For each of your references

Document any differences between how you originally thought about them and how you think about them now.

What makes the animations interesting to you now?

Animation Principles

What animation principles can you identify that are important to the chosen animation and why?

Liz Kaines:

- Run Animation
    - Originally, I thought the animation would be similar to the human run animation, with simple back-and-forth movement on the limbs. On closer inspection, there were a lot of smaller details with the female Au'ra (the race of the character) animation, like a slight sway to the left and right on the arms and body as a whole, the legs move forward at a slight angle towards the center, and there's more bounce to the run compared to the human animation.
    - Closer analysis of the animation made me appreciate the smaller details that give my character a different personality compared to the other races.
    - Ease in and Out
- Idle animation
    - Like the run animation, I also assumed the idle animation was a simple stand-up straight with slight breath-in/out. While there is still that slight bounce to show breathing, the character is mostly leaning to the left, shown by the angle of the legs, and how the left leg is mostly straight for most of the animation, while the right does most of the moving.
    - While still simple, I again find it interesting how small details can make it subtly unique.
    - Squash and Stretch
- Punch Combo
    - I originally thought the animation would be shorter prior to recording reference videos for it, like a one-two punch. After seeing it uninterrupted and closer, its a much longer combo, with little time in between punches, and barely any anticipation. This could have been to show the speed of the monk class.
    - The secondary action with how the legs move, bending and stepping slightly forward with each punch adds to the believability of the animation.
    - Squash and Stretch

Moogle:

- I always thought that the idle animation of Moogles throughout every final fantasy game felt bouncy. Now after analysing them closely, it's not just because of their circular up and down but also the secondary actions of their ball wobbling and bouncing as they try to stay in the air or talk to other players.

- Like the punch combo, I think that their animation shows the importance of secondary actions as they make the personality of the character/object.

Smork Ork

- Run Animation
    - After looking at the idle animation I expected the run animation to be very simple, but it was surprisingly complex. There were multiple moving parts, not just in the arms and legs, but the upper body and even the head. A lot of small details that, when put together, lead to a smooth animation. There was also a lot of animation in the clothing of the characters and the way it got pushed around when the characters moved. Due to the nature of the game. The animation is very limited, so they used as little as possible to achieve the effect. I think they did a very good job, unless you move in really close, you would not be able to tell the way that it was animated.
    - There are a lot of arcs in how the character moves, the arms move in arcs, the legs move in arcs, even the movement in the upper body is in arcs. There is also a lot of easing, where certain parts of the arm will slow down or speed up depending on the movement.
- Idle Animation
    - Originally I thought the animation was very fluid with a lot of movement, but after taking a closer look at it, I noticed that the animation is actually limited to a couple of keyframes that it cycles through. There is a lot of easing in and out in the animation, which gives it its fluid look.
    - I find the animation interesting as they created a realistic and accurate animation while using a limited amount of keyframes and data.
    - The animation mostly relies on easing in and out, as well as arcs, nothing in the animation moves in a straight line, this makes it feel smoother and more alive.
    - The animation also uses easing, as it eases into each keyframe, this prevents it from feeling stiff and forced.
- Attack Animation
    - Initially, I thought that there was going to be a lot of animation in the attack animation. But after watching the reference video over and over, I realized that the animation itself is not very complicated, there is just a lot of secondary animation going along with it to give it the look of a complex animation. The actual motion that the character performs is very limited, there is no squashing or stretching, there are very few arcs, it is mostly just easing. I find it interesting how they have mastered the style of getting as much animation in as possible with as little movement as possible.

Dynamic Components

Compare your initial references with your final deliverables critically, what works, what

doesn’t work, what is different?

Liz Kaines:
Punch Combo

- Compared to the initial reference, my final deliverable has less bounce to it before and after the combo, however, the main action was recreated fairly accurately. One of the main problems I found about the animation was the lack of anticipation between punches, though at the same time, it was the speed that of the punches that made

Idle Animation

- I originally recreated the animation as close to the initial reference as possible, however, found that the reference wasn’t very noticeable when viewed from a far distance, so I’ve modified it by emphasizing more of its movement.

Run animation

- I found that the animation was less bouncy compared to the reference, I wasn’t able to recreate the sway of the animation as much as the original, and lost a bit of that uniqueness to it, however, it does work as a running animation in a way that it is still pleasing to look at.

Smork Ork:

- The player can toggle between different animation states depending on the action that they perform, The animations in our final deliverable do not blend as well as we would have liked compared to the references. The walk and idle animation both work and transition smoothly between each other, but the attack animation doesn't, making the transition from attacking to running too jarring. The running animation is somewhat similar to the reference, but in the reference, there was a lot more secondary animation that breathed life into the character that was not in mine. The same thing can be said about the idle animation, the main movements were there, but a lot of the secondary animation was missing.

Core Animation Concepts

What animation techniques are utilized? (e.g., steering, LERP, morphing, paths, splines, IK, Blending, Motion-Capture) and what evidence supports your claim?

- Steering: Movement of the Player characters
- Lerp: Transition between the title screen
- Paths: Navigation for followers
- Splines: Bird path
- IK: Punch, walk animation, where the fist and feet are placed, where the limbs would bend towards.
- Blending: Transitioning between idle to walk.

Usability & Engagement

How do the animations contribute to the overall experience?
Do the animations enhance player engagement, or do they distract?

- The animations provide context to the player's action.
- I would say that they contribute positively and enhance the overall gameplay experience.
- They are not too distracting and clearly represent the action that the player is performing, but they are interesting enough where it catches the player's attention.
- They also enhance player engagement as they provide additional information about the character, Smork's animations have more weight to them and are more rigid compared to Liz, making him more of a tank of the group. While Liz is more flowy, light, and bouncy, fitting for a rogue.

Technical Considerations
Compare your final deliverables to your initial prototype:
    Observe how the character transitions between different animations.
    Describe the smoothness, speed, and naturalness of these transitions.
    How does the game handle interrupting animations or blending multiple animation sources?
Are there discernible layers of animations being blended
    (e.g., a character running and reloading a weapon simultaneously)?
Document the transitions with control
    i.e. when you tell the character to move forward or reverse or change direction, do they abruptly change animations or is there a smooth transition?
    What are the advantages and disadvantages to the chosen method?

The blending of the animations is much smoother and more natural in the final deliverables, In the prototype, the animations snapped from one to another without any transitions. In the final deliverables The transitions are much smoother and more natural. This can best be seen in the transition from idle to running, where the characters will gradually speed up to their full running animation, and back down to their idle animation smoothly, this gradual shift makes it feel more natural then just switching between the animations, There are also discernible layers of animation being blended, where the player can choose between different facial expressions, these expressions can be toggled during any state, and will seamlessly blend the layers. When the player suddenly stops moving, the animations will gradually blend between running and idle, until the player is fully stopped, this gets rid of any sliding during the animation. The advantages to this method are that the animations look smooth and they seamlessly transition between the animations, the only problem is when one animation has a lot of active movement and blends to one with very little, it can cause the animation and characters to break if the timing is off.