Coding Coders Who Code Things

Jacob, Joey, Kenny, Zach

EECS 448 Project 4 Deployment Plan

<u>Apple App Store</u>

In order to deploy our product to Apple's App Store, we would need to sign up for the

Apple Developer Program. This required program costs $99 per year and gives access to submit

apps on the App Store for all Apple platforms. It also gives access to beta versions of Apple

software, testing tools, app analytics, and the ability to create Safari extensions. After signing up

for the Apple Developer Program, one will be given access to the App Store Connect website

that serves as a dashboard for submitting and managing apps. However, before submitting an

app, it must follow the App Certification Process and adhere to the App Store guidelines. The

largest of these guidelines is that the app must be built using iOS and Xcode11. Xcode11

includes Swift 5. These programs include all the iOS libraries and is required for development

and submission of an app. Xcode11 will create all necessary archives, profiles, certificates, and

other required documents automatically. Once submitted, the app will be tested by a reviewer.

Prior to submitting the app, it must be free of any bugs. It also must be tested using low network

connectivity, low storage conditions, and tested on older devices. It is recommended that the app

is tested using a third-party program called TestFlight. TestFlight is included in the Apple

Developer Program. Moreover, the developers need to make descriptions and take screenshots of

the app. Once submitted, the app will undergo the review process. This process tends to take

about a week. After it has been approved, the app will launch on the App Store. For

monetization, the developers can set a purchasing price for the app upon submission, offer in-

game purchases, or have in-game advertisement. Overall, Apple tends to take approximately 30% of an app's income.

Google Play Store

To create an app for the Google Play Store, the developers will simply sign into their Gmail accounts and create a Google Play Developer account. The Google Play Developer account has a one-time fee of $25. However, if the developers would like to sell apps or include in-app purchases, they will need to sign up for a Google Payments Merchant account. Using Unity, the process to get the app into the Google Play Store is rather simple. In Unity, the first step is to create a new keystore box. After creating the app in Unity, the developers will build the project and upload that onto the Google Play Developer account. Once submitted, the app is tested, and feedback is given within a few days. Like Apple's fees, Google will take approximately 30% of an app's income from all app purchases, in-game purchases, and in-game ads.

Xbox Live

The first requirement to get a game on the Xbox Live is to create a developer account. These accounts cost approximately $19 for individual accounts and approximately $99 for company accounts. These are both one-time costs. The developer account allows the developers to create and submit apps. In order for the game to be available on Xbox Live, the developers must join a developer program that helps with the submission process. The next step is to set up the game with Partner Center. Partner Center enables Xbox Live for the game and publishes the game to a development sandbox. The third step is to set up and IDE to use Xbox Live. This

includes setting up an IDE to use the Xbox Live SDK for creators or managed partners. After these steps, the developers must add the Xbox Live sign-in code to the project. From there, the developers can add features such as identity, social features, achievements, cloud storage, and multiplayer options. After creating the accounts, Xbox has built in features that can make uploading Unity games very simple. Once the game has been created, the developers can test it on their own Xbox. After testing, the game can be submitted and then eventually uploaded to the Xbox Live Store. Microsoft will also take approximately 30% of total game income.

Printing Disks

For a mainstream $60 videogame, there are a lot of pieces that must come together for a successful game. In addition to the actual code and development of the game, packaging must also be created and accounted for unlike when developing an app. Moreover, the cost of creating the disk itself must also be accounted for. For a $60 videogame, publishers tend to take about $45 per game after retailers take approximately $15 per game. After this cut, there are licensing fees to the console manufactures such as Microsoft, Sony, or Nintendo. On average, this tends to be around $7 per game. Additionally, the expenses of creating, packaging, and shipping the game disks can cost up to $4 per game. However, not all games may sell. This means that unsold inventory may have to be returned to the publisher. If needed, this tends to cost around another $7. After these expenses, this leaves publishers with approximately $27 per game sold. This money will then be needed to pay for development, marketing, and other expenses. In addition to the cost of producing the game, the process of creating the disks is very long and tedious. Overall, printing disks for distribution can be very expensive with respect to app development. Since it is very expensive to create a disk, there must a large return on investment for there to be

any profit. A company would need to sell thousands of copies in order to have enough income to pay the developers and other game designers, marketing teams, and advertising teams. Moreover, if the company wanted to expand their game to other platforms or consoles, this would also incur extra fees because the company may have to seek out other publishers or acquire extra licensing fees.

Attending a Conference

Depending on how large the conference is, the price of having a booth differs drastically. For example, to have a 600 square foot booth at E3, it is estimated that a very low cost would be approximately $100,000. On average, a normal estimate would range between $300,000 - $500,000. The space itself tends to cost around $30,000 for 600 square feet. This is also the smallest space offered. However, this does not include the price of having a booth. On average, booth and expo designers quote around $80,000 - $250,000 for a very basic, standard design. Additional E3 fees include $15,000 to the conference's managing company. Overall, a company would need to be very established and profitable to be able to afford a booth at a large conference like E3. If the company wanted a very high-end booth and a larger space, the prices could grow exponentially. These booths may end up costing millions of dollars. This also does not include any promotional items the company would give away during the expo, airfare, or hotel costs.

On the other hand, attending a more indie game conference, such as Pax, has a significantly lower cost of attendance. The cost for a 100 square foot booth costs an average of $2,500. After spending more money on fees and possible merchandise, the conference tends to cost approximately $5,000 per booth. Like the E3 conference, this does not include any travel or

housing expenses. Pax would be a much more affordable gaming conference for a smaller company that wants to get their games out into the public.

Online Publication

With Unity, there is the option to automatically create an HTML link. This process is very easy to do and is free. However, if the developers wanted their game on their own domain, the domain could cost around $10 - $15 a year depending on the top-level domains and the registrar. Moreover, if the domain name that the developers want is already taken, they could buy it from the owners. However, it is up to the owners to determine how much to sell it for. Lastly, on top of purchasing the domain, the company would also need to invest in web development to create the website. On the other hand, there are paid services that allow for easy web development. These services can range from $15 - $30 per month. Additionally, web hosting is needed to rent out servers to host the website and help with connectivity to ensure that the website is always available. This tends to cost around $8 per month. Overall, to build a simple and small website using all the features mentioned, it will cost an average of $350 per year. However, creating with only the necessary domain fee and webhosting fee would cost an average of $110 per year. This would be an affordable and simple way to get the product into market while also learning web development.

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