**PROPOSAL**

**Zookeeper System Enhancements**

**Version 1.1.2**

**Prepared by**

**Group 8**

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# Stakeholders

## Team members

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# Document revision

|  |  |  |  |
| --- | --- | --- | --- |
| **Version** | **Date** | **Changes description** | **Author** |
| 1.0.0 | 8/8/2020 | Prepare document structure | Viet |
| 1.0.1 | 8/8/2020 | Added stakeholder table  Added term of references | Viet |
| 1.0.2 | 8/8/2020 | Added document revision | Viet |
| 1.0.3 | 8/8/2020 | Added Zookeeper description | Viet |
| 1.1.0 | 9/8/2020 | Update document structure | Viet |
| 1.1.1 | 9/8/2020 | Added scope and objective, project approach, skill and knowledge involved, cost, abbreviation and references | Viet |
| 1.1.2 | 9/8/2020 | Update team member information | Viet |
|  |  |  |  |
|  |  |  |  |

# Term of References

## Zoodata

**Zoodata** is an IT solution provider with twenty-four years of experience, founded in Perth, Western Australia and services different sectors and departments including health, government and privates. With extensive experience and rich expertise, Zoodata poses to be a major IT pioneer and trusted partner in Perth.

## Zookeeper

**Zookeeper** is web application, it was designed to replace the timesheet system which í currently still utilized by the client. The previous timesheet system called **Task Tracker**. Currently, the new timesheet system Zookeeper is still in development stages and require to add more feature into its system.

1. Rationale

[ More detail about the current Zookeeper system ]

[ Add a diagram of Zookeeper system ]

|  |  |  |  |
| --- | --- | --- | --- |
| **Identify Objective** | **Current situation** | **Desire outcome** | **The gap** |
|  |  |  |  |
| **Action & Requirement** | | | |
|  | | | |

1. Aim of the project

The aim of the project is to create a website system that allow users to manage the tasks by creating, updating and deleting tasks and to replace the existing timesheet system called Task Tracker which as still utilized by the client.

1. Objectives of the project

The objectives of the project will be to:

- Develop and optimise a website application using C#, Blazor, Entity Framework, MySQL; and to

- Complete several unfinished features

- Setup connections to the database

- Tidy up validation

- UI/UX design and changes

1. Background of the study

Before companies begin using timesheets, time periods are defined in the system. Most companies or organizations have a self-service module for employees to enter their time after supervisors set up parameters (Mitrefinch, 2016). This module usually includes shift hours, overtime categories or the time they start and end work on a task or project. However, workers are able to cheat the system by providing fake information, which causes waste in time and budget of the companies.

Timesheets are a way to avoid illegal or lost information. Even when contractors work seasonally or at multiple locations, one centralized time tracking module can help to secure accurate payroll data. Tracking time accurately, whether for regular employees, mobile workers or contractors, helps to reduce payroll costs (Zoho, 2019).

Employers have a more efficient system for each category of workers. It is due to the fact that managers are able to determine and utilize the skill of workers. Besides, employers are easy to track the progress and promising delay of the project. Therefore, managers have a visual representation of what it takes to have a productive labour force. Furthermore, timesheet also enhances workers’ productivity by monitoring and reducing time wastage by themselves.

With the rise of technology, most of companies and organizations use modern software instead of hard-copy for task management. This enhances the work efficiency by narrow down the time for recording, seeking and allocating data.

Therefore, Zoodata which is a full-service Digital consultancy particularly in the government sector has developed a Task Tracker project for 5 years. This project is an application system that helps users to manage tasks by creating, updating, deleting or allocating tasks to any individuals. Last year, Task Tracker was upgraded to a web-based system called Zookeeper. However, there are various issues needed to be fixed and new features need to be implemented.

As a result, this project will focus on learning about the existing Zookeeper project, completing several unfinished features, proposing some tests and develop new functionality. Besides, clean code and high-performance level are some of the aspects that also needed to be illustrated in Zookeeper.

1. Review of literature (Harry’s)

- Module 2 & 3 will explain more about this. Please have a look.

1. Project schedule (Viet’s)

- Implement GANNT CHART here

1. Proposed methodology

There are various ways and steps to gather and analyse information. In fact, Zoodata has used Agile methodology as a project management process. Agile is a project management methodology that runs several short development cycles which are called sprints (Workfront, 2019). This methodology allows teams to adapt to changes quickly and deliver outcome frequently to the clients, which enable clients to keep track of the progress of the project and request for changes if necessary.

In the Agile management process, there are a variety of ways to gather the necessary requirements of the project from the clients. The business requirement should be discussed and documented from the meeting between the clients and project manager. Functional requirement should be collected through all team members from different disciplines in order to meet the business requirement. Implementation requirement should be gathered when a meeting between Project Manager and team members (Melville, 2019).

These requirements will be broken down and produced in form of backlogs containing user stories before being picked up and developed by team members. The outcome of this sprint will be introduced and evaluated. The sprint will be repeated until releasing the final product.

After gathering and analysing the requirement, The Zookeeper project should be developed to fix the bugs including setting up reminder email manually, handling browser events on timesheet page or warning users when unsaved changes have been made in browsers. Zookeeper should also implement new features like allowing users to specifically pick colours to start process or automatically submitting timesheet for weeks on leave.

1. Expected outcomes (Harry’s)

1. Skill and knowledge involved

|  |  |  |
| --- | --- | --- |
| **Developers** | **Personal skills** | * Analytical skills * Teamwork skills * Self-learning * Workspace adaption * Communication skills * Strong written * Critical thinking * Research skills |
| **Project Management skills** | * Learning methodologies * Understand SDLC * Leadership * Team management * Negotiation skills * Well-organization skills * Risk management * Planning skills * Quality management * Problem solving |
| **Professional skills** | * Web development. * Design pattern. * C# and ASPNET Core. * SQL * HTML, CSS and Javascript * Graphic design UI/UX * Unit test. * Testing process. * Fix bug technique. |

1. Cost
2. Abbreviation

|  |  |  |
| --- | --- | --- |
| No. | Abbreviation & Names | Meaning |
| 1 | SDLC | Software development life cycle |
| 2 | C# | Computer programming language, developed by Microsoft Corporation |
| 3 | ASP.Net Core | Web framework, developed by Microsoft Corporation |
| 4 | SQL | Structured Queuing Language |
| 5 | HTML | Hypertext Markup Language |
| 6 | CSS | Cascading Style Sheets |
| 7 | Javascript | A programming language that conforms to the ECMAScript specification |
| 8 | UI | User interface |
| 9 | UX | User experience |
| 10 |  |  |

1. References

# References

Melville, N. (2019). *Gathering requirements in an agile world*. Retrieved from We are diagram: https://www.wearediagram.com/blog/gathering-requirements-in-an-agile-world

Mitrefinch. (2016). *What is a timesheet and how does it work?* Retrieved from Mitrefinch: https://mitrefinch.com/blog/what-is-a-timesheet-and-how-does-it-work/

Workfront. (2019). *Agile Project Management*. Retrieved from Workfront: https://www.workfront.com/project-management/methodologies/agile

Zoho. (2019). *What is a Timesheet?* Retrieved from Zoho: https://www.zoho.com/au/invoice/what-is-a-timesheet/#:~:text=Timesheets%20let%20you%20know%20exactly,and%20cost%20your%20company%20money.