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EECS 448

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Maintenance Plan for Rock Chalk Jaymovies

**SYNOPSIS**

Once Rock Chalk Jaymovies is deployed as per our Deployment plan, we need to consider the costs of maintaining the product. The actual web application has always been fairly lightweight and should be easy to maintain with the bare minimum of developer support. Since the user login component and the framework were both completed by third parties (Facebook and Laravel respectively), it will require a bit of maintanence to ensure that upgrades to both frameworks run smoothly, enhancing security while ensuring that the product continues to run.

**INITIAL MAINTENANCE COSTS**

The primary cost in maintenance will be the extensive database needed to ensure that the service can be deployed. We discussed in the deployment plan how the movie data will need to be moved to a custom server (most likely Linode, although other cloud storage solutions exist). Within the first year, we will need to construct a database and scraper that will be able to successfully store currently streaming and available for purchase movies, TV shows, etc. This will require a significant amount of developer manpower and resources. Considering developer time and server costs, we estimated that it would run about $95000 in order to do the revamp in order to get this service ready for production. There is domain name registration to consider as well, which would probably run about $5000 for the year considering the traffic that the app will hopefully be pulling. Therefore, we expect that the initial launch in the first year will be about $100000.

**POST-LAUNCH MAINTENANCE COSTS**

After the revamp is done and the product has been deployed, we will need to continually scrape for new content, discard old content, and ensure that compatibility with the services we need is not broken. As a scraping service (as opposed to service using public APIs from the streaming services themselves), streaming services will have no incentive to ensure that our product works well with theirs. It is not hard to see that as the service becomes more popular that their incentives line more with potentially even purposefully making structural changes to break our app. This will most likely be a fulltime task-the amount of content available is massive, and we need to be able to serve as many streaming services as necessary in order for the program to work. One developer at this point for the first year will be sufficient, but if Rock Chalk Jaymovies ends up catching on it is easy to see that the team in charge of maintaining our database will need to grow quickly. This is where most of our costs will lie and we need to be vigilant about how viable the product will be going forward. We could see the cost of development talent here going up to $200000 due to the sheer amount of work involved in maintaining this database. Developers will need to be on call to minimize downtime and will need to have a strong algorithms background in order to solve the technical challenges that will likely arise by working on a product that most of the streaming market is averse to.

**PLATFORM DEVELOPMENT MAINTENANCE COSTS**

One of the large concerns for Rock Chalk Jaymovies is platform development. As we stated in the deployment plan, our goal is to support as many viable platforms as we possibly can. This will start with a web app on our initial launch, since it gives us maximum flexibility in deploying the features we want onto our product. We also wanted to develop for iOS, since it’s generally easier for developers to make money on their platform as opposed to the Google Play platform, and is more extensible for our goals.

Apple’s tvOS (for Apple TV) was our second desired expansion. We feel that moving to TV is a necessary step for our product, since most people want to watch their content on a large screen. We want to be able to provide the Rock Chalk Jaymovies experience wherever people are, and between web, mobile, and TV we think our bases are mostly covered.

Once these services are up, we have a few incidental costs. Apple will be hosting our mobile application, and they generally expect a 30% cut of revenue as well as a $99/year developer fee. As a result, we plan on initially offering the mobile application for free to customers, with only the web app carrying ads. This means that the only outside fee we’ll need to pay for our mobile app is the $99 developer fee, which will cover the TV expansion as well. As a result, our primary cost in this area will most likely be developer time, as we’ll need to hire a developer specifically for our iOS development. The good news here is twofold: First, we will probably only need to hire one iOS developer for both applications, as the mobile applications will be frontends to a backend that already exists. Second, the technical challenges for iOS development will likely be far fewer than the challenges posed by our database. As a result, we can get cheaper developers (maybe even hire a consulting firm who can contract labor out at much cheaper rates than we can) at around $50000/year, saving money for our backend needs.

**FUTURE MAINTENANCE COSTS**

There are several future costs we need to consider. Eventually, a third-party storage solution will become prohibitively expensive and we’ll need to move our servers in-house. This will require the hiring of IT technicians and other server experts in order to ensure that everything is working properly, an expansion which should be in the upper six figures.

**CONCLUSION**

As you can see, our primary cost of app maintenance is in developer time. We will probably require at least three developers, two working on the backend to ensure user continuity and to limit site breakdowns, and one developer to maintain the mobile and TV platforms. At the beginning, we can use equity to ensure that our backend developers will be compensated near market rates, while we can pay our mobile and TV developer less (or contract his position out) since the amount of work they will have to do will be presumably less. We expect that our app will cost around $150000 in developer costs, with another $10000 in server costs and around $500 in app store and other incidental expenses (domain registration, etc.). This adds up to a total of $160,500 for the first year. Keep in mind that this maintenance cost is largely an estimate-the cost of the product may go up dramatically depending on our development needs going forward. Theapp could get expensive as the amount of data we need to store in our database grows larger and streaming services become less eager to share their data with us.