**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 provide with twenty-one years of experience, founded in Perth, Western Australia and cooperates within different sectors and departments including health, government and corporates. With extensive experiences and rich expertise, Zoodata poses to be a major IT pioneer and trusted partner in Perth.

## Zookeeper

**Zookeeper** is web application and it was designed to replace the timesheet system which as 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 Time 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

- Make database connections

- 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 of companies or organizations have a self-service module for employees to enter their time after supervisors set up parameters. This module usually includes shift hours, overtime categories or the time they start and end work on a task or project. However, workers can be able to cheat the system by exaggerating fake information, which causes the 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. 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.

It is true that 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 help users to manage tasks by creating, updating, deleting or allocating tasks to any individuals. Last year, a group of students coming from Curtin University joined into the project and cooperate to build and upgrade web-based system called Zookeeper which is extended from Task Tracker. However, the project was not on the right track and exists various issues needed to be handled.

As a result, this project will focus on learning about existing Zookeeper project, completing several unfinished features, proposing some test 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 a various ways and steps to gather and analyse information. In fact, Zoodata has used Agile methodology as a project management process. To be more specific, Agile is a project management methodology that run several short development cycles which is called sprints. This methodology allows teams to adapt to changes quickly and deliver outcome frequently to the clients, which enable clients to keep track with the progress of the project and request for changes if necessary. In the Agile management process, there are a variety of ways to gather 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 discipline in order to meet the business requirement. Implementation requirement should be gathered when a meeting between Project Manager and team members. After that, these requirements will be chopped down and produced in form of backlogs containing user’s story before being picked up and developed by team members. Finally, the outcome of this sprint will be introduced and evaluated. The sprint will be repeated until releasing final product.

After the being analysing, The Zookeeper project should be able to handle these following issues:

* Automatic reminder email should be implemented
* Leave can be added to submitted/approved timesheets
* Users are able to setup reminder email manually
* Handle browser events on timesheet page
* Warn when unsaved changes have been made in browser
* Allows users to specifically pick colours that they like in order to start the personalisation process
* Email notification when timesheet is approved/rejected
* Automatically submit timesheet for weeks on leave
* After logout, user should be redirected back to the login page instead of being randomly offloaded.

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

<https://www.zoho.com/au/invoice/what-is-a-timesheet/#:~:text=Timesheets%20let%20you%20know%20exactly,and%20cost%20your%20company%20money.>

<https://mitrefinch.com/blog/what-is-a-timesheet-and-how-does-it-work/>

<https://www.workfront.com/project-management/methodologies/agile>

<https://www.wearediagram.com/blog/gathering-requirements-in-an-agile-world>