Classify Deployment Plan

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The end goal of our web app Classify is to enable teenagers to get the most out of their high school experience. How? We believe that the four years a student spends in high school are a valuable resource. The courses a high schooler chooses to take can have lasting impacts on their lives from saving them money on general education classes in college, to shaping a potential career path. We believe these students deserve more information than what's in their school's enrollment guides when making these decisions.

By using our tool, high schoolers can score the courses they've taken by a variety of factors such as difficulty and workload, as well as provide additional comments about their experiences. Students will be able to search for courses and review their scores as they make their important scheduling decisions for their upcoming semesters. In the remainder of this deployment plan, I will discuss how our team chose to deploy our app, and how we plan to market Classify to our target audience, high schoolers.

Heroku

Our team did some research to assess the "how" of our deployment decisions. For a Ruby on Rails application, popular hosting providers include Amazon Web Services, Digital Ocean, Engine Yard, and Heroku among others. Our team chose to use Heroku.

Heroku is a cloud based service that aims to simplify the process of concept realization to URL. What really sold us on this platform was that the actual deployment process with Heroku is facilitated by pushing from a Git Repository. We were already using a

public Git Repository to manage version control and team development, so this took another level away from the complexity of the deployment process. Another aspect that attracted us to Heroku was Heroku Postgres, an add-on which functions as a fully managed database service with a variety of features. The add-on is segmented into four tiers, each level incrementing in number of features, amount of storage, and price. The lowest tier "Hobby" is perfect for Classify, an app that doesn't currently need more than 10,000 database rows (maybe someday…). The Hobby tier will cost us $7 a month, and a bulleted description of the package features is listed below (1):

- Up to 10,000 database rows (as previously stated)
- Write-ahead log (WAL) off-premise storage every 60 seconds, ensuring minimal data loss in case of catastrophic failure
- Includes a full-featured web UI
- Runs unmodified Postgres 9.4
- Maximum of 20 connections
- Designed for apps that can tolerate up to 4 hours of downtime per month

In the event of massive usage growth on our app, we would also be able to easily upgrade to the next tier of Heroku Postgres to support more data which is incredibly convenient.

Marketing Plan

The importance of marketing cannot be overstated when developing a product meant for a public audience. And specifically for Classify, substantial user participation is essential in making our vision come to fruition. Over the next year, our plan to market to our target audience of high school students successfully will be broken up into two primary stages. The first will focus on a restricted group of Kansas City area schools and will utilize direct

relationships and contact within these communities. The second stage will implement a marketing shift toward all Kansas high schools.

Beta Stage

For project 4, we improved upon Classify's prototype to make it ready to meet the needs of our Beta Stage. This version of the app is restricted for use by high school students in the Kansas City area, as mentioned above. We chose to restrict the user base for many reasons that will benefit Classify in the short term and long term. Firstly, **Kansas City is close to home**. As students at KU, we are surrounded by a large population of KC area high school alumni on a daily basis. Personal contact with these student communities will be crucial in gaining interested users, and alumni connections open a door to fostering these relationships with current high schoolers that they know. Establishing points of contact at these schools is important also because **we value receiving frequent feedback from early users.** These informal relationships with current students interested in Classify will allow us to ask real users of our product questions like 'is navigation on our website intuitive to you?' or 'if there a specific need you or your peers would like to met on this tool that isn't already?' and also give them a channel to communicate their concerns or specific needs they want the tool to fulfill that it doesn't already. Since this stage of app deployment would be to a limited audience it would be a more appropriate setting to change or redesign major elements of the user flow if necessary. We also see the potential of Classify creating **valuable data that could be assessed to rank student satisfaction with their high schools**. If the app gains what we feel is enough user participation to implement this feature during the Beta stage, then we would reach out to administrators of the KC high schools in

our database to let them know about our tool and this feature specifically. We would notify these administrators that, if desired, we will send them a monthly report of how their school ranks in the district (and eventually state in next stage of deployment), as well as their top ranked courses.

Besides this technique of manually recruiting customers, our team also researched various marketing techniques for apps specifically (2). We found a lot of other product developers found success in creating a one-or-two page "showcase" of their app for their web audiences (a few examples: Snapchat and Path). Creating a short, thought-provoking product video for this site is also something we're interested in. Entrepreneur Neil Patel says: "Press is the best way to kick start your startup, and the best way to get it is to manually reach out to journalists(2)." Following his advice, we will also prioritize reaching out to local news sources and bloggers to give extra press to our product.

Statewide Stage

The second half of our deployment plan would begin when our team decides we have gained a large and well-rounded enough data set from our KC area schools, given that also at least one full semester of high school has passed in the Beta Stage (as we expect there to be a major increase in new course scores around finals weeks). The point at which this data set is large or diverse enough could possibly be judged by a combination of how many users we have per school on average, as well as how many scores each school has for each course on average. This second stage would remove the restrictions on our user base, and our team would shift our marketing focus to schools in Kansas that aren't in the Kansas City area. Aligning with our strategy in the Beta Stage, personal contacts at the high schools we attended will be utilized to establish awareness of Classify in new areas. These points of

contact at schools beyond the KC area could become "ambassadors" for Classify within their school district, and their job would be to market our tool using fliers in schools and find opportunities to create awareness and interest among students. Some convenient options that come to mind for possible outreach are high school sporting events (especially large rivalry games), as well as tabling during high school lunch periods. We would also have these ambassadors explore advertisement opportunities with the high school newspaper and yearbook staffs. To fill these roles our team would have to be dedicated to seeking out high schoolers passionate about our vision for this tool, partly because besides their title they wouldn't receive any concrete incentive to collaborate with us. Our team would schedule consistent "check-ups" over the phone with these ambassadors to address needs or concerns in their specific communities.

Summary

As college students, we are acutely aware of how our high school experiences led us to where we are today. We want to make these high school experiences as enjoyable and beneficial as possible for students by simplifying and improving their enrollment decisions. Overall, our costs of deployment would mainly lie in a small monthly fee of $8 from Heroku, in marketing materials for our ambassadors, in our production fees for our product video, and in advertising fees if we chose to run ads in high school newspapers. This web application is a worthy investment of our time in effort because we are passionate and informed about our audience and vision, and because Classify is of low financial risk.

Sources

1. https://devcenter.heroku.com/articles/heroku-postgres-plans

2. https://www.entrepreneur.com/article/229305