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HW #2

Introduction

The idea for this project is a social video sharing application hosted on the web. Similar to how Instagram works, users will be able to take short, 15-30 second videos on their phones and instantly share them with their friends. The simplicity, ease of use, and speed of the application will be its main strengths. Simplicity and ease of use in UI design means that users will be more likely to actually use the application. The back-end hosting will also be very quick and efficient in order to further streamline the entire process. Additionally, the application will have social features such as commenting, voting, integration with Facebook, achievements (awards), GPS tracking, and visual effects. Particularly interesting are achievements as they will let users show them off to their friends. Some achievements will have more tangible prizes associated with them such as exclusive visual effects and profile page themes in order to further incentivize use of the application.

Stakeholders

Client

The client takes the most risk as they are usually the ones funding the project. One requirement that the client has is a large enough user base to justify the cost of not only developing the application, but also maintaining and building the infrastructure required to run it. The client should also consider if they already have the infrastructure in place and if it would be efficient to simply run the application on existing infrastructure. Otherwise, they will need to invest in building new infrastructure, which could be costly. Another potential issue the client faces is the possibility of the product becoming too successful. The back-end infrastructure becomes even more critical and comes to dominate the cost of supporting the product. The client also has to make sure that the application is unique enough to become the dominant social video clip sharing website. This is not a particularly unique idea and there are certainly many other companies interested in developing it so it is a risk to invest in this specific product.

User

The user's primary concern is adoption. A social-media website, no matter how technically brilliant, is nothing without a user base. Without social validation that the application is good, nobody will use it. Of course, another major driving factor is cost. Free websites are vastly more popular. Joining the community is just a matter of going to the website or downloading the phone application. Another concern is ease of use and user interface design. It has to be very easy and quick to take and upload a video. The interface also has to look modern and professional as this will give new users a good first

impression. Again, as this is not that unique of an idea, there must be some unique features to make the application fun and worthwhile to use.

<u>Designer</u>

The designers must have a detailed and specific proposal from the client. They must know who the intended market is, platform, budget, and timeline. Since the lifetime of a product such as this is assumed to be infinite, the designers should also design the application to be highly scalable and portable to new platforms that will inevitably be around in the future. This not only includes phone platforms, but server platforms as well as the back-end infrastructure needed to support the application is very important. The designers should also consider the efficiency and speed of the application and determine how much effort is worth on optimizing it. Faster is better, but there is a point where any increases in efficiency are not perceptible to the user and it becomes wasteful to spend more time on it. Another consideration is the visual style of the application. This can be determined by the target audience, which is presumably very broad.

Time and Cost Considerations

This project should be doable as a senior design project as it requires almost no startup cost or physical labor. Android and iOS devices are widely available and it is very simple nowadays to setup some type of hosting infrastructure. There are many free enterprise solutions to choose from, such as Apache and MySQL, for testing different hosting platforms. Even Windows Server 2012 is free for students and, of course, Linux is always free. Mature development tools for these platforms are also free and easily obtained. Hardware wise, hosting can be done on any spare PCs or on virtual servers in the cloud that can be purchased cheaply from a multitude of service providers. Since the core of this product is really quite simple, it should be rather easy to program. The bulk of the time will actually go into testing and tweaking for final use and deciding what features to code rather than figuring how to code those features.

Skills Needed

Most of this project makes use of programming skills, mainly in mobile application and web development. Some knowledge in IT infrastructure and networking is also needed in order to properly deploy a good hosting solution. In addition, there will need to be someone in charge of developing the aesthetics of the application, which is often overlooked in pure-engineering projects. The group will also need to be innately familiar with what makes a user interface bad or good as this will greatly impact the user experience.

SWOT Analysis

<u>Strengths</u>

The primary strength of this application will be the user experience. This application should be so easy to use that the user wants to keep using it. Other strengths lie in the social sharing features. Gimmicks such as visual effects and achievements will lend the application creative, addictive, and competitive

qualities. These features will also be constantly updated to keep users coming back for more. For example, there might be an achievement-of-the-day feature where, every day, the users are given a task of taking a video of something in particular. One day, everyone might be asked to take videos of their pets, while another day, they might be asked to take videos of eating in local restaurants. Additionally, voting can be used to have contests between friends or site-wide for the best video. Ideally, this application will make taking videos more widespread and change the way people look at their cell phone cameras.

Weaknesses

The primary weakness of this application is originality. While a product that covers all of these features does not yet exist, it is still unknown whether these features are enough to make this application stand out. It needs to be very streamlined and polished in order for it to gain acceptance. This is an area in which most product designers fail, especially for engineers without formal training in industrial and product design.

Opportunities

There is an opportunity to shift the entire paradigm of this application in several different ways. It could be turned into a totally different experience by changing only a few things. One way to do this is to turn it into a massively multiplayer social game. Another unexplored opportunity is using GPS for creative purposes, such turning the application into a log book for trips. Images can be laid out on a map for people to see where and what users did. Yet another opportunity is to market the application as a personal memo recorder. Lastly, local businesses can sponsor their own achievements and tie them into coupons and special offers.

Threats

The primary threat of this application is failing to properly implement hosting infrastructure. Receiving, processing, and hosting potentially thousands or millions of videos a day reliably and consistently is not an easy or cheap task. This topic can easily venture into some very difficult and advanced areas of computer science and engineering. Also, as mentioned in the section about weaknesses, failure to design an intuitive and streamlined user interface is also likely. Something so simple and seemingly peripheral to the core of the application is what separates a highly successful company, such as Apple, from everyone else.

I pledge my honor that I have abided by the Stevens Honor System.