The Magician's Apprentice:
An Exploration of The Animation Pipeline

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COMD 4830 Senior Project
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The Project

Animation. Illustration. Comics. Video games. All of these are professional fields that require their own form of background designers, colorists, character designers, and more. However, each industry has its own nuances and needs, and thus, the pipeline used in each line of work varies.

My senior project is an exploration of the animation development pipeline. Throughout the last semester, I have gone through the process of "developing" a personal story, entitled "Ashta: The Magician's Apprentice", using the methods and steps a professional animation studio would.

The goal of my senior project is to educate others on the animation pipeline, and push me to understand my craft more than I did before.

The Context

In the summer of 2020, I worked as a lead character designer on my first-ever animation team to produce a short film entitled "Two Ships". I was given a description of the characters and went work. Pretty simple approach.

However, later that year, I had the chance to intern with **Nickelodeon Animation**, and I realized how much perspective I was missing. The choices my team made at the very beginning of the pipeline, had the chance to effect the next 4 months of production.

"Two Ships" Character Design Development
Property of RAD Artist Network

The Pipeline

Every animation studio has their own unique pipeline. Some shows start with storyboards and then develop a script, others start with a script. Animated movies and animated shows have different starting points, as well as different time frames. The pipeline I was most familiar with is Nickelodeon's.
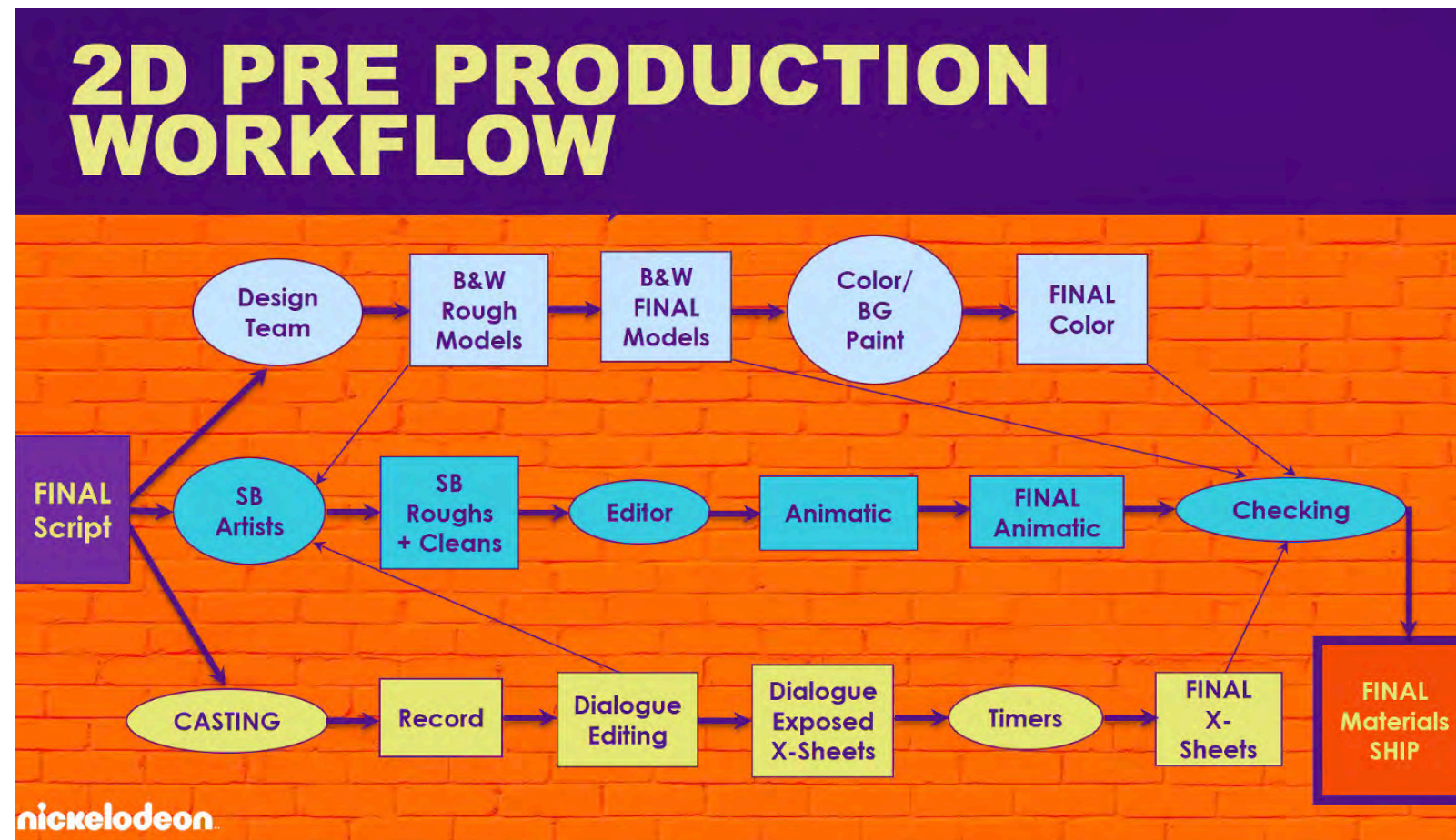
Taken from Nickelodeon's 2020 Virtual Job Fair Presentation

The pipeline structure I will use is as follows:

Script Development

↓

Design Development

↓

Turnarounds (Models)

↓

Rough Storyboard

The Script

Ashta's story has been in development for a while now (in my head, at least) and so I was able to come up with a script the assistance of a writer friend. The scene is meant to highlight the different dynamics at play between the characters.

Link to script!

Most shows will have their main characters exist in words, but it is up to the designers to bring them to life. Any additional characters in the story are also developed after they are included in a script. This is the beginning of the design pipeline.

Ashta: The Apprentice

Ashta is the main character of this story, so I started my development work with her at the front. She is nothing short of expressive with her feelings and her development focused on exploring that.

Ashta: The Apprentice

Ashta uses a a fighting style that reflects movements found in traditional Indian dance, along with gymnastics. It was important for her design to reflext that culture and feel comfortable to move in.

Ashta: The Apprentice
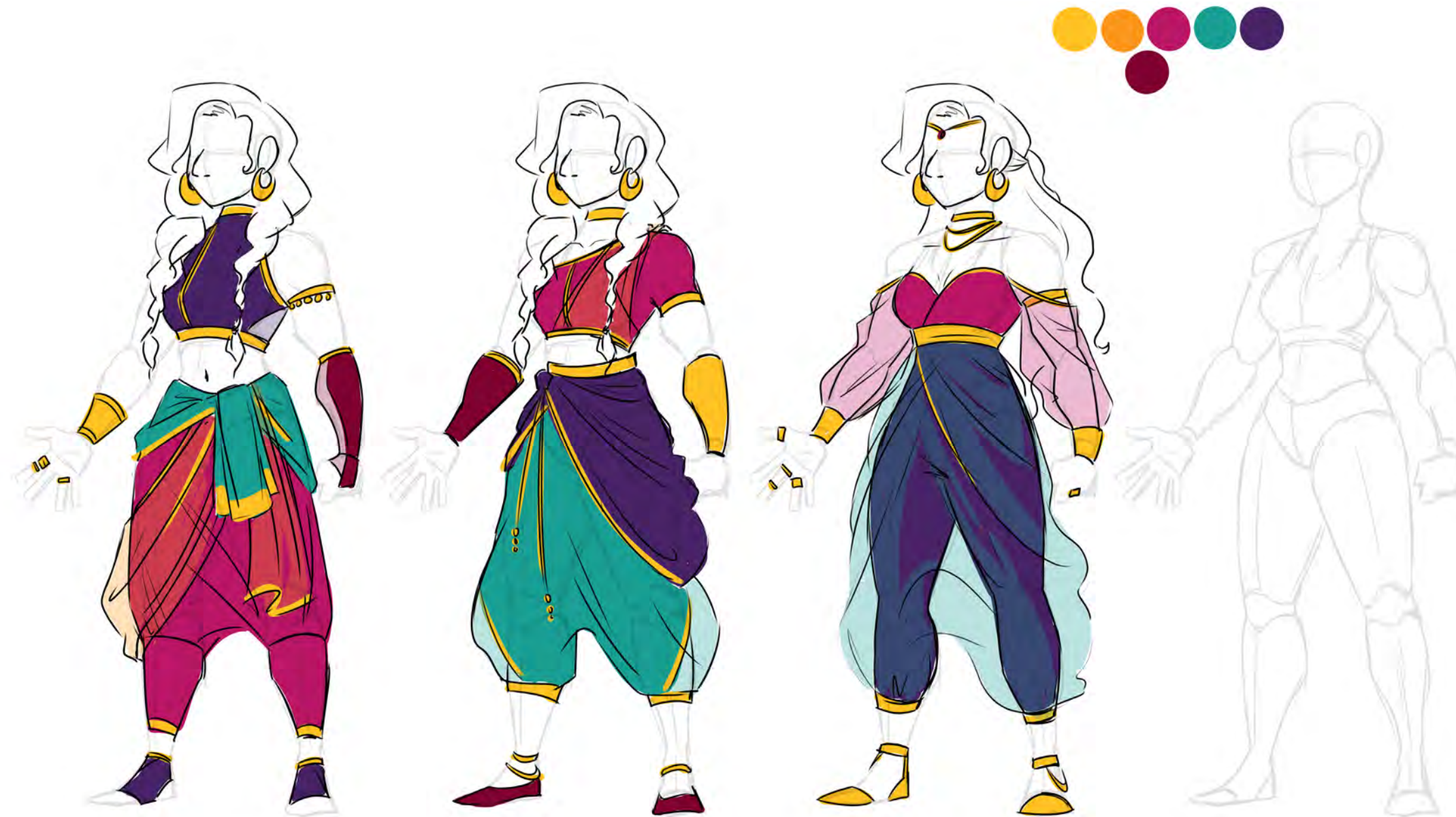
Given her personality, it was important for her to have bright, vibrant colors. The accents of gold was a designt element I chose to include in most of the rest of the cast to tie them together.

Rai: The Convict

Following Ashta, we have Rai. He is an exiled convict from a neighboring land who teams up with the rest to potentially clear his name. His attitude is opposite to Ashta's, so his design reflects that.

Rai: The Convict
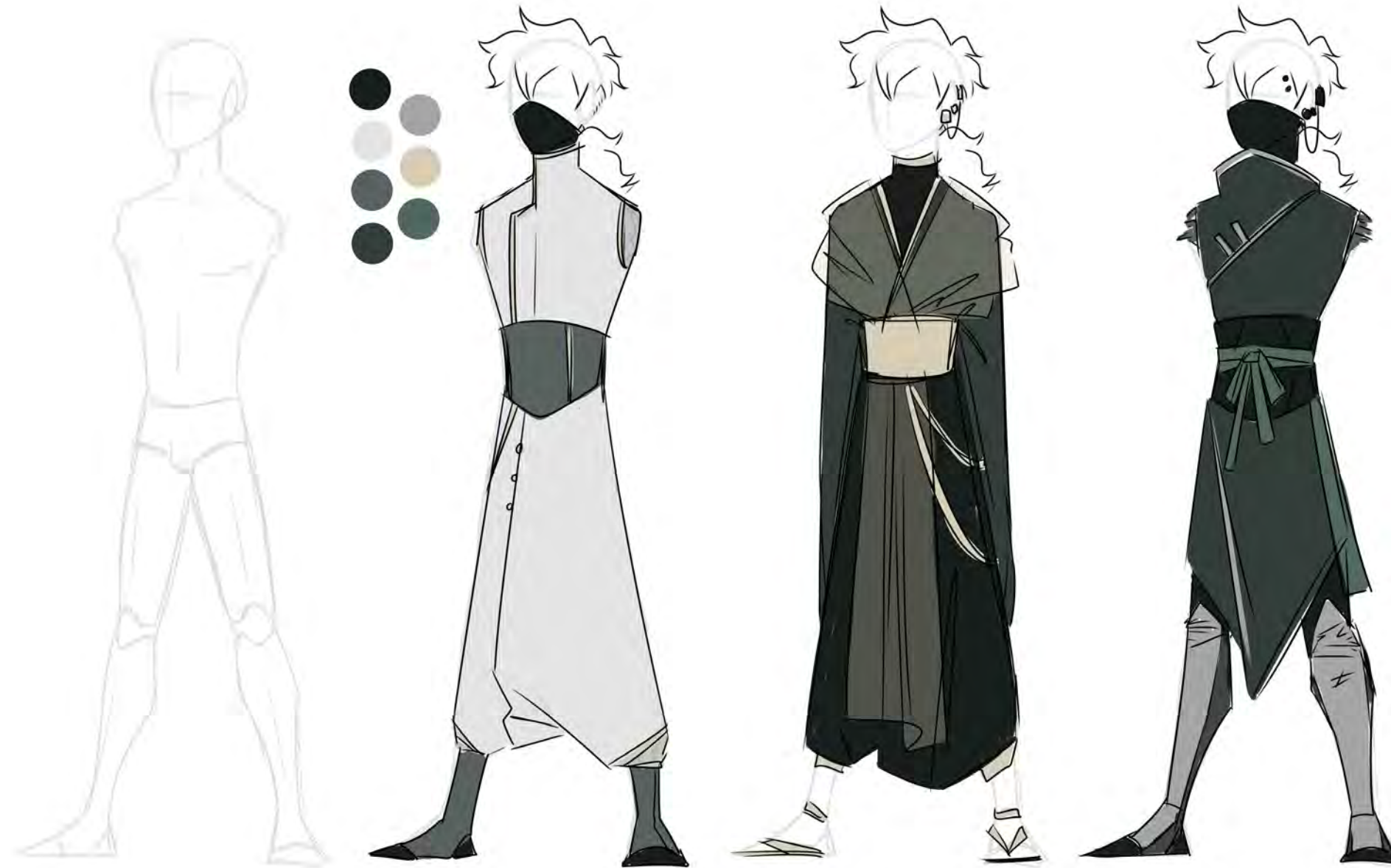
As a result, Rai's colors were made to be much more muted compared to the rest of the cast. His attire is made up of whatever pieces of clothing he can find in this foreign land while he hides.

Rahjil: The Inventor
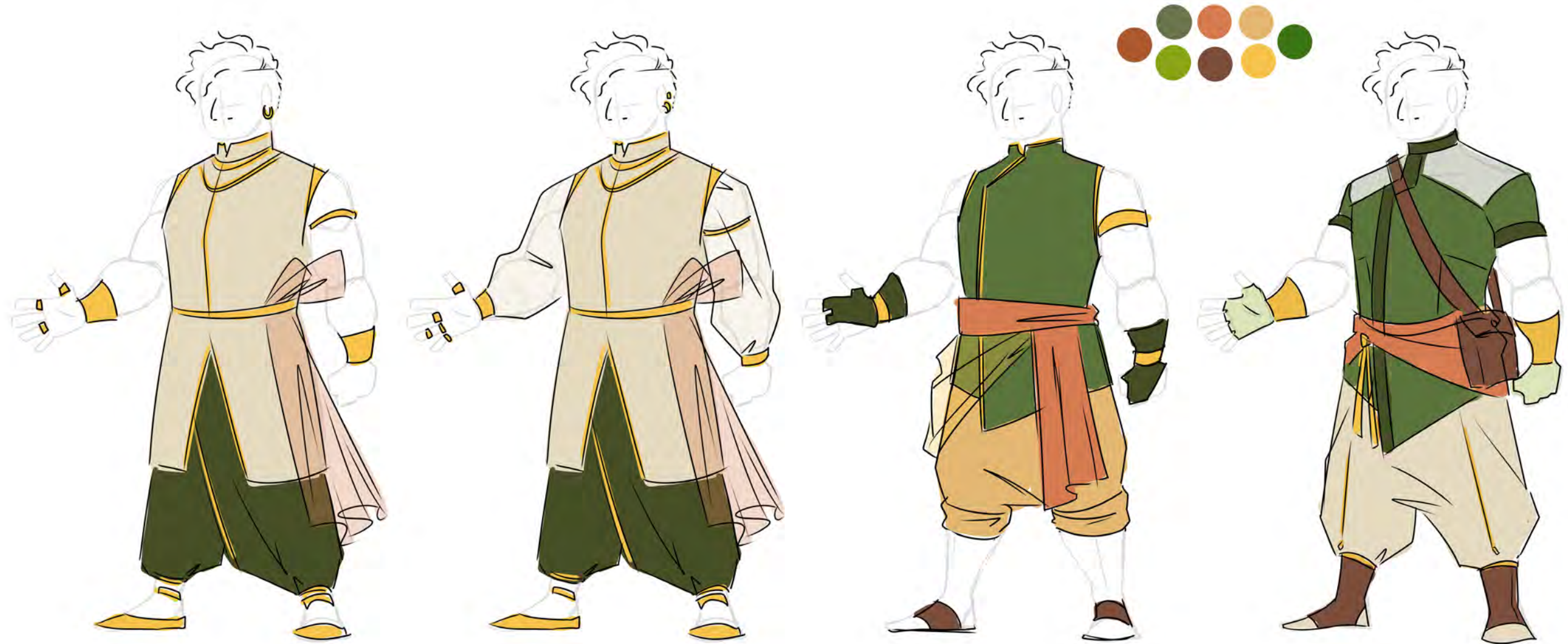
Rahjil is Ashta's twin brother and works under Zira as an engineer. Unlike his sister, he is less aggressive and a lot more approachable because of his laidback nature. This "softer" feeling was key to his design.

Rahjil: The Inventor

To help push this "softer" vibe, I revisited his body type and added more curves and circle shapes. There was still a squareness to him, but it was important for him to feel friendly.

Oseni: The Linguist

The next female in the cast is Oseni, the daughter of a famous late ambassador. She is just bubbly as Ashta, but also cares a lot about keeping up appearances meet the expectations of others.

Oseni: The Linguist
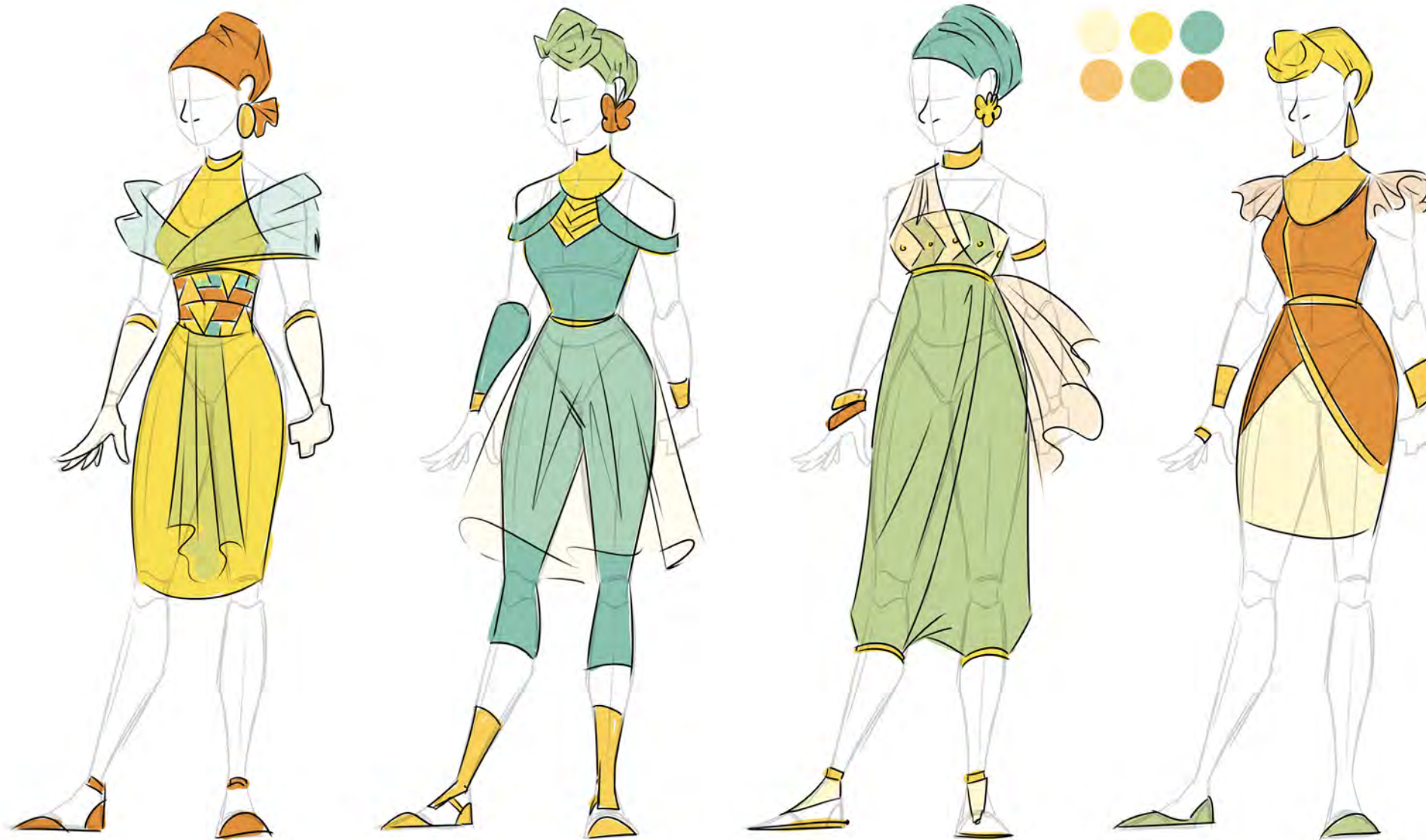
Oseni's comes from a land inspired by the African country of Ghana. Her design focused on key elements in traditional Ghanian attire, such as headwraps and fabric patterns

Oseni: The Linguist
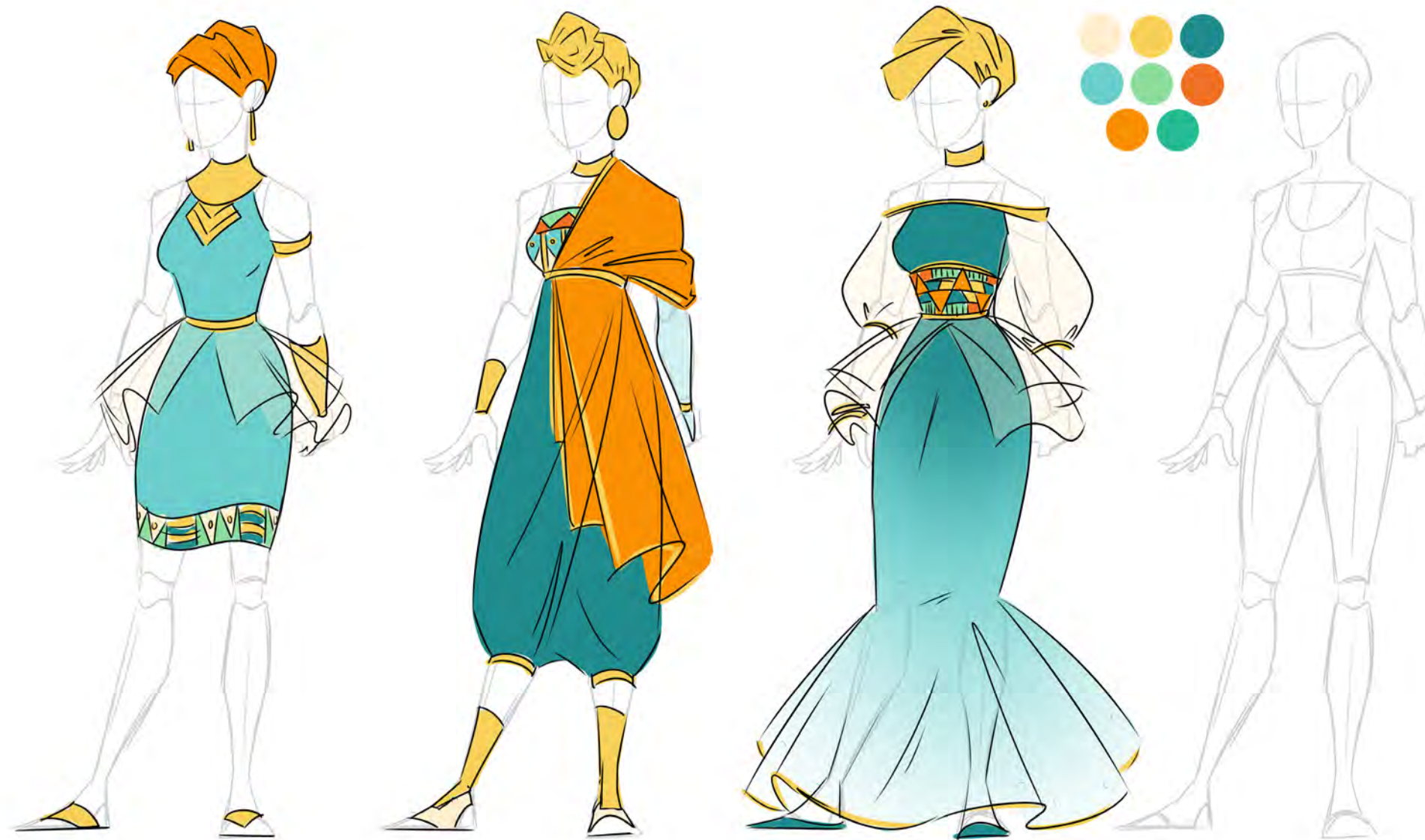
Oseni is of a bookworm and doesn't engage in as much physical activity as Ashta, so I felt comfortable putting her in a skirt. However, it was important for her to still feel younger than Zira (explained later).

Tama: The Soldier

To balance out the cast both in personality and in overall design, Tama was added. As one of the two candidate's aiming to be captain of the guard, Tama's design approach was "large and in charge".

Tama: The Solider
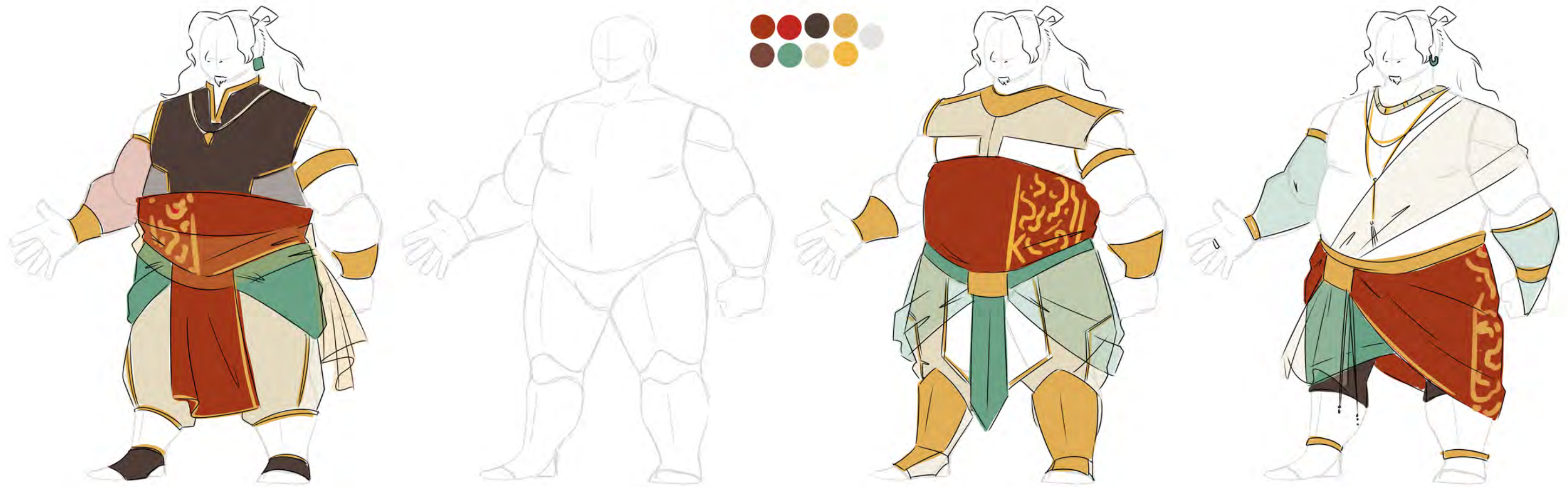
Having a unique silouette is imperative to any character design. At first, Tama's body type was too similar to Rahjil's (due to my own lack of familiarity with drawing said body type), so Tama was also revised to feel like a stronger presence in the world. His country of origin is Maori inspired.

Tama: The Soldier

Upon further development, I decided to push into his role as a solider for design inspiration, resulting in armor. Certain draping clothing is meant to reflect his Maori inspired background.

Zira: The Leader
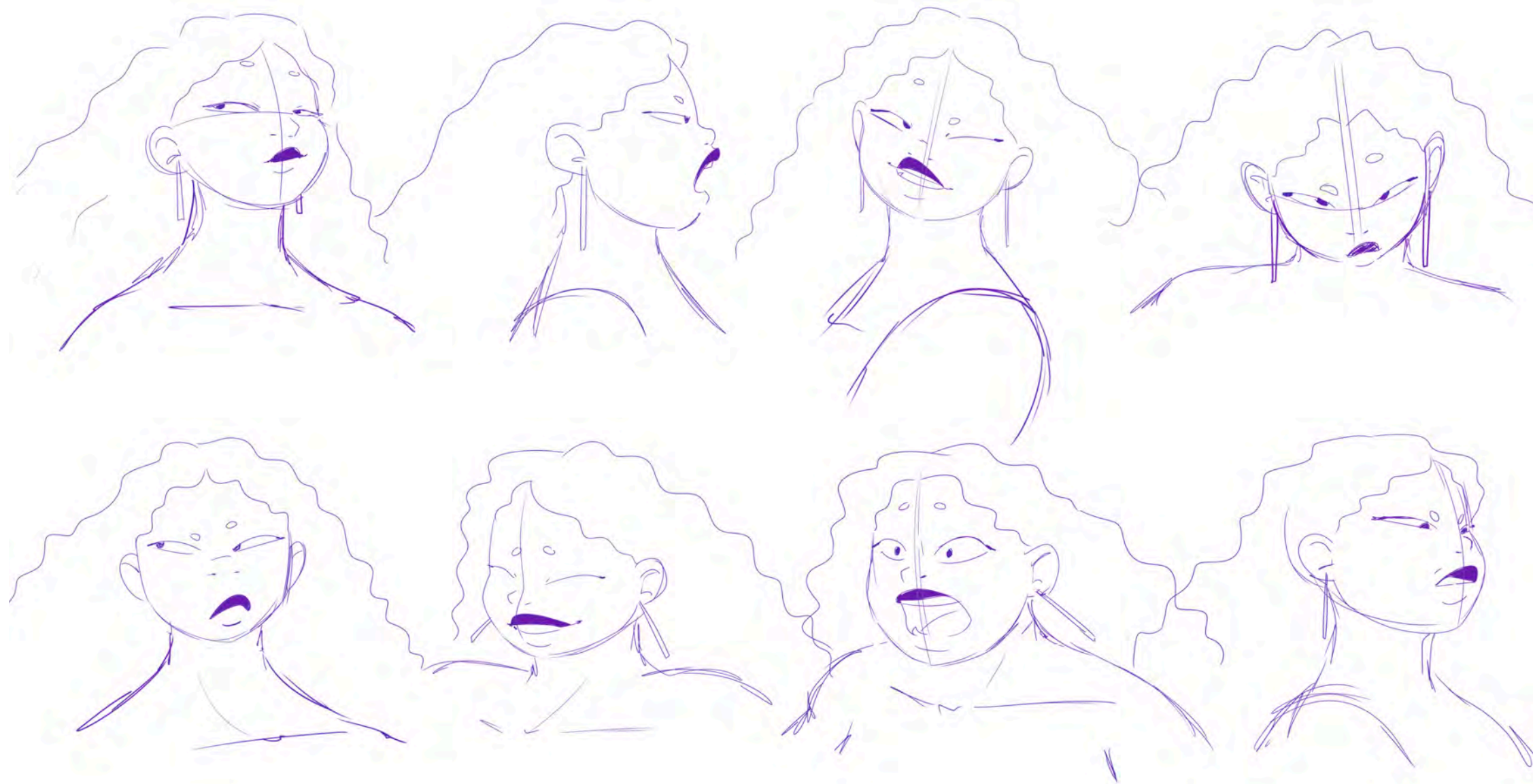
Reigning from a Moroccan inspired country, Zira is in charge of the international affairs, including military and magic. She is a mentor to both Ashta and Rahjil, and a important political figure.

Zira: The Leader

Zira is significantly older than Ashta and the previously mentioned cast. It was important for her to feel as mature and level headed as she was elegant. Her magic uses geometry, as reflected in her designs.

Zira: The Leader
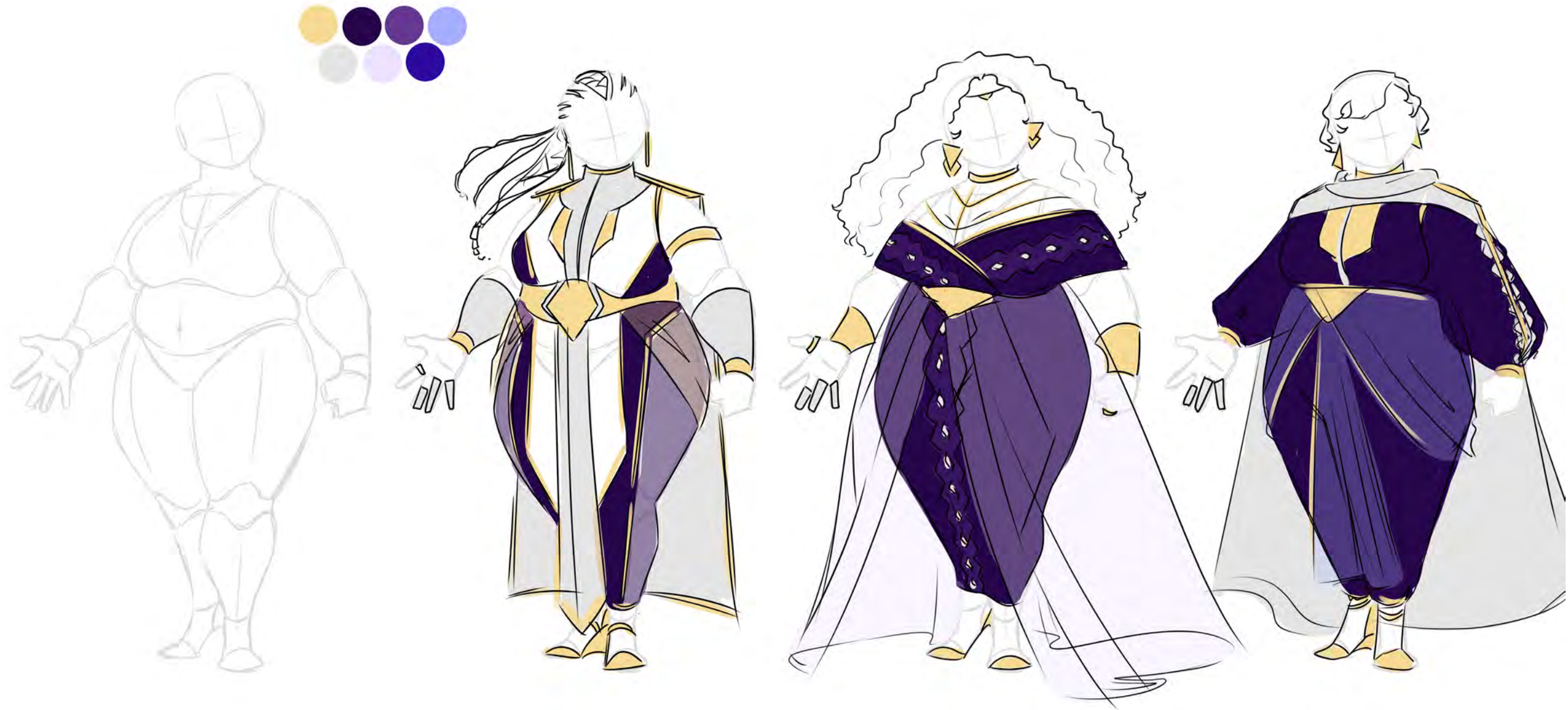
Along with geometry and Moroccan patterns as a guiding point, Zira's design motif is "the moon". This was chosen to highlight the yin and yang relationship she has with Ghazin, who's motif is "the sun".

Ghazin: The Prince

Ghazin is a controversial prince hailing from the same India inspired country as Ashta and Rahjil. De-
scribed often as "a sweltering peacock", he just as expressive and rowdy as Ashta.

Ghazin: The Prince
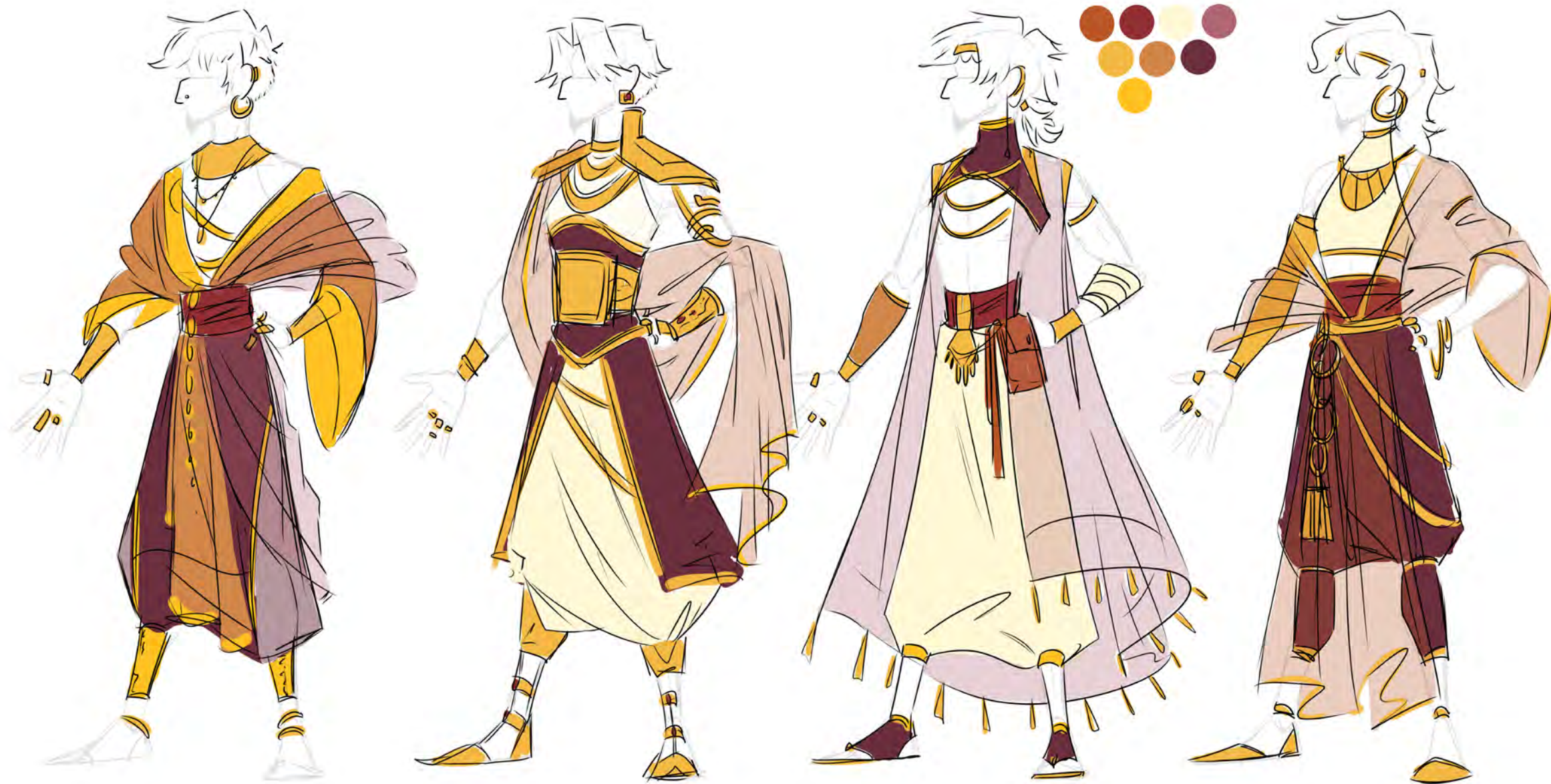
As mentioned before, Ghazin's design is meant to be the opposite of Zira's i.e. his colors are warm while she is cool, his fashion is asymmetrical whereas hers is not, etc. He also comes from money, so gold!!!

The Turnarounds

When people think of character designers, they usually think of cool action poses and funky concept art. However, professional character designers in the animation industry primarily do character turn-arounds as the main bulk of their job. This is the backbone of any animated character design.

Jinx from League of Legend's Arcane - 6 Point CGI Turnaround
Property of RIOT Games and Fortiche

Korra from The Legend of Korra - 4 Point 2D Turnaround
Property of Nickelodeon Animation Studios

Whether 2D or CGI, someone's turning characters. The more turnaround points (or point of views) the more information you have. Most studios do either a 3 point turn, but they can be as many as 7 or as few as 2. I chose to go with 4: front, 3/4, side, and back.

Ashta Turnaround

Rai Turnaround

Rahjil Turnaround

Oseni Turnaround

Tama Turnaround

If you don't like it, blame this guy.

Zira Turnaround
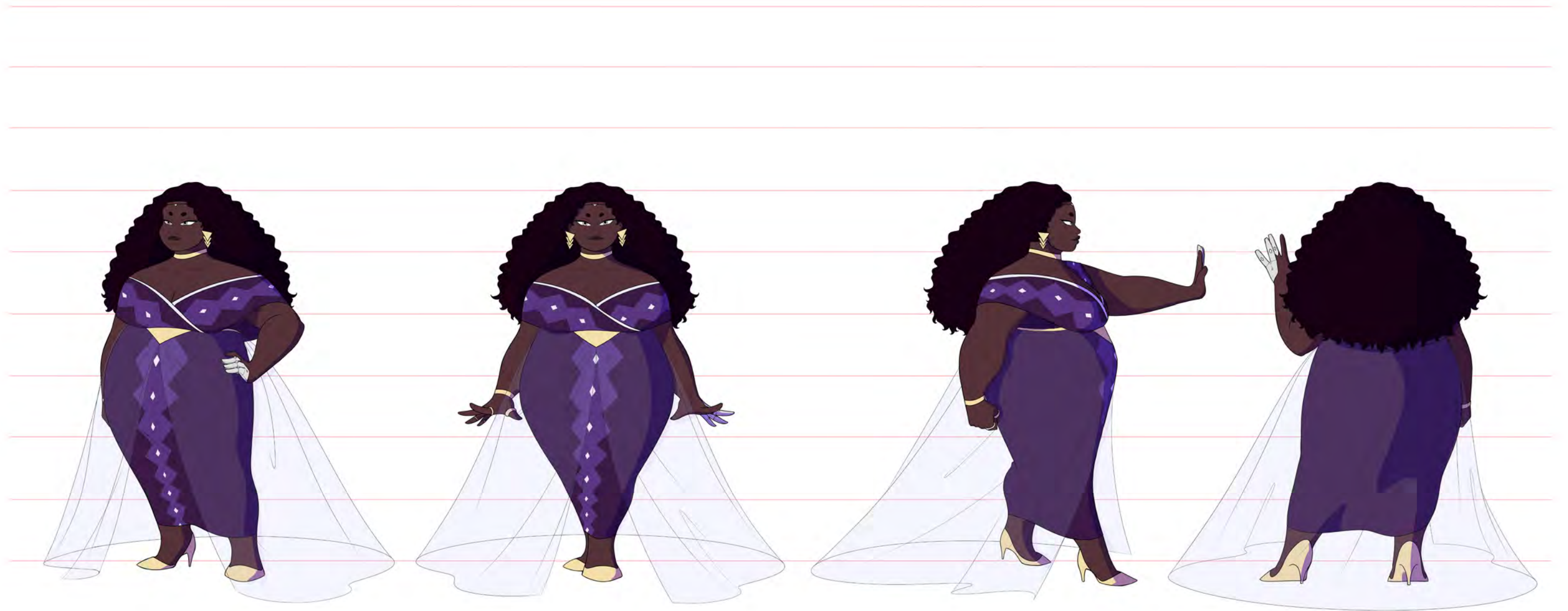
Ghazin Turnaround

Character Line Up

The Storyboards

You may have noted that the Nickelodeon pipeline has a split between the design pipeline and the storyboarding pipeline, with some overlapping in between. While I would have loved to show a full boards along with my designs in this process, I soon leaned why the storyboard pipeline is it's own separate being.

Meme of me. Property of me.

The Storyboards

Never the less, I tried. I learned that, when not given a background to work with, a lot of board artists will make their own backgrounds using 3D softwares like Blender or Maya.
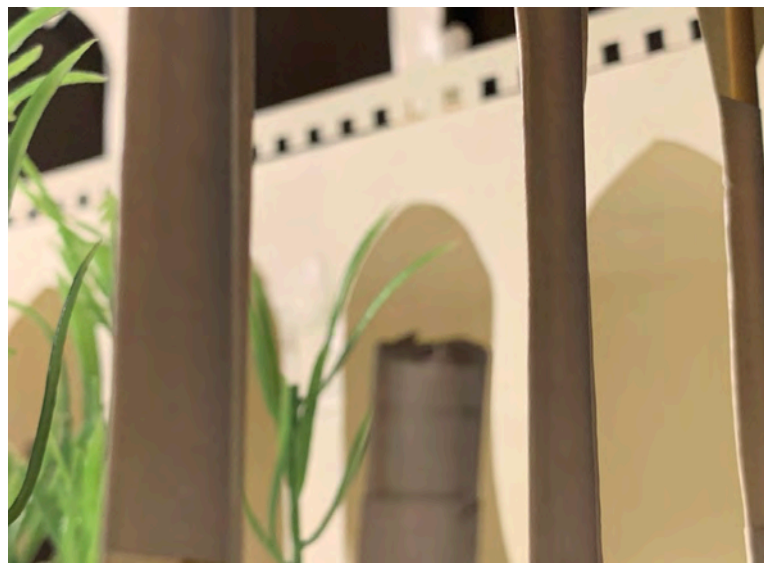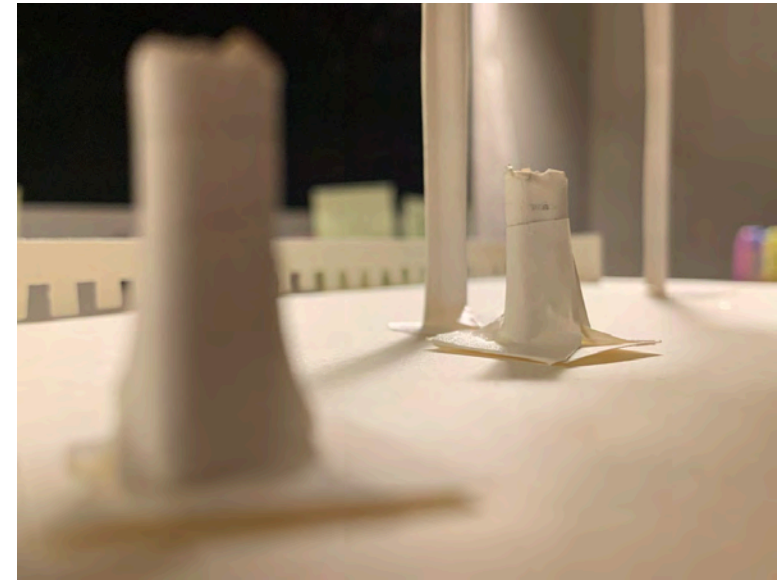
I didn't have time to learn a whole new program in the span of one senior project class, so instead I tapped into my architecture skills.

(Fun fact: I studied architecture before transfering to City Tech!)

Paper model of storyboard setting.

The Storyboards

I took shots of different angles within the model to help me get an idea of how to direct the script.
These were supposed to help me make proper backgrounds.

The Storyboards

In the end, I was only able get a very small snippet of one scene done. I knew I was only going to be able to pull from one scene, but the task was more demanding than I thought it would be. This was a big learning point for me in this exploration.

Please feel free to look at them in sequence here.

The Conclusion

Like any good journey of exploration, you learning just as much about yourself as you do what you're trying to learn about. I can safely say that this journey is no different. Some of the highlight lessons for myself are as follows:

1. The 2D animators would kill me. Drawing my characters 4 times over was already a lot, I could not imagine animating any of them without wanting to choose violence against the designer. However, a CGI artist would have a lot of fun with my designs!

2. I learned how to draw large men! I've never drawn that body type before and there was A LOT of process that went into correcting Tama and Rahjil's bodies alone.

3. I decided to go with a script driven development process, but I wonder if things would have been different if I started with boards. I would like to explore more about that process in the future and see how much in changes the process.

And to you reading, I hope you have all learned as much about the animation pipeline as I have!

Thank you!