

# Costing and Budget

Sad Pumpkin Games

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Assignment 3.1

## Introduction

This paper will cover the known initial startup costs of indie game developer Sad Pumpkin Games. Sad Pumpkin Games aims to release one or more polished minimum-viable-product into either early release or crowdfunding campaign within the first year of being established. The costs contained herein are estimates for the expected needs of a one-year development schedule, including budgets for business fees, software licenses, employee, and contractor costs. In order to save money throughout its first year, Sad Pumpkin Games will outsource a portion of necessary development to external contractors for projects with less-than-full-time requirements, such as per-piece art creation and audio composition, where hiring full-time employees would be cost prohibitive and/or inefficient.

## Sad Pumpkin Games

Sad Pumpkin Games is a remote game development startup focused on lean development strategies in order to minimize unnecessary overhead. The studio lives by the agile fail-fast methodology of game development, building small MVP (minimum viable product) titles which can be focus tested as early as possible. This focus on fail-fast development avoids unnecessary spending on development for games that have no chance of success or features that have no appeal to audiences. The funding strategy of Sad Pumpkin Games is to develop multiple MVP titles within the first year using the minimum budget possible, then crowdfund or seek investment on a per-title basis in order to flesh out and polish successful titles.

## Itemized Costs

Expense	Cost/Unit	Total Cost
<b>Business Costs</b>		
Establish LLC	\$500	\$500
Web Domain	\$20/year	\$20
Payroll Service	\$20/month	\$240
iOS Developer Program	\$99/year	\$99
Android Developer Program	\$25	\$25
<b>Software Costs</b>		

Google Firebase	Pay-Per-Use	---
Google Workspace	\$12/user/month	\$576
GitLab	\$19/user/month	\$912
Unity	\$1,800/user/year	\$7,200
<b>Employee Costs</b>		
Engineer	\$60,000/head/year	\$120,000
Artist	\$40,000/head/year	\$80,000
Remote Work Stipend	\$1,000/hire	\$4,000
Workers Comp. Insurance	\$1.51/\$100 payroll	\$3,020
<b>Misc. Development Costs</b>		
Audio Composition	\$100/audio-minute	\$3,000
Additional Art	\$100/piece	\$1,000
External QA Testing	\$15/hour	\$5,400
Marketing	\$1,000/month	\$6,000
<b>Total</b>		<b>\$229,292</b>

## Overall Cost

The complete cost for Sad Pumpkin Games to enter full-time development on multiple MVP titles with a one-year runway is roughly \$230,000. This sum covers fees for the establishment of the startup, monthly and yearly service and software license fees, employee salaries, and external contractor budgets. The cost accounts for the employment of two full-time engineers and two full-time digital artists, using moderately-low estimates for salary. Additionally, the lowest paid tier of each service has been used for the estimation of service costs for project repositories, payroll services, game engine licenses, and server storage. Like all businesses most of the overall cost comes from labor, which is why external contract work is relied on heavily during the year-one establishment phase.

## Bootstrap Cost

Much like the minimum-viable-product titles developed by Sad Pumpkin Games, the studio has a minimum-viable-cost estimate as well. In the event that funding for the target overall one-year runway cost of \$230,000 cannot be found, Sad Pumpkin Games is prepared to operate on an even more lean budget. The sum of roughly \$15,000 would be enough to bootstrap the company through its first year and the development of one or more MVP titles. This value removes the cost of labor, instead relying on

the free time of the founders and the services of external contract artists and other specialists. This replaces the \$207,000 cost of employees with a marginal bump of \$1,500 to the budget for external per-piece art contracts. Additionally, as the startup no longer has employees, the cost of payroll services, project repository hosting, and other services are removed as well. The most substantial reduced cost of services is the Unity engine license cost, as the \$1,800/user/year cost is only required if the studio receives over \$200,000 in revenue or funding within the year.

## Vendors/Partners

### Google

Multiple Google services are used in this budget due to their relatively low cost, ease of use, and their quality. Google Domains will provide the domain name for the Sad Pumpkin Games website, which funnels into Google Workspace being used to build, host, and make email accounts for the website (via Sites, Drive, and Gmail respectively). Having all the studio's sites, communication, and business storage centrally located with Google will help reduce the overall bandwidth and maintenance of dealing with multiple accounts across all employees.

Firebase, Google's answer to Microsoft Azure and Amazon AWS, will be used for a similar reason. Firebase offers fully featured server solutions, including databases, user authentication, push notifications, analytics, and in-app advertising. The features of Firebase are also mostly free up to a certain point, reducing initial startup costs for the studio and then growing as the number of active users grows.

### Fiverr

Fiverr was selected to be the primary source of contracted specialists for its ease of use and glut of available options. Additionally, the cost structure and contract terms for most contractors via Fiverr is extremely clear, making the process of selecting and vetting external contractors very simple. Using a

third-party service to access these contractors will save the time and resources that would otherwise be devoted to seeking and hiring contractors individually.

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