



A Cost Effective Sharepoint Platform Attendance Tracking System

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ABSTRACT

The economy is made out of ventures and organizations. Economy has survived in light of the fact that the business pioneers had possessed the capacity to adjust to the changing times however development. Before whatever else individuals maintain their business physically, squandering time, cash and exertion. Information in paper are truly consuming physical room in the workplace; Data are effortlessly lost making misfortune the organizations. At the point when the paperless age came to be, a great deal of engineers made apparatuses that some overlooked how they can completely amplify it and relied on upon its default out of the container highlights. Once in a while that on the off chance that it doesn't address their issues they toss it out of the receptacle and by new programming to fit their business needs. This is the primary motivation behind why it turned out with this paper to show how a basic stockpiling site can be amplified and utilized for any business preferred standpoint and extending its capacity to meet our everyday needs.

Keywords

SharePoint, Server, Cost Benefit Analysis, Attendance, Tracker, Proxy, Trigger, MOSS

1. INTRODUCTION

Innovation can be found anywhere, inside your home, car, mall, office etc. with this innovation present around us; we can use this on our advantage to the betterment of our personal, career and business growth. Talking of business we have tools in our offices that we seldom underutilized and don't unlock its full potential, some of the organization still uses an excel file for tracking and logging the activity of their staff, some that have the door smart card entry don't have the time to check all the log ins as a lot of people are using the door and it's a waste of time asking the logs from the security office. There are innovations that are just within our reach but we are not aware that it is possible to use. Currently employee attendance is being tracked on file only (basically when an employee's comes in they check off their name on an attendance list). Since every employee has a computer and SharePoint program is already installed or loaded on their computers what not create an application inside the SharePoint platform where they can submit their attendance without using a plugin. Using SharePoint means ease of access when it comes to accessing the site; also it is very cost effective as we can eliminate the use of a third party tool. This is a thorough investigation of how we can augment the utilization of the SharePoint 2010 Platform as an altered participation following framework that can be utilized by organizations and organizations. This study will indicate how we can tweak a basic stockpiling site and change over into a following device with are did shape and altered page. This

study was done on standard old adaptation of SharePoint the SharePoint 2010/Microsoft Office SharePoint Server; this is a full form of an entrance based stage for cooperatively making, overseeing and sharing reports and Web administrations. SharePoint takes into consideration stockpiling, recovery, seeking, chronicling, following, administration, and giving an account of electronic archives and records. A large portion of the capacities in this item are planned around different lawful, data administration, and process prerequisites in associations. For some this is only an instrument however for us we realize that this device holds increasingly and can help out the association, by examining, investigating and extending is ability we observed that SharePoint's custom improvement capacities give an extra layer of administrations that permit fast prototyping of coordinated web applications. Likewise we as a whole realize that SharePoint is incorporated to the Microsoft office where it could tweak some of its structures. As a representative, it additionally know that it is so vital to have an apparatus where I can return more to my day, rearrange my life and spare cash that can re-put into the business. This is likewise rehearsing incline conduct by wiping out pointless buys only for a straightforward errand like most representative participation programming is so hard to discover that it's best left to IT experts. This study can give esteem as the information of the tracker can be utilized for business investigation, including planning and other crucial everyday capacities, its straightforwardness is surprising that once apparatus has been set up, you can request that a little child push the catch to record your time. Given the straightforwardness you can't likewise prevent the significance from securing the information it will hold. These information can be associated and work streamed to different devices that has been set in SharePoint and giving the information entire new point of view, by one push of a catch it can supply information to workforce, Managers, Business investigator and to the consistent change group, In short this basic apparatus will regarded to be an extremely imperative spine of an associations who endeavor to be on top.

2. LITERATURE REVIEW

Fox [1] SharePoint is an energizing Web-based innovation. In its fourth form, SharePoint has experienced a significant development since the 2003 discharge, and the sorts of things you can do with SharePoint keep running far and wide. The individuals who have had the opportunity to see the item grow up will be shocked and content with a significant number of the progressions that are presently incorporated with the stage. Truth be told, existing SharePoint designers will witness what apparently is a huge change in the components and usefulness that SharePoint gives, and also an advancement in the apparatuses bolstered and the engineer group that energizes around the innovation. Murray [2] appears to be in a flawless

tempest of innovation and workforce improvement, where a few essential parts of the way we work are meeting up. Since the mid '60s, the utilization of work groups has been on the ascent. Fortune 500 organizations are brimming with them. Most average sized organizations have understood that work groups can support efficiency, help chiefs oversee, and give aggregates more responsibility for work they perform. Groups empower singular laborers to get together for the sake of a shared objective delivering the yearly report, for instance and convey their own individual abilities to the blend. Your work group for the yearly report may incorporate an author, a proofreader, a visual creator, a generation and format individual, a corporate correspondences individual, and somebody who can give the money related detail. Furthermore, here's the uplifting news information is demonstrating that working in firm groups helps innovativeness and efficiency, and individuals appear to be more joyful at work when they're a piece of a fruitful group. Wisnowski [3] Integrated Windows verification empowers Windows customers to consistently verify with SharePoint Server without having to physically give qualifications (client name/secret key). Clients getting to SharePoint Server from Internet Explorer will verify by utilizing the qualifications that the Internet Explorer process is running under as a matter of course the certifications that the client used to sign on to the desktop. Administrations or applications that get to SharePoint Server in Windows coordinated mode endeavor to verify by utilizing the accreditations of the running string, which, as a matter of course, is the personality of the procedure. Yardeni [4] For those new to Microsoft Exchange Server, this segment covers the historical backdrop of the Exchange Server product offering. Now and again as a newcomer to an innovation, it's difficult to hop directly into the innovation on the grounds that everybody working with the innovation alludes to past forms without contemplating that a few people won't not recollect what was in the last update, or in the item several modifications back. Along these lines, this area is planned to give you a little history of Exchange Server so that the form numbers and real outstanding components and capacities bode well.[5] One of the hardest difficulties maybe is finding the best method for recording and monitoring those, so they can quickly draw the required group of audience's consideration regarding them and hold them returning for possible upgrades. Regularly, many messages are just told and remembered for it is basically simpler to keep little bits of data, for example, directions at the top of the priority list and disregarding to newcomers than keeping a sensible track of those. [6] SharePoint's fundamental installation prerequisite is to have at least one operational server with either of the Microsoft Windows Server 2003 or 2008 editions installed. [7] The last released WSS version is Windows SharePoint Services 3.0 ; version 4.0 is being developed and is coming forth introducing a new branding name –SharePoint Foundation 2010 [8] MOSS is the commercial upgrade of WSS and extends both the core and end user features. [9] MOSS boosts the SharePoint platform to a higher level thanks to its numerous extensive business-oriented features. [10] To a certain extent, MSS can be understood as the extracted search module of MOSS, being available as a standalone application, as MOSS does integrate all the search characteristics of MSS. [11] MSS is an affordable alternative for organizations not demanding the extended MOSS features except for search.

3. METHODOLOGY

SharePoint Attendance tracker application will be based on a rundown based inside the SharePoint 2010 site, it can be an intranet or extranet relying upon the business set up, SharePoint Attendance tracker application will have 2 section the site information base where the log ins and the log outs are put away and the UI.

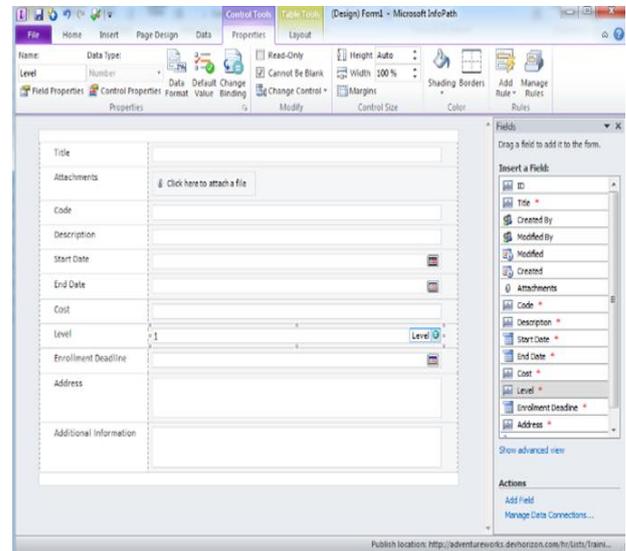


Figure 1 – Sample form using Microsoft Infopath 2010

This attendance tracker can send a workflow to report monthly to the controls team via Alert me option, an email will be sent by the SharePoint system via outlook email set by the administrator.

3.1 Conceptual Design

SharePoint Attendance tracker application will be exhibited as a page to the end client; the tweaked interface will be the presentation page for the SharePoint Attendance tracker application. Legitimate marking will be taken after standard size and text style will be utilized. SharePoint Attendance tracker application can be bookmarked or can be made with an easy route to the clients' desktop for convenience, this application can be opened by the different clients and spare information at the same time, on the foundation you can conform the revive of the site so that all information is reflected ongoing to the information base. When log is submitted it will consequently record the clients ID and the time the catch was activated. Time/Zone Setting can be determined to the site administrators setting.



Figure 2 – Log in / Log out button

Attendance Log In		
<input type="checkbox"/> LOG IN/LOG OUT	Created	<input type="checkbox"/> Created By
LOG OUT	27/09/2016 08:14 PM	[REDACTED]
LOG OUT	26/09/2016 09:32 PM	[REDACTED]
LOG OUT	23/09/2016 08:08 PM	[REDACTED]
LOG IN	23/09/2016 09:53 AM	[REDACTED]
LOG OUT	22/09/2016 07:31 PM	[REDACTED]
LOG IN	22/09/2016 09:59 AM	[REDACTED]
LOG OUT	21/09/2016 07:14 PM	[REDACTED]
LOG IN	21/09/2016 09:30 AM	[REDACTED]
LOG OUT	20/09/2016 08:03 PM	[REDACTED]
LOG IN	20/09/2016 09:27 AM	[REDACTED]

Figure 3 – SharePoint Database

3.2 Cost Benefit Analysis

SharePoint Attendance tracker application will only incur a small cost for the storage, depending on the business pricing if the storage will be priced per GB or per increment of GBs like for a site default 50Gb is allocated and can cause about a thousand dollar per increment of 50Gb, if this is the case SharePoint Attendance tracker application will only cost you about a dollar. User cost though will differ as pricing will be 20 – 50 dollars annually, but user cost covers all platforms already. Compared to a third party tool that can cause a company a huge amount of dollars on their IT budget. The SharePoint Attendance tracker will only share a common server used by other sites in an organization or a business.

3.3 Requirement Analysis

Pyles [12] SharePoint Attendance tracker application will continue running on a windows OS vista or more, It will be made on a SharePoint 2010 Platform, it will be supervised by a site director or gathering of support, the interest tracker will be trailed by the business controls assemble which has a full however confined get to, it mean they can download reports yet can't delete log and archive the data. This ought to be conceivable through a current SharePoint site by the affiliation or the Company.

3.4 System Architecture

Microsoft Corporation [13] as a matter of course, all administration applications are incorporated into the default amass. You can include and expel benefit applications from the default aggregate whenever, including when you make one.

When you make a Web application, you can choose the default gathering or you can make a custom gathering of administrations. You make a custom gathering of administrations by selecting just the administration applications that you need the Web application to utilize.

"Numerous locales that live in various Web application and application pools can be brought together by sharing administrations in the default intermediary gathering to give scientific categorization, content sort, and profile sharing over an intranet. This accommodates personalization and endeavor wide institutionalization crosswise over numerous locales and applications. This decision gives a case of adjusting procedure detachment (by executing separate Web applications and

application pools) with the business need to share data and influence profile information over the applications.



Figure 4 – Topography of the whole site

3.5 Requirement Analysis

SharePoint Attendance tracker application is tried with pilot client, as test appeared above client will attempt utilize the apparatus for a week to test dependability, another client will join to try out the numerous information sparing component. Controls group will test and download result on the off chance that it considers the downloaded give an account of the apparatus in a type of an exceed expectations record. The participation tracker can be moved effectively utilizing a SharePoint Designer 2010 rendition if the business wishes to move up to SharePoint 2013 or 0365 Azure cloud stage. The primary thing to comprehend is the engineering of SharePoint 2010 for SharePoint 2010. From the base up, note first that SharePoint 2010 keeps running on the Windows working framework (OS), specifically Windows Server 2008 or 2008 R2. When you introduce SharePoint, there is likewise a reliance on SQL Server and ASP.NET. SharePoint is based on the ASP.NET establishment. Accordingly, in case you're acquainted with ASP.NET, a number of the foundational programming ideas will be well known to you, for example, Web parts or ace pages, both in the engineering and automatically. In SharePoint 2010, you have two principle pieces that make up SharePoint: SharePoint Foundation 2010 and SharePoint Server 2010. While these basically speak to two unique versions of SharePoint, SharePoint Server 2010 is based on top of SharePoint Foundation 2010

3.6 Input/output reports and analysis

We can now say that SharePoint participation tracker is a financially savvy, straightforward, simple to utilize, community apparatus. The instrument can be effortlessly incorporated with a current SharePoint site of a business or an association without the assistance of an outsider or an overrated device; it is accordingly more financially savvy. Usability for clients as you can just bookmark it on your desktop for simple get to. Framework upkeep is a breeze as this is simply arranged on an indistinguishable server from alternate destinations in the office so there is a standby support. On cooperation this device can be shared to numerous clients and they can utilize the application at the same time.

3.7 Implementation plan

SharePoint Attendance tracker application Proposed implementation plan:

1st Phase: Setting up Database

2nd Phase: Customizing and publishing of the customized form to the SharePoint server

3rd Phase: Setting of admin and user access

4th Phase: Testing of the tool

5th Phase: Onboarding of the users

Final Phase: Go Live of the tool

3.8 Description of the prototype

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The Prototype is built inside an existing SharePoint storage site, user interface will be on a standard width of 500 pixel by 800 Pixel height, interface will include the quick reference guide on how to use the tool and some tips on how they can effectively use it, an email of the site admin will be indicated and can trigger an email to the site owner for reporting an issue. Button for log in will be in the middle for easy access. Once user is done and has clicked on submit button, 2 and page will automatically show thanking the user.



Figure 5 – Tracker System prototype

4. RESULTS AND DISCUSSIONS

SharePoint has been labeled as one of the stages that lone a couple business knows, SharePoint was introduced more as a capacity and record site, This study demonstrates something else, SharePoint can be utilized as a standout amongst the most proficient device an association can have, Creating the SharePoint participation tracker is only something that you can redo and use for your leeway, Yes on the off chance that

you can investigate the stage and in the event that you have the promptly accessible assets and right get to you can make this exceptional apparatus. SharePoint participation tracker device spares you organization cash as well as will sort out and maintain your business. SharePoint participation tracker can be relocated to SharePoint 2013 and on the off chance that you have the 0365 SharePoint stage the most recent of the renditions, you can improve your instrument and move your information to the cloud server.

Country	Newbie	Associate	Tenured	
Philippines	10	3	3	16
France	2	1	1	4
Germany	4	2	1	7
Malaysia	5	3	2	10
India	3	1	0	4
Singapore	2	2	0	4
Total	26	12	7	45

Table 1 – User Type

Measuring the ease of use – to measure if the users are happy to use the log sheet or the auto log I created in SharePoint with 45 correspondents.

1 to 5 - is not satisfied

6 to 7 – is the average

8 to 10 is the highest satisfaction

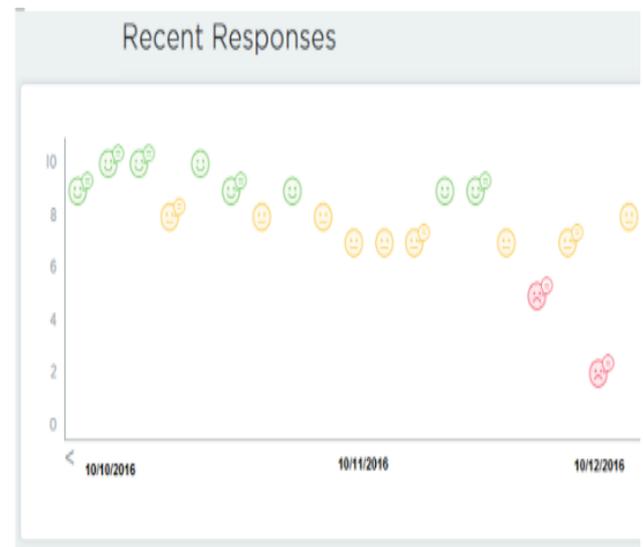


Figure 6 – Usage Tracker 1



Figure 7 – Usage Tracker 2

What is more important in a tool?

- 48% - User Friendly
- 20% - Speed
- 15% - Accessibility
- 12% - Navigation
- 10% - Others

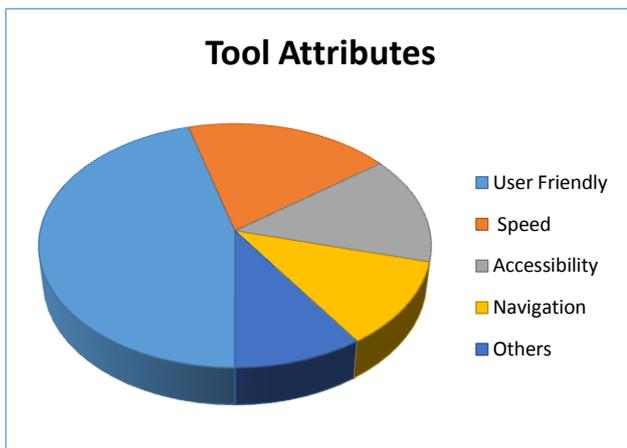


Figure 8 – Survey Results

5. SUMMARY, CONCLUSIONS AND RECOMMENDATION

5.1 Summary

These spreads significance and foundation of the concentrate, how we underestimate developments around us and how a straightforward instrument can lighten the issue encompassing our business world, this concentrate likewise highlight the advantages for both clients and associations. A basic device made from a stage that was intended to store records and information and sort out documents, inside this stage we have pushed the stage to be overhauled and to be utilized to address development hole. We likewise secured well-ordered how we can physical make a model and have clients test it. How the framework functions as a rule from web to server to cultivate and back to the clients. It made us see how our information are being kept and being overseen.

5.2 Conclusion

The abrogating reason for this study was to decide and demonstrate the significance and importance of developing the apparatus in SharePoint based stage, to show how we can extend and use a device to the client's leeway. To finish that objective it got to be vital for us to burrow profound and check prerequisites and measures. Identified with that exertion we come to finish up the way of the stage where our apparatus will be arranged. It came to realized that the likelihood of developing a device inside a capacity site is achievable. We have built a model that is as of now working and is as of now being checked for process practicality, the thought is to come up additionally with other conceivable devices from the essential idea of SharePoint participation following instrument. Analyzers were gotten some information about their experience of the idea, it was demonstrated that the to be sure the apparatus is a straightforward simple to utilize and dependable. Through this it will serve as the fundamental establishment of different devices that we can make from a basic stage, through this study we have tended to a portion of the developments bottle neck. Usability and straightforwardness of development.

5.3 Recommendation

1. Given that we have created the Tool/Application under a SharePoint 2010 platform it is still relevant to check new features if you are to migrate from a higher version.
2. Tool can be fully automated once the user has opened the address/link but this is due to a more detailed study and with the use of a middle ware.
3. Although we have stated how we can maximize the attendance tool/application it is still recommended to verify and check the limitation of your sever and in depth study of the server part is required.

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