1. Download the animation with skin
2. Move the downloaded animation file to the animations folder (or create animations folder then move)0
3. Open Blender
4. Delete default cube (select > Press X > Delete)
5. File > (left side: under System > Desktop) > Import > FBX
   1. avatar-portfolio-ccr folder – animations – public – models - animation.fbx file
6. Select the character mesh and armature
7. Go to File>Export> gITF 2.0(.glb)
8. Configure export settings:
   1. Format: GLB (Binary)
   2. Include: Check Selected Objects
   3. Transform: Set +Y Up (if needed)
   4. Geometry: Set UVs and Normals checked
   5. Animations: Keep Checked if you have an animation
   6. A screenshot of a computer

      AI-generated content may be incorrect.
9. Chose a file location (models folder), Rename the file!, then click Export GLB
10. Go to <https://gltf.pmnd.rs/> and Drag n Drop the .glb file to it and it will generate a react file for the character
11. Put the .glb file in the models folder on the desktop folder of project
12. Have the .fbx file in the animations folder on the desktop folder of project
13. Under Components, in the VSCode , create a new file called “Avatar.jsx”
14. Inside the Avatar.jsx file, paste the copied auto-generated react JSON avatar file.
    1. A screenshot of a computer

       AI-generated content may be incorrect.
15. Update the export function Model ----> export function Avatar
16. Update the useGLTF(‘/Character.glb’) ---> useGLTF(‘models/Character.glb’)
17. Update the useGLTF.preload(“/Character.glb”); ---> useGLTF.preload(“models/Character.glb”);
    1. A screen shot of a computer program

       AI-generated content may be incorrect.
18. Should get the following render:
    1. A cartoon figure on a cube

       AI-generated content may be incorrect.
19. Fix the shadow and camera angle.
    1. Remove <mesh></mesh> from Experience.jsx
    2. Add <ambientLight intensity={7} />
       1. the avatar should be black anymore
       2. A cartoon of a child with her arms out

          AI-generated content may be incorrect.
20. Go to App.jsx and update the camera angle:
    1. <Canvas shadows camera={{ position: [0, 2, 5], fov: 30 }}>
21. Now decrease the position by wrapping the Avatar in a group:
    1. Experience.jsx –
    2. A screen shot of a computer code

       AI-generated content may be incorrect.
22. Animation make sure to have **useEffect and useRef** in for import code at the top
23. Create an “Animations” folder under the public folder
24. Make sure the Mixamo animation .fbx file downloaded is moved to the Animations folder
25. Create a non-changing variable for animations and rename it and since I am using an FBX format file for the animation, include the path of where the .fbx file is.

*const* { animations: thankfulAnimation } = useFBX("animations/Thankful.fbx");

1. Log it to see if its loading correctly: console.log(thankfulAnimation);
   1. You will see an array and open one of them and you will see the name: “Mixamo.com” and the steps of the animation. I do not want all the animations to have the name Maximo.com
   2. Rename it
2. Rename : helps to keep track of what the animation is, this one is the Thankful gesture

thankfulAnimation[0].name = "Thankful";

1. Create actions to be able to play the animation
   1. useAnimations - uses an array of an ActionClip
      1. parameter 1: **animation name**
      2. parameter2: **group** (on which it will perform the animation)
         1. create the ref={group} on the targeted group
         2. add const group= useRef{};

<group *ref*={group} {...props} *dispose*={null}>

*const* group = useRef();

*const* { actions } = useAnimations(thankfulAnimation, group);

1. Play the action with useEffect – wIwon’t use any parameters at this moment just run by default.
   1. Get the actions and take the one name Thankful and I will reset it and then play it.

useEffect(() => {

actions["Thankful"].reset().play();

}, []);

1. There is an rotation issue that is fixed by wrapping around the character group using a <group></group> and including a rotation fix.
   1. <group rotation-x={-Math.PI / 2}></group>

A screen shot of a computer program

AI-generated content may be incorrect.