● Tool/Resource name

Github/Desktop

<https://github.com/>

Unity 2019 LTS

<https://unity3d.com/get-unity/download>

Substance Painter

<https://www.substance3d.com/products/substance-painter/>

Zbrush

<https://www.zbrushcentral.com/>

Blender

<https://www.blender.org/download/>

Photoshop

<https://www.adobe.com/au/products/photoshop.html>

Mixamo

<https://www.mixamo.com/#/>

● Short description

Github is a command-line tool repository hosting service, We use Github as a place to store and manage our project files. Github allows us to track and modify our work while other team members can track the process of changes to know about the files updates. One of the reasons we chose it since it's free along with the popular and trusts in the coding community as well as how easy and convenient it is to use.

Unity is one of the best engines for game development has been using from idle to top lead company in the industry. Its can be used to create a variety of game type such as three-dimensional, two-dimensional, virtual reality, and augmented reality games, as well as simulations and other experiences. Furthermore, the engine also can be used to create films, automotive, architecture, engineering and construction. We chose to use it because it's suitable for beginners to senior game developer as well as the language that its support which is C# it's similar to Java that we learned in RMIT so its faster for the team to adapt than other engines like Unreal which is using C++ or Godot is Python as Their primary supported language. Along with that Unity Community also very active that can help other people swiftly.

Blender is a free open source 3D creation software that supports multiple 3D pipelines- modelling, rigging, animation, simulation, rendering, compositing and motion tracking, even video editing and game creation. It's popular because of that multi-purpose support feature and no fee needed to download. Normally if you are not using Blender then the workflow to create a complete model for a game, multiple different types of software is needed to complete a functional model like AutoDesk 3D Max and Maya are for 3D modelling, rigging, animation, Substance Painter is to texture paint the model and Marmoset Toolbag for rendering purpose, sometimes Zbrush is also needed for sculpting 3D model.

Zbrush is specialised software for sculpting 3d model. By using Zbrush we will be able to sculpt our own project assets. Even though Blender does support sculpting feature. However, those features are not as in-depth as Zbrush since it has so many features compared to Blender for sculpting. More than that, Zbrush can handle highly detailed model than Blender.

Substance Painter is also an industry-standard software that use to texture paint 3d object. Because of the trustworthy and ease of use with useful functions to help texture paint more comfortable and faster are the reasons along with the experiences our team member had so we chose it.

Photoshop is a graphic editor that's used for digital art and graphics editing that we will use to design UI for our project. Mainly we chose it since most of us are familiar with it than other software.

Mixamo is an automatic software that rigged and animate 3D model that we decided to use to reduce our workload.

● Specific version (if applicable) and Cost (hopefully zero! )

Unity 2019 LTS - Free

Zbrush 2020 - Free

Blender 2.8 - Free

Substance Painter 2019 - Free

Photoshop - Free

Mixamo -Free

Github/Desktop -Free

● Describe any alternatives that you did not use (simply name and link to them).

Autodesk Maya

<https://www.autodesk.com.au/products/maya/overview>

Autodesk 3D Max

<https://www.autodesk.com.au/products/3ds-max/overview>

Unreal Engine 4

<https://www.unrealengine.com/en-US/>

Marmoset Toolbag

<https://marmoset.co/toolbag/>