**The Twitch API Project**

**Maintenance Plan**

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**Costs**

* Paying developers – For the first year, at the very least, the developers can expect mostly to just get by. So, developers should be paid enough so that they can pay for living expenses such as rent, utilities, travel expenses, etc. A reasonable low-end estimate for Lawrence would be $300-400 a month per person for rent, $100-150 per person for utilities, $150-200 per person for food, and around $30-50 a month per person for regular travel expenses, excluding regular car maintenance. Overall, the estimate would be $580-800 for the developers to just get by.
* Server maintenance – There are three options for website hosting, the first of which is building a server to host the website and all information it needs to store. Should the website see enough traffic, a dedicated server will be needed. Otherwise, the website likely can be hosted on a cheap computer that is hidden away, or hosted using a web host. Until the website becomes popular, web hosting is also a viable option, and costs between $5-10 a month.
* Domain fees – Purchasing a maintaining a domain names costs $10-15 a year.

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| --- | --- | --- |
| **Monthly Costs to Maintain Product** | | |
| **Column1** | **Low-end ($)** | **High-end ($)** |
| Paying developers (x3) | 580 | 800 |
| Web Hosting | 5 | 10 |
| Total: | 1745 | 2410 |
| **Annual Costs** | | |
| **Column1** | **Low-end ($)** | **High-end ($)** |
| Domain name fees | 10 | 15 |
| Total: | 10 | 15 |
| **One time fees** | | |
| **Column1** | **Low-end ($)** | **High-end ($)** |
| Chrome developer fee | 5 | 5 |
| Total: | 5 | 5 |

**Revenue**

Ads

Displaying ads on the webpage could be a potential source of revenue. However, these will take up valuable screen space that could be used to display valuable information to the user. Also, Twitch offers a relatively add free experience to begin with. Normally, ads are only played upon entering a channel or when a Twitch partner runs a commercial. Displaying ads on something that is normally ad free will likely turn away potential users.

Donations and/or Crowdfunding

A common way for users to support developers is for the developer to setup some way for users to donate to them. Popular examples of crowdfunding are websites such as Patreon and Kickstarter, even just a direct Paypal transfer. Setting up a simple “donation” button would allow the developers to pursue features as time allows. Using crowdfunding as a way to generate support would allow the developers to pursue goals for features. However, crowdfunding only works if enough people are interested in a product, so currently that means that there would have to be enough people willing to pay for or support some sort of Twitch randomizer, which is highly unlikely as the typical Twitch user browses specific games or follows one particular streamer. In order to pursue crowd funding as a viable source of revenue, more features would need to be added to the product to entice Twitch viewers to use it. So, a stream randomizer would need to be one feature of the product. The overall product would need to provide some sort of viewing experience enhancement.

Charging for the extension on the Chrome Store

Since the project utilizes the Twitch API, we cannot legally sell it.

General Maintenance Plans

* Keep up with Twitch API updates, as these could potentially break code or lead to bugs
* Put the project into the public eye, and advertise that help is needed to help draw in additional hobbyist developers. A web designer would be helpful to improve the look and feel of the frontend UI.

Possible improvements

* Improve styling of webpage
* Work on random search algorithm to improve performance time. This can likely be done by utilizing a binary search algorithm to search for the minimum and maximum viewer count indices.
* For the extension, some kind of Twitch account integration could lead to features such as:
  + The ability to save search filters
  + Display which channels a user followers are currently online.
  + Randomize a stream within those channels a user follows.
* User authentication is currently implemented on the webpage. That is an area of improvement for feature features. The additional features for the extension could be used for the webpage as well.
* The webpage could also use some sort of specific stream search feature.