



Sri Lanka Institute of Information Technology Information Technology Project (IT2080)

PLAY ZONE PRO Play Zone Management System Progress Report

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Background

The Playzone Management System (PMS) is designed for play zones and recreational centers that offer services like arcade games, indoor sports, and other leisure activities. These businesses cater to a growing number of customers, and as demand increases, so does the need for an efficient way to manage operations. Currently, the client relies on manual systems such as paper records and spreadsheets to handle bookings, finances, and resources. These outdated methods are prone to errors, inefficiencies, and delays, which negatively impact both customer satisfaction and business performance.

The client operates a popular play zone but struggles with managing multiple aspects of the business. Issues like overbookings, resource mismanagement, and inaccurate financial reporting arise due to the lack of a centralized, automated system. Furthermore, customer complaints and security incidents are not being properly tracked, leading to a poor user experience. As the business grows, these operational challenges become increasingly difficult to manage manually.

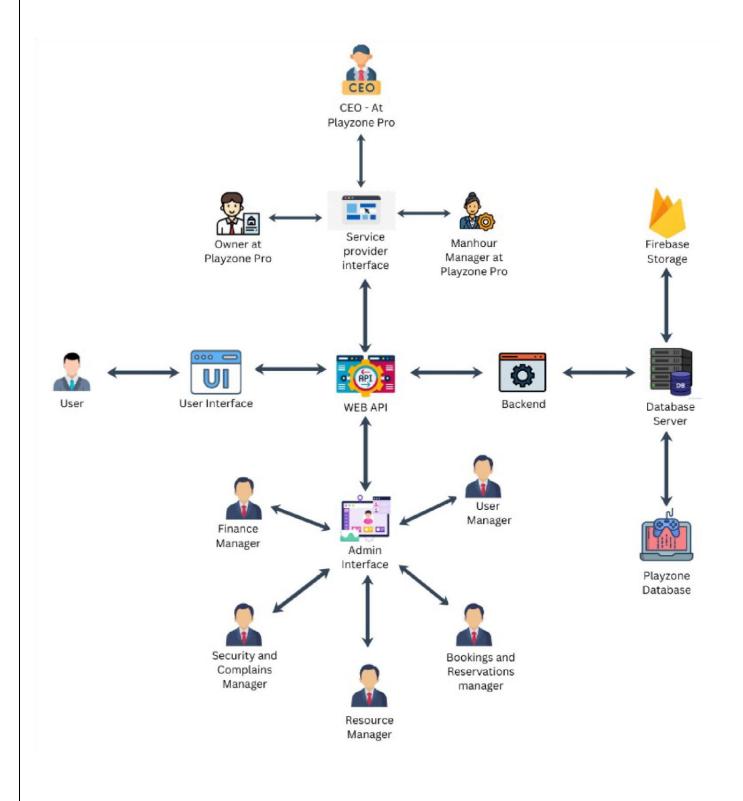
The Playzone Management System aims to solve these problems by providing an integrated digital platform that automates and centralizes key functions such as user management, booking reservations, financial tracking, and resource management. By replacing the current manual processes, the system will reduce errors, improve efficiency, and enable better decision-making. It will also provide real-time data that can help improve resource allocation, pricing strategies, and promotional campaigns.

Ultimately, the system will modernize the play zone's operations, enabling the business to scale effectively while maintaining a high level of service. With features designed to automate routine tasks, improve security, and enhance customer satisfaction, the Playzone Management System is essential for improving both operational efficiency and the overall customer experience.



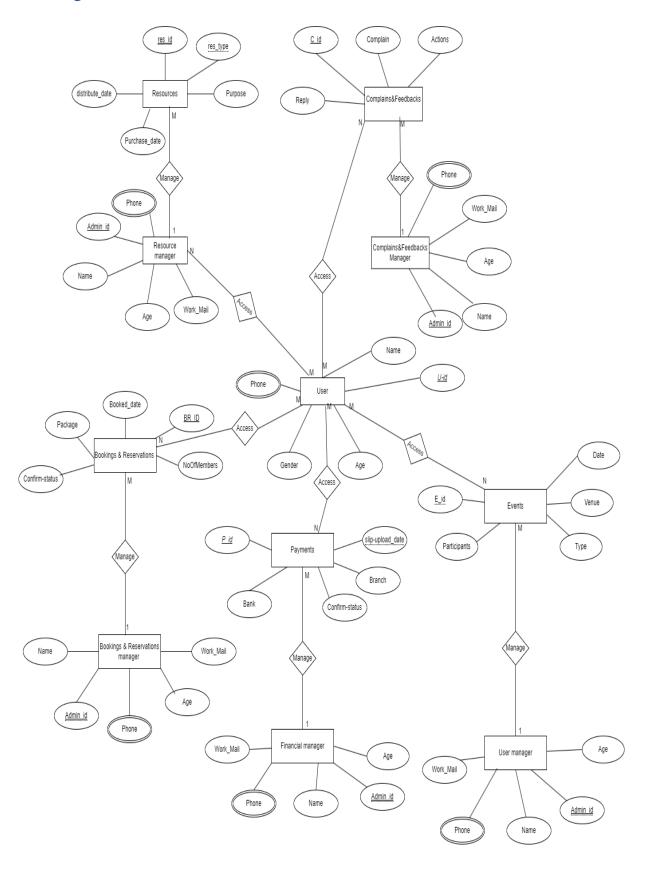
System Overview

System Diagram





ER Diagram





RELATIONAL SCHEMA



References

- 01. "Play area activity management"

 https://www.semnox.com/familyhttps://www.semnox.com/family-entertainment-centre/play-area-management.html
- 02. "Non-functional requirements", "Wikipedia" [Online] Available: https://en.m.wikipedia.org/wiki/Non-functional_requirement
- 03. What is agile methodology? [online] Available:
 https://saigontechnology.com/blog/agile-development-process-in-software-outsourcing
 outsourcing
- 04. Reasons for selecting Agile Methodology [Online] Available: <u>Advantages and Disadvantages of Agile Methodology</u>: Pros and Cons (bespokesoftwaredevelopment.com)
 - 05. "Visual code studio", "code.visualstudio.com "[Online] Available: https://code.visualstudio.com/
 - 06. "Literature Review" [Online]. Available: https://www.omicsonline.org/about.php
 - 07. https://www.mongodb.com/languages/mern-stack-tutorial
 - 08. "GitHub", "github.com" [Online] Available: https://github.com/
 - 09. Romio Technologies' Kids Play Zone Management System https://www.romiotech.com/kids-play-zone/