

Deployment Plan

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Our team's goal is to provide high quality, engaging and therefore ultimately distracting resources for procrastinators around the nation. However, in order to distribute our product to students across the nation, we need to devise a deployment plan. Some of the most important deployment measures involve issues with web servers, security, and advertising. Additionally, activities such as attending conferences could improve our development knowledge and introduce us to other helpful resources.

The first step needed to deploy our web-based arcade is to purchase access to a shared server to host our website. We currently host the arcade on the KU server; however, in order to release our product to the market, we have to find a different host since we won't be students forever and we are only allowed a limited space on the KU server. The chosen hosting site must meet certain specifications because our website uses a PHP back end and stores data in a MySQL database. One option we have found is a provider called Cloudways. Cloudways supports both MySQL and PHP as well as provides many other features. They offer 24/7/365 support, and a no commitment, month-to-month payment plan so we would not be locked into a long-term contract. Cloudways also offers an unlimited number of applications that can be hosted on any plan. This would allow us to create branches off of this arcade and expand our horizons. The pricing month to month varies on the RAM, processor, storage, and bandwidth as well as the web service we want to use. Some web service options are DigitalOcean,

Linode, Vultr, Amazon Web Services (AWS), and Google Cloud. The price could be anywhere from \$10-\$230 a month. Since we would be a small startup, we would most likely choose the cheapest \$10/month option until we establish our user base. If the arcade takes off, we could upgrade the storage, bandwidth, and other benefits, or switch to a larger web service like AWS.

We will also need to consider purchasing a domain name, so that users can easily access and remember our website. One of the keys to establishing a loyal user base is to have a memorable and clever domain name! The characteristics of our target population of procrastinating students requires our domain name to be short, easy to spell, instantly recognizable as offering games to play, and ideally something that would not be blocked by a school's firewall. Domain names tend to cost around \$10 a year. Some popular companies from which to buy domain names are BlueHost, GoDaddy, and HostGator. However, there are many domain name companies that will also host your website, so it may be beneficial to find a company that can provide both a domain name and host our website. The hosting company would again have to be able to support PHP and MySQL. If we were unable to find such a company, we would need to put resources into redesigning our game on a different database and back-end. This could cost significant time and labor.

Something we would need to improve upon early in our deployment is security. It is likely that the hosting web server we choose to utilize would come with important security benefits; however, to be safe, we would also need to take our own measures to defend against hackers. One change we could make is to require our users to create a

strong password. Currently, we ensure that users input no fewer than 8 characters for their password, but we do not enforce having a letter, capital letter, number, and special character. Additionally, we should use HTTPS to send for verification of passwords to verify that no one can interrupt connections. This is especially important to ensure the integrity and confidentiality of data used on websites.

One non-expensive way to promote our web arcade is by word-of-mouth. If we can hook our friends on playing the games, they will in turn tell other people, ultimately spreading the arcade further across the university. However, this will not take our website beyond our campus, so finding advertising methods beyond word-of-mouth is a must. We will need to determine an advertising budget and then target users on different platforms. Social media could help us target a younger audience that would be interested in our product. For example, we could advertise on Instagram or Facebook for anywhere from 20 cents to \$2. Members of our target audience most likely use one or both of these forms of social media. Other websites we could try to advertise on could be more academic, student-focused websites such as Quizlet or Chegg. Students tend to spend a lot of time on these sites during the school year and could be enticed to take a study break on our website.

Another early advertising tactic we could use is university emails. Currently our engineering department sends out weekly emails describing new and upcoming events and opportunities. We could request they put an announcement for our new product. Also, we could ask professors if we could come to announce and promote our product at the beginning of their classes. We can ask our fellow engineering students to test our

website under the pretense of bug testing, but which would also serve to potentially hook them on playing our games. These announcements could start spreading the news of the website in our own community and possibly allow us to gather feedback from classmates on how we could improve. We could also temporarily add a feedback field onto the website to allow early users to report bugs or suggest features and games.

Additionally, we could spread the poster displayed below throughout campus on bulletin boards, tables, libraries, and lecture halls as well as local companies and coffee houses. Whereas our email announcements are limited to the engineering department, print posters can spread information about the website all over the campus and local community. By using bright colors and intriguing or humorous phrases like “Procrastinate Now!” or “Just Do It, Tomorrow” people will be drawn to read the sign and visit the website.

NEED A STUDY BREAK?



Try out the new Study Break Arcade!

Includes fun games to pass the time and two
player games to include your friends in the
study break!

<https://people.eecs.ku.edu/~a035d579/eecs-448-project3and4/>

In order to improve our game development understanding, we could attend the Game Developers Conference in San Francisco, California. At first, we would attend primarily to learn about the business aspect of game creation and how to create popular, modern games. However, if our arcade becomes a big hit, we might be able to have a table at the conference in the future. The cost to attend the conference with the most basic package is \$199 per person. If all of our members choose to attend the conference, this would amount to \$995. Additionally, we would have to pay for room and board as well as transportation costs which could range from \$300-\$600 per person. Though this seems like a large cost, the benefits of attending the conference are large. For instance, we could meet many different developers who might have ideas for our product or who might want to take part in its development. We could use the conference to learn more about security, game development, and how to expand our business. We could also discover and talk to other companies who provide services that might improve the functionality or other aspects of our website. To reduce the costs of conference attendance, we could send two or three of our team members instead of everyone.

Another crucial feature to improve upon before launching is the test suite. We will need to build a more robust test suite to test every aspect of our website and games. Currently, we have multiple tests per game, but we should figure out how to write tests for our PHP backend as well as the home page. We don't want our website to have many bugs especially at initial deployment, because people won't want to visit the site

again if they experience a lot of problems. Too many bugs can also lead to poor word-of-mouth, which would inhibit our ability to grow.

The most important things to consider when we try to deploy our product is finding a shared hosting server for our website, taking security measures to protect users' information, and developing an advertising plan to spread the word about our web arcade. These three considerations are vital to kick starting our website commercially. Long term benefits come from conferences and a solid test suite. Attending conferences, such as the Game Developers Conference, could provide invaluable knowledge that we can implement in the future, and a thorough test suite will ensure our website works properly and that the games function as expected, which will create a positive and enjoyable user experience. This plan will help lift our product off the ground, but we will need another plan to guarantee the longevity of our product. Long live procrastination!