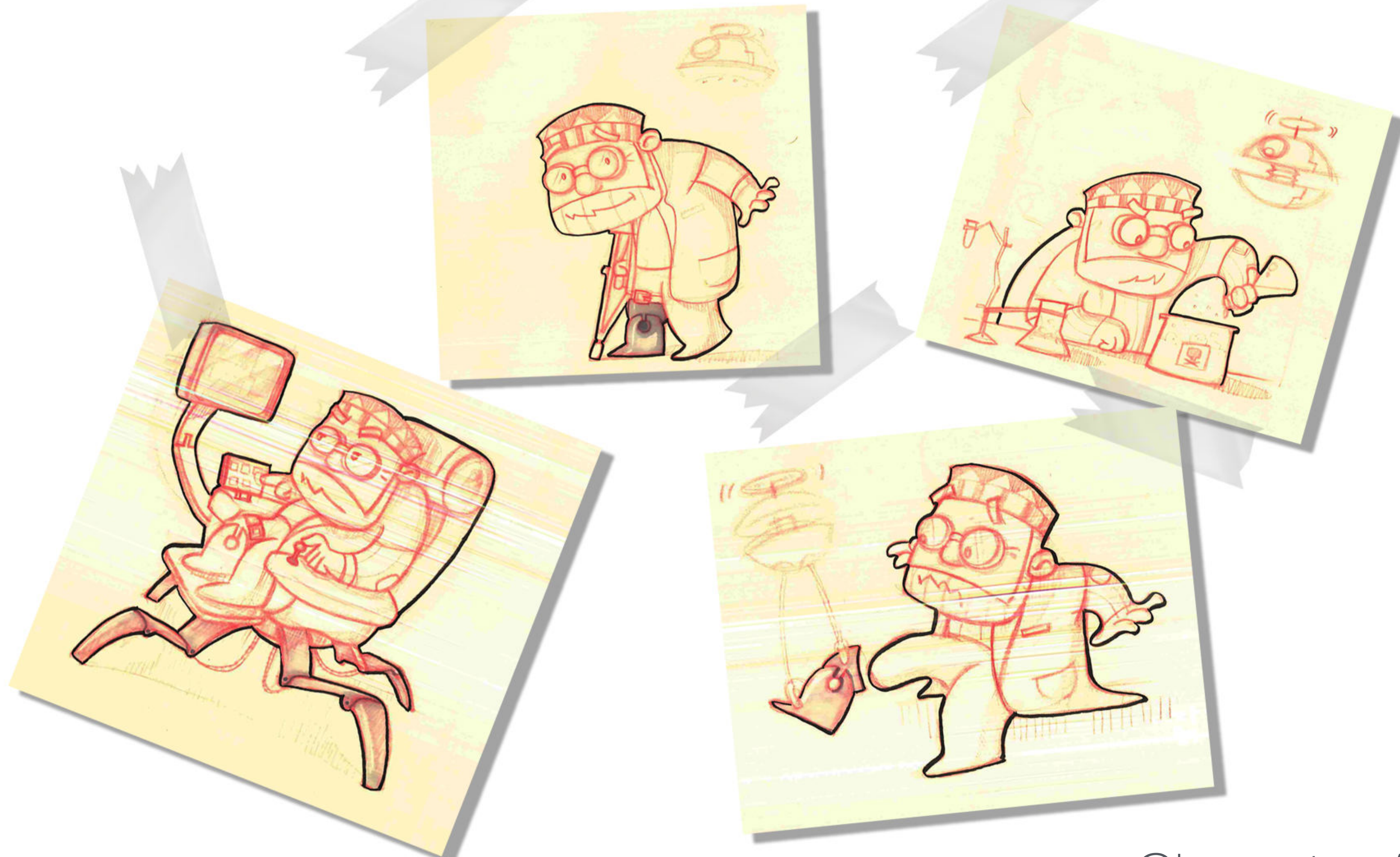
- Gender – Male
- Age – 60 years old
- Body color – Light Skin
- Eye color – Black
- Costume- Green shirt, Crimson red pants, White lab coat with a traditional shimla cap.



Character Exploration

Character Exploration





Character Action Sheet

Selected Character

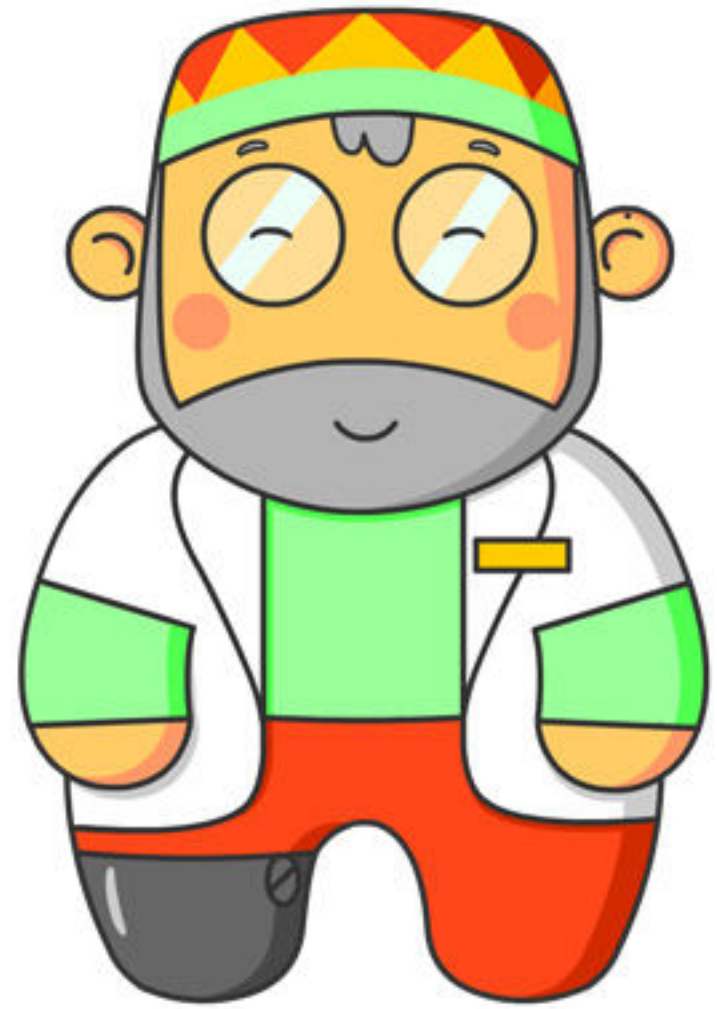


2 HEADS

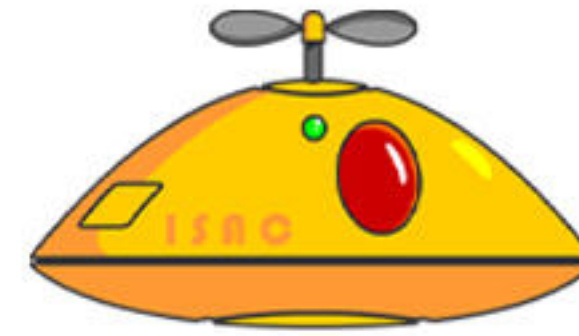
Character Family



Dr Spider (Granpa)



Tobu

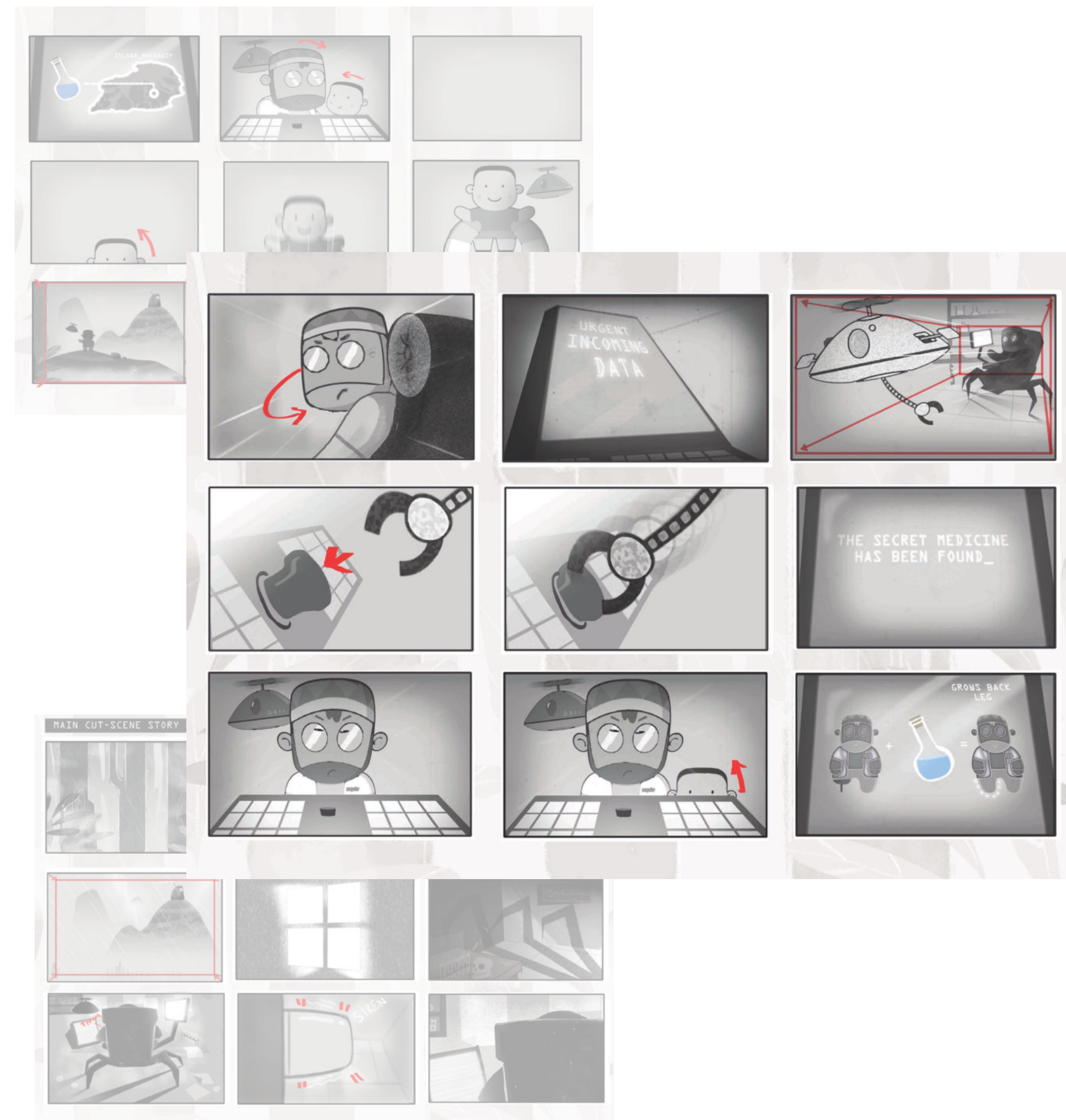


I.S.A.C

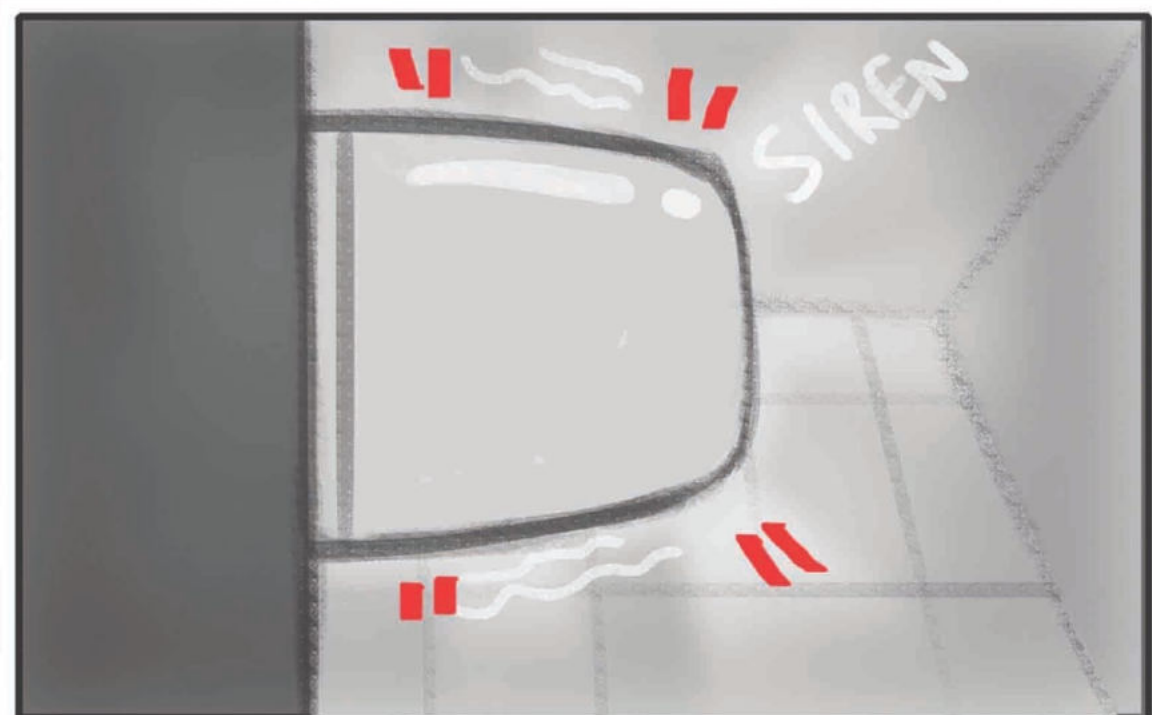
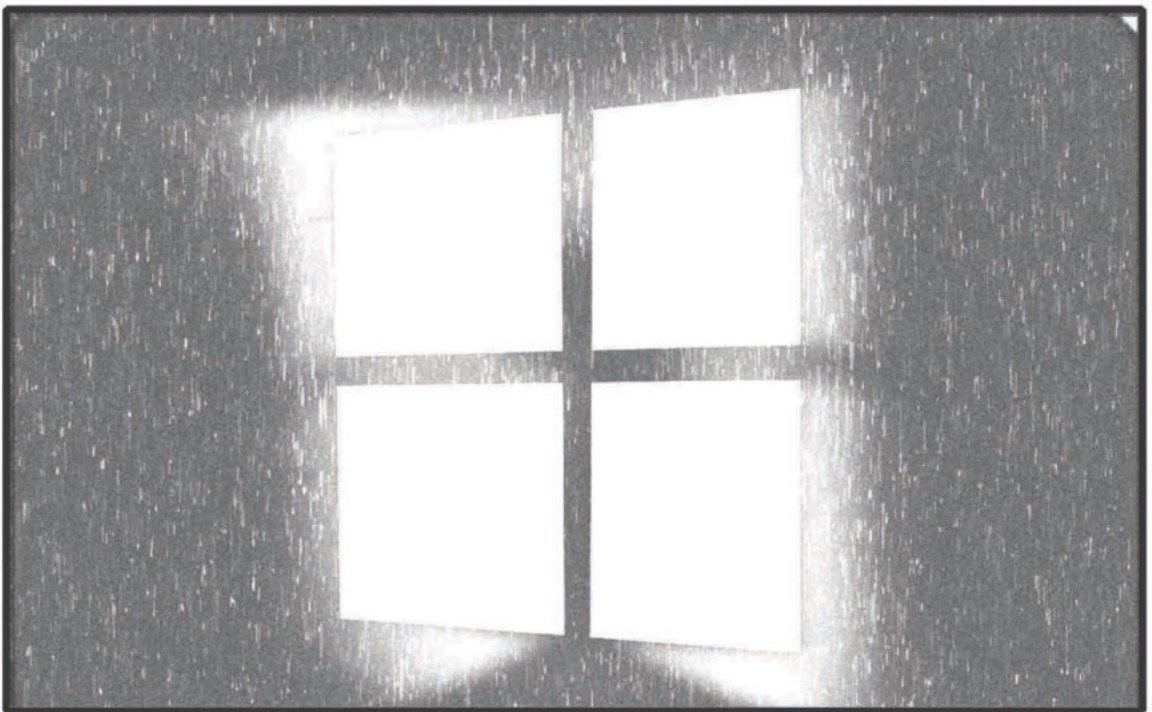
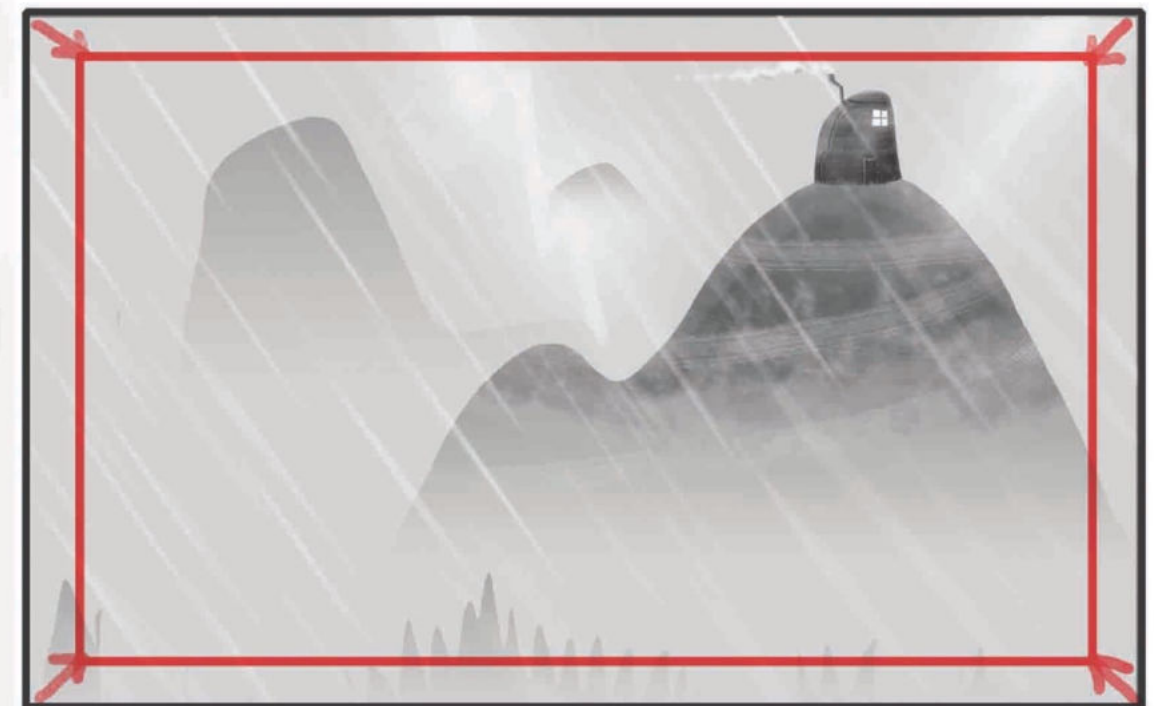
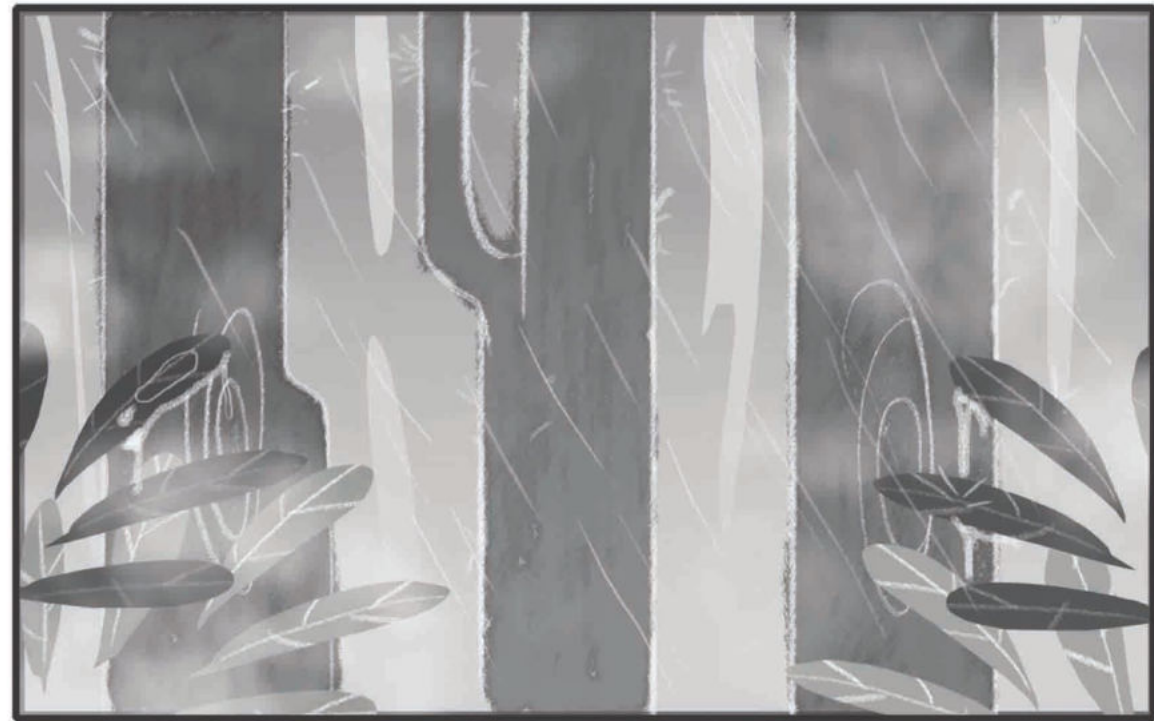
Gameplay Story

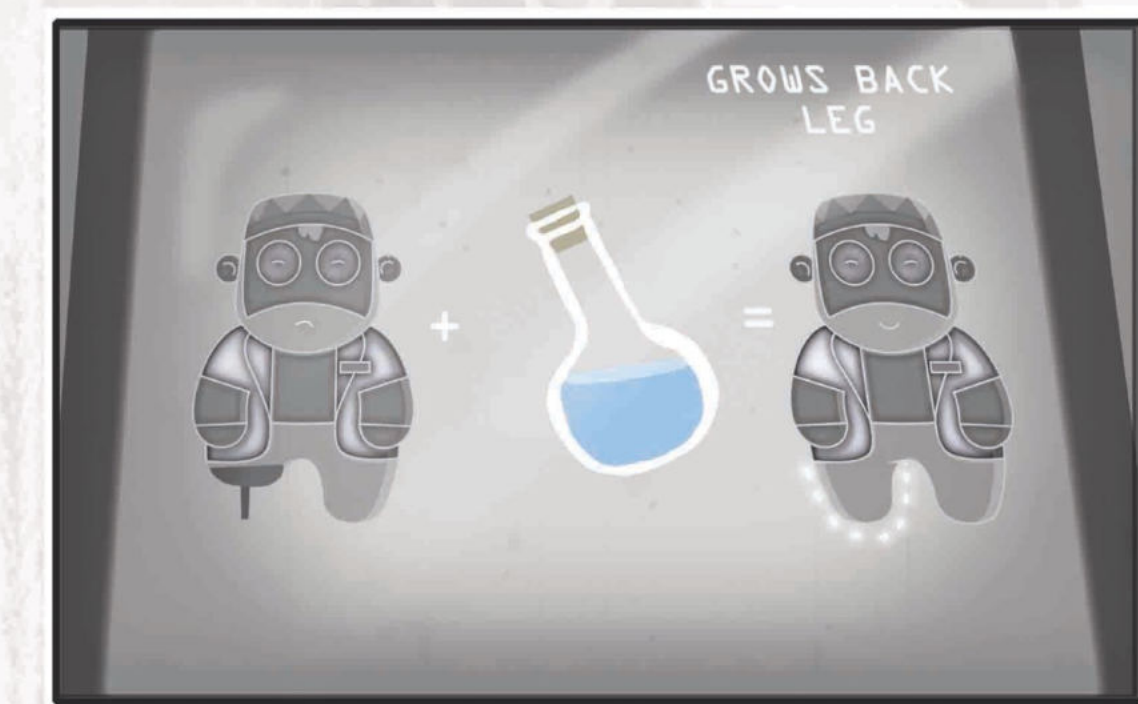
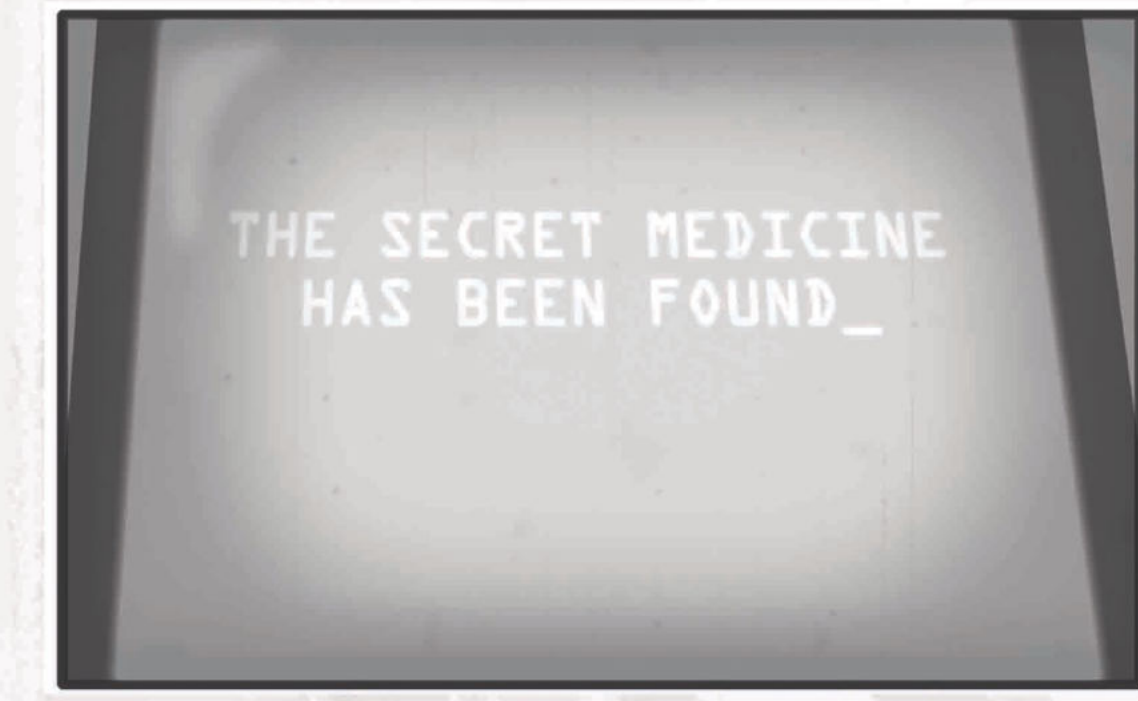
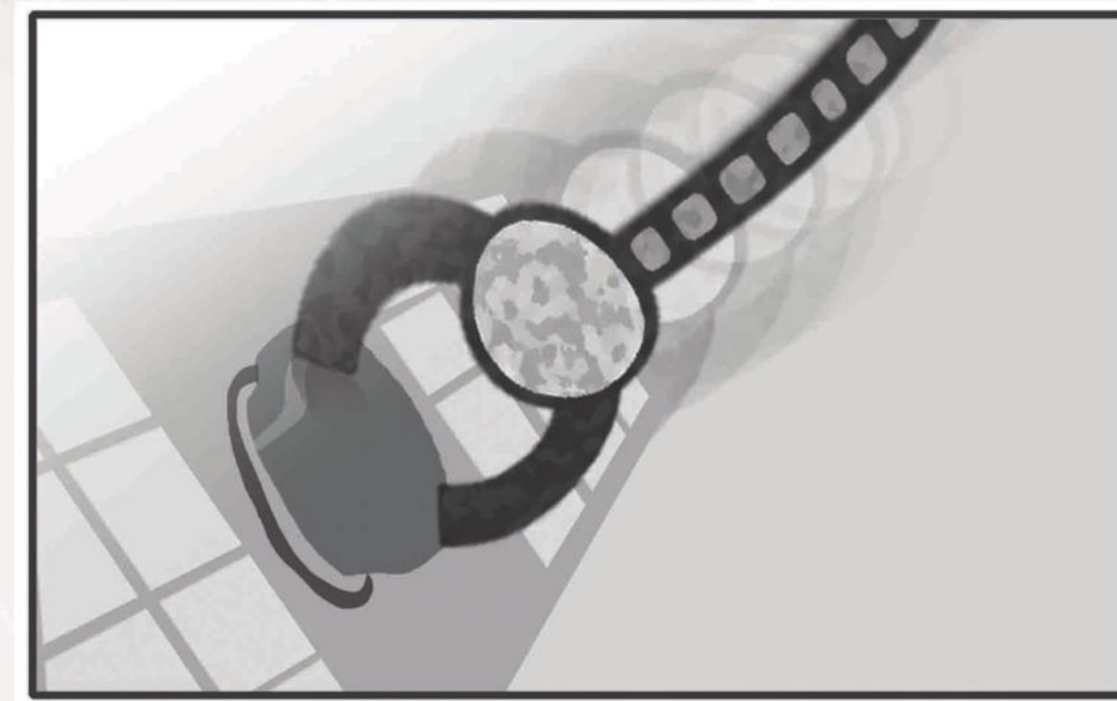
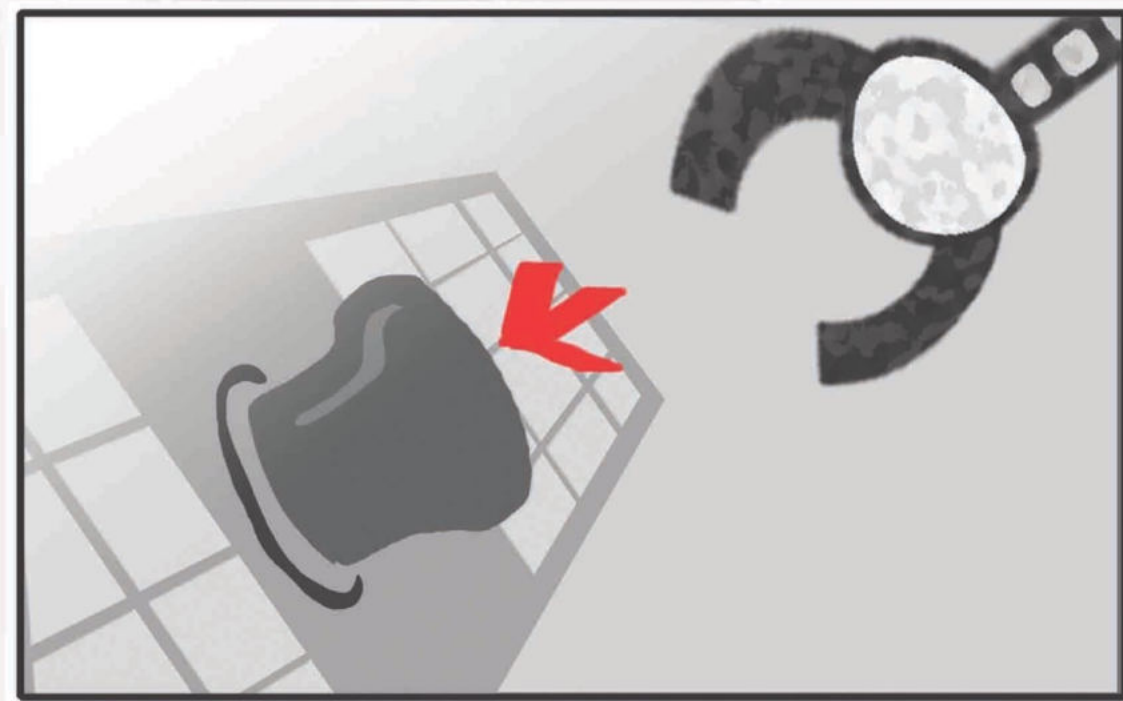
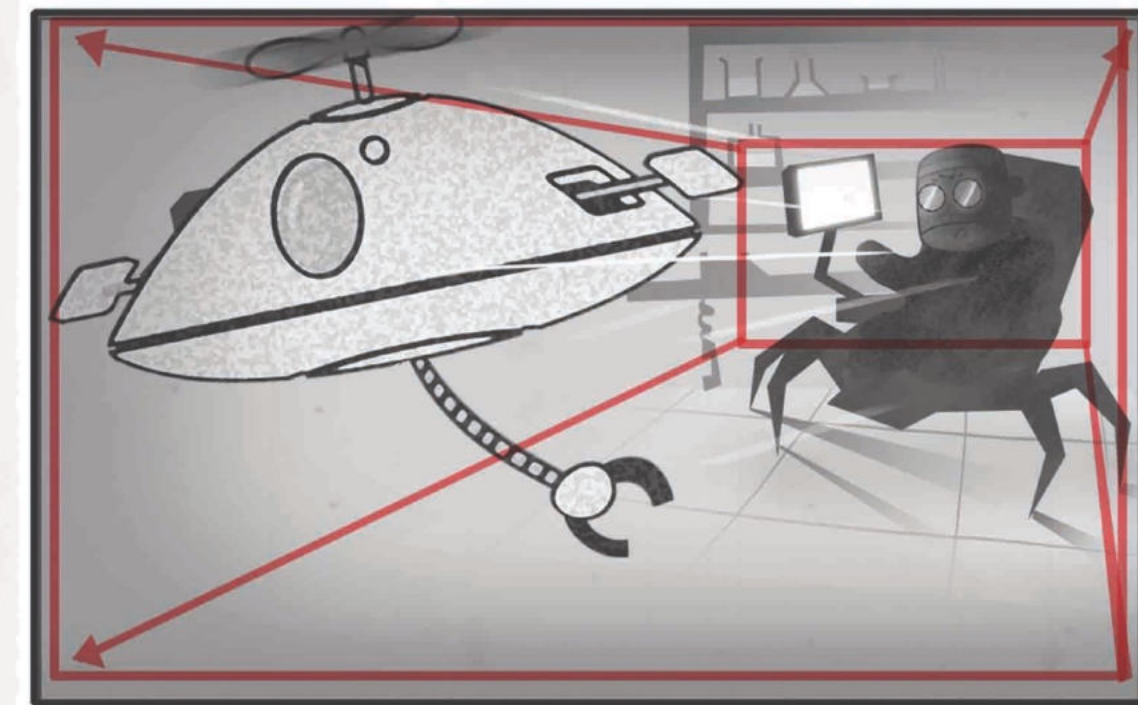
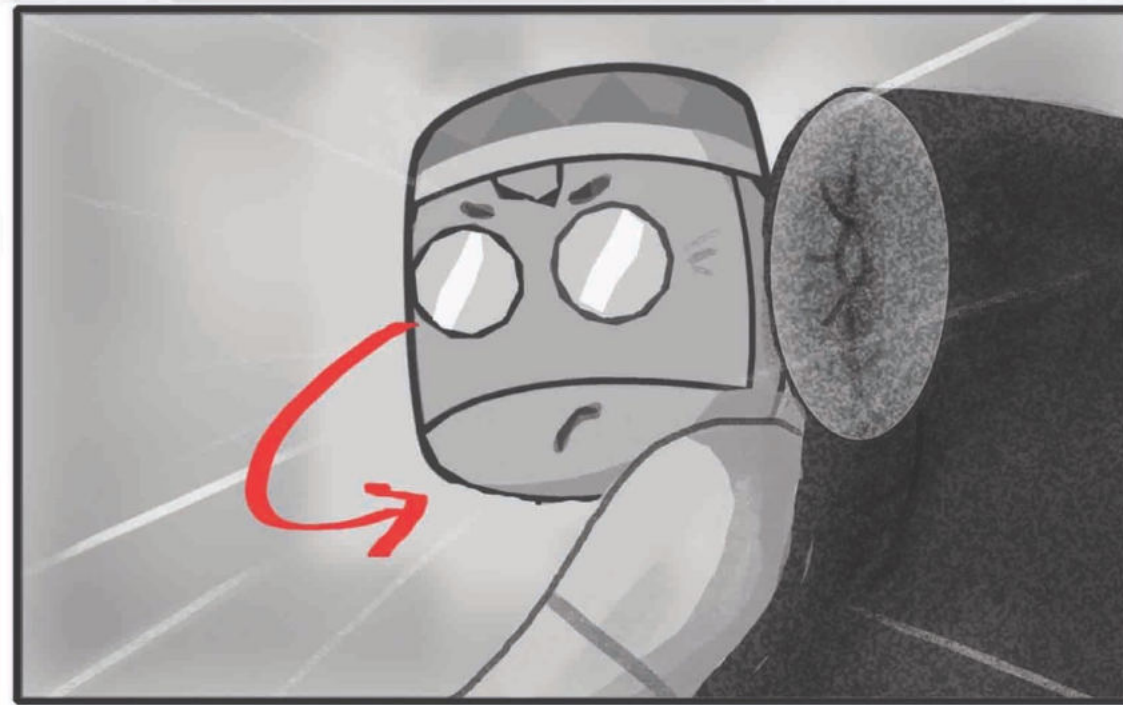
Plot Points: Once late at night, on a rainy day... we see a sparkling light from a window high up on the hill. It was the experiment room of the renowned scientist Dr. Spider. He was seated on his spider chair, but seemed to have faced some trouble. "URGENT" kept flashing from the screen behind... with loud noise of the siren. Dr. Spider along with his flying robot, ISAC comes to resolve it. they try their best.. and then finally... they find the Secret ingredient. The Divine Water which can help Dr. Spider to get back his legs. Both Tobu, his grandson, and Dr. Spider is overwhelmed by the inventory. Tobu packs his bag and is all set to go on the mission to get the Divine water along with I.S.A.C

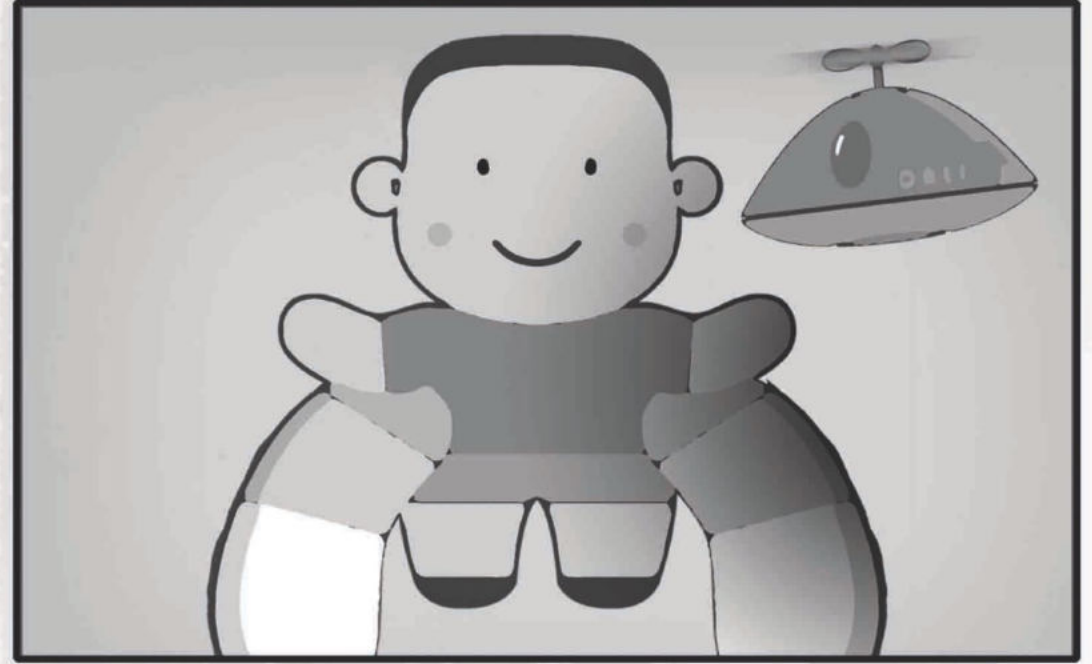
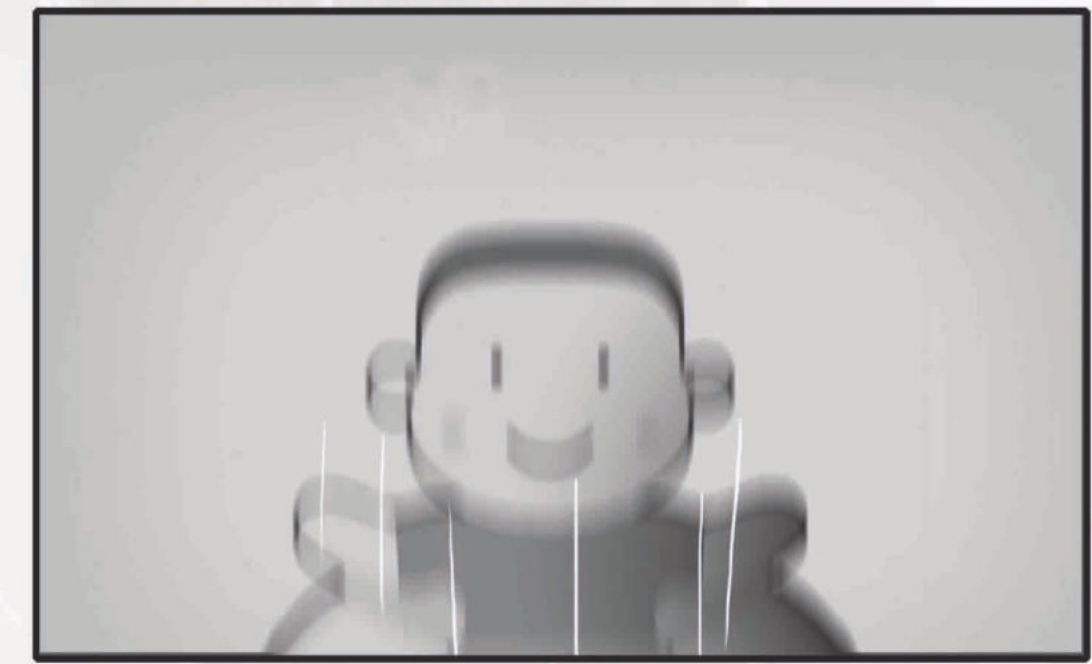
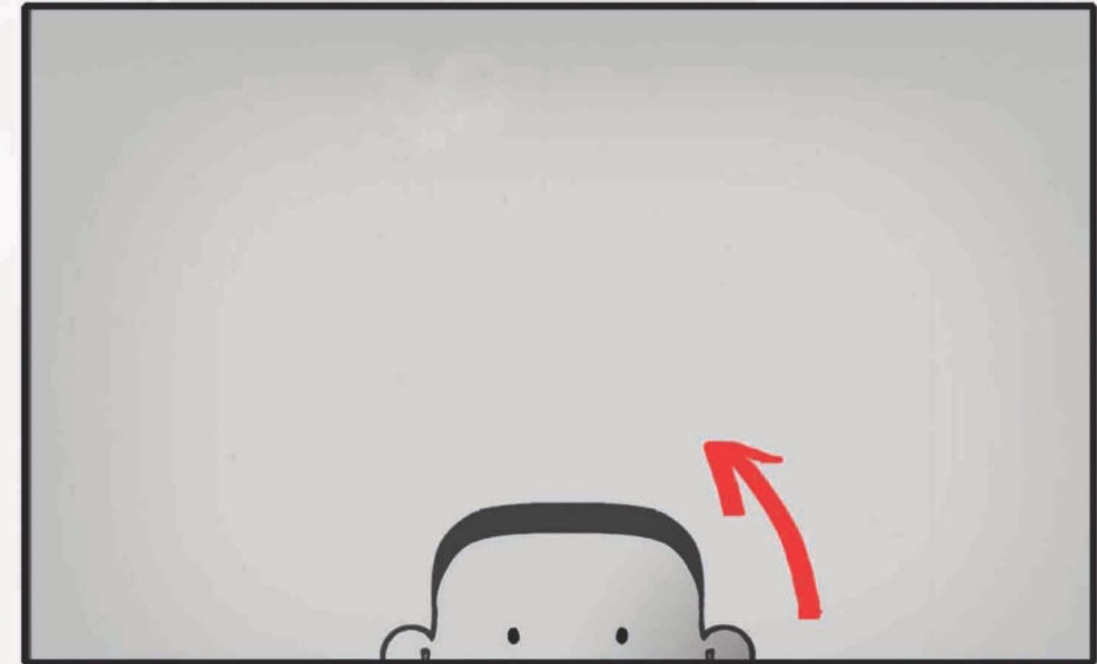
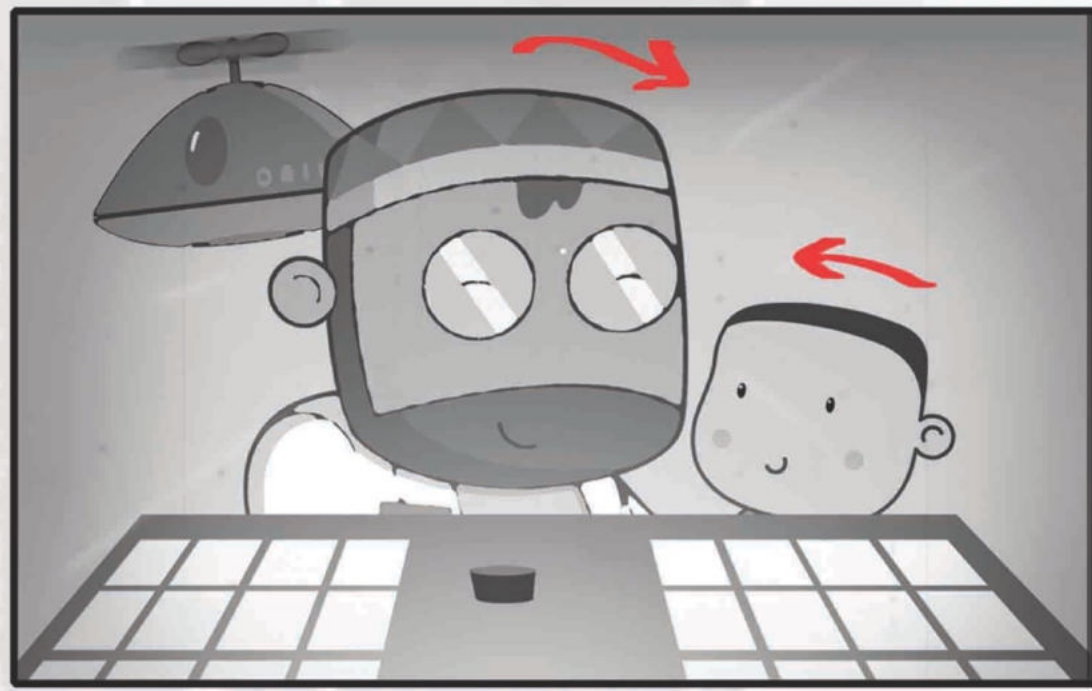
Story Boards



MAIN CUT-SCENE STORY BOARD







Experience

The overall learning experience that I received from interning at COSMIC had been great. It was possible because of the excellent supervisors who guided me, and gave relevant and constructive feedback and criticism when necessary. I had a first-hand experience on how to design a game and the kind of decisions.

I had to make to bring out a successful project. I also understood, to a certain extent, the design decisions the game designer makes in order to speed up the process of game design. I hope to weave in these experiences into my own projects to make better decisions and produce wonderful outcomes.

Acknowledgement

I thank our guide Prof. Phani Tetali, Prof. Ravi Poovaiah & Dr. Ajanta Sen for his kind support and guidance.

I also like to thank Indrajeet Roy, Rohan Verma & Aakanksha Mirdha for their support and help.

Last, but not the least, I would like to thank the almighty for his blessings.



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That's all **Folks**