### **Financial Outline**

# **Assignment 4 – Final Project Documentation**

INFT575 Preparation of Final Business Case

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### Costs

#### **Time**

By far the largest cost for this project will be in terms of time. According to the rough time estimations for each task in the Work Breakdown Structure included as part of this documentation, the total amount of time put into this project should be somewhere around 128 hours. Currently the legal minimum wage in Australia is around \$19 per hour, so the smallest possible amount that my development time spent on the project will be worth is around \$2,432. However, according to PayScale.com the average salary for a junior software engineer in Australia is \$23.85 per hour (*Average Junior Software Engineer Salary* (n.d.)), which would mean that a more appropriate valuation of my development time is somewhere around \$3,052.80.

### **Tools**

The main tools that I intend to use throughout this project are Unity Personal Edition and Visual Studio Community 2017. According to the Unity terms of service, assets developed using Unity can be sold as long as the developer hasn't earned/received more than \$100,000 in revenue or funding in the last fiscal year (*Can I Make A Commercial Game With Unity Free/Personal Edition?* 2015), so that shouldn't be an issue. Additionally, the store page for Visual Studio Community states that "any individual developer can use Visual Studio Community to create their own free or paid apps" (Microsoft 2019).

### Research

One potential cost for the project is buying similar products in order to analyse how they work and to get a better idea of how best to implement my product. At this point, the two most likely candidates are *PSXEffects* and *Retro Look Pro*, the purchase of which will total \$45AUD.

### Example scene assets

Another potential cost is buying assets such as models and textures for the example scene. However, as a solo game developer I'm used to finding and using royalty-free assets with the appropriate crediting as well as developing simple textures and models myself – I'll do the same in this situation in order to help save on costs.

#### Rent

Throughout the project my main workspace will be my room where my computer and desk are located, and as such the rent should be included in the total cost calculations for the project. At the moment, the rate is \$250 per month – however, I won't be using my room for development 24/7. Instead the cost of rent should be based on the amount of time that I actually use this space as a workplace, similar to how tax deductions for home office usage is calculated. As calculated above, the rough estimate for total hours spent on the project is 128 – according to the Project Timeline which can be found in the project documentation folder, development will span from March 1 to November 10 which is a little

over 8 months or 6,120 hours. 8 months of rent at \$250 per month is \$2,000, which is around \$0.33 per hour, which means that the rental cost for 128 hours dedicated specifically to the project is \$41.83.

### Hardware

I already own a powerful desktop computer that can be used for development, but I've also recently been planning on buying a laptop – this would complement the project in that I'd have a less powerful machine to test the package on to ensure that it is well optimised. The product is targeted specifically at indie developers many of whom don't have the disposable income to spend on powerful hardware, and as such it's very important that it runs optimally on the widest array of machines possible. The maximum budget that I'm willing to dedicate for the laptop is \$1,600.

### Misc/emergency costs

It's also a good idea to have some emergency money set aside for issues such as hardware failure and other unforseen costs. Since this is still a relatively small project, I'm going to add \$100 to the project budget if to be used for this purpose.

#### Total costs

According to the above calculations, the total cost for this project will be around \$4,800AUD.

### **Pricing**

As listed in the Research Journal, the two products that I could find for sale that were the most similar to my own (*PSXEffects* and *Retro Look Pro*) are priced at \$20 and \$25 respectively. Currently the Unity Asset Store takes a 30% cut of each sale (*Sell Assets* 2019) which means that if my product is priced at \$25, I will receive \$17.50 per sale with \$7.50 going to Unity. In order to break even on development costs, I'd need to sell 275 licenses.

Due to the fact that this is a student project and reaching this number of sales with a product targeted at a niche market seems unlikely – I don't have any funds available for marketing, for example – my financial goal is to recoup the cost of the \$1,600 laptop that I'm planning to use as one of my development tools. To achieve this goal, I would need to sell 92 licenses to my product at \$25 per license on the Unity Asset Store. If I feel that my end product is substantial enough to warrant the price and remain competitive, I might consider upping the price to \$30 which would mean that I'll need to sell 77 licenses to recoup the cost of the laptop.

### References

- Average Junior Software Engineer Salary, (n.d.), viewed 12/06/19, <u>https://www.payscale.com/research/AU/Job=Junior\_Software\_Engineer/Salary</u>
- Can I Make A Commercial Game With Unity Free/Personal Edition?, 2015, viewed 12/06/19, <a href="https://support.unity3d.com/hc/en-us/articles/205253119-Can-I-make-a-commercial-game-with-Unity-Free-Personal-Edition-">https://support.unity3d.com/hc/en-us/articles/205253119-Can-I-make-a-commercial-game-with-Unity-Free-Personal-Edition-</a>
- Kosman, C, 2019, PSXEffects, Unity Asset Store, viewed 04/05/19, <u>https://assetstore.unity.com/packages/vfx/shaders/psxeffects-132368</u>
- Limitless Unity Development, 2019, Retro Look Pro, viewed 04/05/19, <a href="https://assetstore.unity.com/packages/vfx/shaders/fullscreen-camera-effects/retro-look-pro-133193">https://assetstore.unity.com/packages/vfx/shaders/fullscreen-camera-effects/retro-look-pro-133193</a>
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