Group 3

AfterSchoolHours Deployment Plan

**Purpose**: The purpose of the Deployment Plan document is to define a deployment plan for the software application/website. This document is comprised of a one section Deployment Plan. The Deployment Plan section contains detailed schedule, resource, technical, and support information necessary for successful deployment of the software application/system.

Deployment Plan

This Deployment Plan section provides detailed information on the deployment of the software application/website. Included in the Deployment Plan are scheduled and resource information, deployment methods, technology infrastructure and support considerations, deployment testing and training requirement, and any known issues with the software.

Deployment Schedule

|  |  |  |
| --- | --- | --- |
| **Deliverables** | **Delivery Date** | **Location** |
| Project Requirements | February 16, 2017 |  |
| Use Cases & Sequence Diagrams | February 23, 2017 |  |
| Project HLA & Class Diagram | March 13, 2017 |  |
| Repo Setup | March 14, 2017 |  |
| Website Host | February 20, 2017 |  |
| Web development Progress / Previews / Database Schema | Up until April 30, 2017 |  |
| Functionality Testing/Debugging | Up until May 11,2017 |  |
| Deployment Plan | April 27, 2017 |  |

Deployment Methods

As we deliver the final product to the client we will make use of 000webhost. This is a hosting company that allowed us to use a free domain as well as manage our website. We will allow the customer to access our website from their computer and register for an account. 000webhost has great features which allow our development team to make constant changes to the website. If the user has account issues after they have registered and/or logged in, we can verify and check errors or changes that have been made. We are use a myriad of different ftp clients to upload our files to the web; we are making use of FileZilla, SmartFTP, and Web File Manager. This will allow for our development team to access our hosting website from home and make changes from their local home computers to our server on the Internet. If the client reports an error, we can make the website temporarily unavailable, go through the 000webhost and review/make changes. We also note that phpMyAdmin is utilized through 000webhost. This is the back-end of the website and makes use of the client-server communication. A combination of PHP/MySQL is utilized and is deployed upon the users. This is all in accordance as stated to the customer beforehand.

Deployment Details/Instructions

1. User will go to website <https://afterschoolhours.000webhostapp.com/>
2. User will register for an account
3. User will register for an account
4. User will then login into their account
5. User will proceed to book venue by choosing state, city, and level
6. User will then choose a school and proceed to venue selection
7. User will proceed through registration of venue and confirm process
8. User will specify venue costs, usage for, and location all throughout process

System Dependencies

* Website built using HTML, CSS, JavaScript, and PHP, with access to a database
* Anyone with a connection to the internet can access this website to fulfill their needs
* Site will support mobile websites as well as any other IOT device
* Operating Systems requirements are not applicable, widely accessible to everyone
* As noted the contact between POC and the rest of the software team to relay messages, if/when the site goes down due to unforeseen circumstances this be professionally handled
* Messages and inquiries upon the site will be made from an email/social media suggestion on the website

Customer Support

We anticipate giving the client a demo in May 2017 and showing how the website/project performs at its optimum peak. The customer will be briefed thoroughly upon all uses, knowledge and responsibilities upon the site. We as a team will provide the user with a technical presentation well after the fact to provide ample support to the usage of the website. This will allow for the customer to engage the website and have a test run. We anticipate things to go smoothly but will always provide a bridge of communication.

Deployment Process Description

When the final tested version of the website files have been completed we will deliver them to the client and deploy them on a custom built webserver. Using a personal webserver allows for a larger amount of control and gives our website less influences to depend on which in turn decreases the chance of failure. We will be recommending server hardware that can host easily multiple websites and adapt to any change the client wishes to make in the future while simultaneously meeting the client’s intended budget. The focus of our deployment operation will be to maximize control while allowing the server to remain user friendly so insist the client use the Ubuntu version of the Linux operating system and the Nginx application as a webserver. We chose Ubuntu because the Linux command line is an easy to learn feature and provides a lot of speed and control due to the fact you can perform many task commands without having to visually select options. Nginx is a webserver application that rivals the well-known and used apache webserver. However apache provides an excessive amount of unneeded features for the clients intended use while Nginx can perform all the main functions of a webserver many times faster than apache using less resources. Once the server is fully functional and configured to meet the needs of the client, the product will be introduced to the server and made operational. In order to transition complete control over upkeep of the website, we will request the client hire a server technician to be trained by us so all maintenance can be performed without outsourcing.

Steps for Deployment

1. Evaluate and approve the operational readiness of the site
2. Schedule a meeting with the client to discuss details about the hosting process
3. Explain to the client their role/responsibilities in creating and maintaining the webhost
4. Obtain input from client to make decisions on the most appropriate server hardware, operating system, and webserver to use for their hosting server while providing technical insight and recommendations if needed.
5. Assemble the server hardware at the client’s location of choice.
6. Install the OS and connect the server to the internet. (We will recommend to use Ubuntu version of Linux as an OS)
7. Install the chosen webserver application. (We will suggest the webserver: Nginx)
8. Load the website definition files onto the server.
9. Create a copy of the website files to use as a live version.
10. Using the appropriate commands for the selected application, enable the copied files to be recognized and used by the webserver
11. Configure the remaining webserver settings to fit the needs of the client.
12. Test client server communication.
13. Test access and all website functions from multiple systems.
14. Compute site/server performance and ensure it is fulfills expectations
15. Train client hired employee in server maintenance and upkeep with a series of hands on sessions and tests that will show the depth of their knowledge and ability to solve possible future problems.
16. Monitor site and record performance for set length of time
17. If the site is functioning as expected for the entirety of the monitoring phase, release full control of the product to the client.