

Seat Critique: Maintenance Plan

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1. Introduction

An application, especially in it's infancy cannot merely be maintained and kept in check in order for it to stay relevant and / or profitable. Rather, part of the maintenance of any application is growth and expansion; this is needed to maintain a customer base, spur up new interest from consumers and investors, as well as keep promoters interested in the continuation of running advertisements.

2. Application

The most obvious part of remaining relevant and maintaining and upward growth is to expand the application itself. Part of this is obvious: new features, revised features, as well as larger breadth, of which include but are not limited to:

- One feature that was close to making it in the the initial release was a social-esque component, the Stall-Wall. This feature allows users to, rather than causing damage to great stalls and their favorite restroom, post to an online message board that resembles the quirkiness of a bathroom stall, without the blatant destruction of others property. This would continue to serve as a great outlet for users to enjoy the appl
- Seat-Meet, an optional expansion on the initial application designed to be a safe space for fellow bathroom users to meet each other. Whether it is a polite friendship, romantic journey, or explosive affair, we hope the passion of people's desire for clean, lovely

bathrooms will drive people closer with this powerful paid service. Not only does this service benefit the user base, but it would also allow Seat Critique to venture outside of the initial reviewing sphere once other search engines are dominated, after all: growth is one of the most important components of maintenance when discussing web applications.

- Seat-Heat, a fairly approachable upgrade, would bring advances to Seat-Seek, allowing users to see a heat map of currently in use bathrooms based on users current locations. This would alleviate common issues in bathroom overcrowding, privacy issues, and give cleaning staffs across the market a clearer view of bathrooms that may need more attention due to higher traffic.
- In addition to the aforementioned Seat-Heat, Seat Critique and the team would continue outreach to help businesses operate more smoothly in regards to bathroom cleaning and attention. This relationship would be strengthened, and perhaps be an additional profit center for more enterprise consumers through the addition of a Seat-Leak feature. When customers are upset with a bathroom experience, rather than reporting it unclear due to a single temporary issue (clogs, no toilet-paper, broken sink, and so on...) an alert system (Seat-Leak) would raise a flag to various cleaning staff that there is an issue is that particular bathroom. Not only would this feature help the consumer, it would also mean the businesses are providing a better experience, as well as not needing to randomly check bathrooms, but rather rely on eager consumer input as a means to keeping bathrooms clean.

3. Hiring

3.1. Development Team

This feature rich application would require hiring a team of developers to continue to expand the original application, as well as maintain any codebases. As a small business and recently developed application, a team of around four engineers / designers would be ideal until the application grows much, much larger in terms of popularity and feature list. Hiring the three to four Ruby on Rails developers that best match the applications future needs would cost around \$5,000 - \$8,000¹ in terms of salaries per developer per month.

- Requirements Analyst / Quality Assurance Specialist – Usually the first and the last line of communication, this position would explicitly define, analyze, and document requirements and communicate them to the team. Additional responsibilities, especially emphasized when regarding maintenance of the application include managing the scope of the project, and analyzing improvement data after quality assurance testing and translating the collection of data to concrete product specifications.
- UX and UI Designer – A combination of having an understanding of the product requirements, as well as the knowledge of user interaction make this position crucial to the implementation of product features as well as maintaining user interest. The easiest component to implement and modify is the UI, which is vital to maintaining great usability. Changes from small animation changes to entire overhauls may be needed to add new features or address user feedback.

¹ https://www.glassdoor.com/Salaries/ruby-developer-salary-SRCH_KO0,14.htm

- Team Lead – Somewhat self explanatory, this person would be adept in many trades in terms of web development and would be able to reach their hand in any aspect of the project or company.
- General Web Developer (Development Operations) – Although still knowledgeable of current goings-on, rather than working on new features or projects, this position would mainly consist of maintaining older or legacy codebases, and refactoring / optimizing currently used code.

Although this is a typical team breakout², as with most development teams this structure is open to extension and modification. Core teams, such as UX / UI may be in need of additional members if needed, or shrunk if more demand is needed from other component of the application such as development operations. An additional allotment of maintenance funding may be dedicated to hiring interns, and the costs of recruiting said resources.

3.2. Business Staff

As the developers work and features and functionality of the application, another aspect of the application must be managed, the business. Keeping the business as a profit-center means hiring and paying executives, marketing, as well as the possibility of hiring lawyers in case any dealings need it be. Monthly salaries vary wildly, and could be anywhere from \$7,000³ to almost triple that. This does not include the marketing budget, and is simply the cost of hiring on employees to help maintain the application. At the end of the day, hiring may include, but will obviously not be limited to:

² <https://rubygarage.org/blog/web-development-team>

³ https://www.glassdoor.com/Salaries/manager-salary-SRCH_KO0,7.htm

- Management – A position that frankly could be better executed as an extension as the development team, but better the team remain distant from the financing and funding of the business as to remain focused on the largest goal of Seat Critique: to spread the joy of bathrooms, and especially exceptional ones, through various means.
- Marketing – One of the vital requirements of maintaining an application is to collect and cherish user interest and involvement through the use of advertising and marketing our application.
- Innovation lead – Although not necessarily needed for the maintenance of Seat Critique, an innovation lead would steer the company to break into markets and deals that would have never thought to be even approachable. Again, growth is vital to simply staying relevant in such a quick-turning environment, so the cost of hiring someone in this position would more than pay back itself. Perhaps a large into office may be needed to utilize the thought power that the engineers simply lack, may add in to the cost of hiring out this vacancy.

That being said, just putting more hands on the project will not necessarily keep the application as well as company afloat. The business-focused positions would require varying amounts of funding to perform their given task, such as marketing needing funding to pay for newspaper advertisements, radio spots, or things of the like.

4. Operations

4.1. Operating costs

All great things aren't free, and Seat Critique is not an exception to that. As the application scales to reach larger markets, serve larger amount of people, and collect larger amounts of data, so do the costs of keeping everything in the background operational. Here is a rough estimation of one year of operating costs **assuming market reach of 500,000 daily users**:

4.1.1. Employees⁴

Previously discussed,

		Estimated Monthly Cost
RA / QA Specialist	–	\$5,000
Designer	–	\$6,500
Team Lead	–	\$7,500
Web Developer	–	\$6,000
Management	–	\$12,000
Marketing	–	\$4,000
Innovation Lead	–	\$10,000 ⁵
Total	–	\$51,000

4.1.2. Application

		Estimated Monthly Cost
SSL certificate	–	\$200 ⁶
Google MAPS API	–	\$1,500 ⁷
Server hosting	–	\$500 ⁸
Domain hosting	–	\$10 ⁹
Security	–	\$1,500
Total	–	\$3,710

4.1.3. Miscellaneous

		Estimated Monthly Cost
Marketing	–	\$1,500 (Strict marketing)
Internship	–	\$100
Community outreach	–	\$1,000 (A kind of advertising)
Employee satisfaction	–	\$1,000 (To keep employee morale high)
Legal fees	–	\$5,000 (Extremely rough estimate)
Total	–	\$8,600

⁴ Sources included above

⁵ https://www.glassdoor.com/Salaries/innovation-manager-salary-SRCH_KO0,18.htm

⁶ <https://www.godaddy.com/web-security/ssl-certificate>

⁷ <https://developers.google.com/maps/pricing-and-plans/>

⁸ <https://www.heroku.com/pricing>

⁹ NameCheap

5. Conclusion

As the application grows, so do the costs of maintenance. The technical growth in terms of server, security, and API pulls must be matched with a strong force to grow in terms of features as well, otherwise the application will grow stale and no longer in the public's view.