Dream Team Supreme RAD Week 2

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Performance Report

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## Introduction

This document is to relay options in regards to testing the website in a few different ways. Due to the project still being in the pre-alpha stage of development there are some restrictions on testing options since the website is not available outside of a private network.

## Why do we need Performance Testing?

Performance testing is required to ensure that the current version of the software not only works but works with many different hardware / software that the intended clients could be using. For example, as a website there are a multitude of different browsers that people can use including Chrome, Edge and Firefox.

All these browsers work in slightly different ways and have slightly different configurations so building a website to work on all the most common browsers is a must.

Also different clients could be using different hardware such as desktops, laptops, tablets and mobile phones. As such making sure that the screen changes size in a responsive manner to fit all the screens and maintain its basic functionality is also a must.

## Private Performance Testing Options

During development the team will be using a private server to develop, test and present to the client. As of such we are unable to do any public testing due to these restrictions. But we can do extensive testing on a private snapshot of the total project. This is useful because we can do incredibly robust testing to see where the limits are, breaking the website intentionally. Even though we are breaking the website because it is private there will be no damage done to any other systems and any other risk will be mitigated. We can also control many variables in a private setting also.

There are many software’s available to test a website that are free and paid. Below is a table with some examples.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Program Number** | **Program Name** | **Description** | **Cost** | **Viability** | **Will it be used?** |
| 1 | GTMetrix | By inputting the URL of a website GTMetrix can give you all the info you need to analyse such as Ping, loading times, page size and all sorts. | Free | This site is unviable for our testing since you need a public URL to get the information. The Website we are testing will be private. | No |
| 2 | Site 24x7 | Allows a website to be monitored and to send out feedback to the developers with updates so the developers do not need to manually check if the site is working or not. | Free version (5 servers 10 alerts per month)  Paid Version (5 servers with 50 alerts per month.) | The free version allows long term testing to make sure that the website is up and running at all times. This would be awesome for a long term project but since out website development will only be 3 weeks a monthly update is not the most useful. | No |
| 3 | WebPage Test | Runs speed tests on multiple locations around the world. Allows developers to see how their website performs while being accessed from different users. | Free | Even in a private setting allowing the developers to see how their website performs with the use of VPN’s or other such means would be a great way to ensure that the website is stable. | Yes |
| 4 | Varvy Pagespeed Optimization | Allows the developer to input a URL to receive performance metrix while examining CSS delivery / Javascript usage and other such things. | Free | Due to a public URL being required to get the information this site is unviable for our testing. | No |
| 5 | Google PageSpeed Insight | Free | Allows developers to input a URL to get website speed for different devices in a simple and easy to understand format. Different browers can also be used to run the Google Pagespeed site to look at our website. | Although a URL is used to get the information I believe this is worth using to test since it will give us results for different devices such as Cell Phones and tablets. | Yes |
| 6 | PingDom | Allows 24/7 monitoring of a website and gives you minute by minute updates. | 14 day free trial followed by subscription. | The free trial fits well within our development plan and allows us to receive updates via SMS or email so that the entire team can stay up to date. | Yes |

## Public Testing Viability

Since we are still in production and development we are unable to public the website at this time. Due to this constraint our testing will be limited but the above plan still has some viable options to do an alpha and beta test and when the time comes to make the website publicly available we can do a more comprehensive test at that time.