

DayCare Management System (Doodle Desk)

Software Requirements Specification Course

Code: INT 219 & INT220

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1. Introduction

1. Purpose

The purpose of this document is to define the Software Requirements Specification (SRS) for the *Doodle Desk* Daycare Management System. *Doodle Desk* aims to streamline and simplify the administrative and operational tasks involved in managing a daycare center. This system will support features such as child enrollment, attendance tracking, fee management, parent communication, staff scheduling, and activity planning. The system is designed to benefit daycare administrators, staff, and parents by offering a centralized, user-friendly platform to enhance communication, ensure child safety, and improve overall daycare efficiency.

1.2 Scope

Doodle Desk is a web-based daycare management system that streamlines daily operations such as child enrollment, attendance, fee tracking, parent communication, activity planning, and staff management. It provides role-based access for admins, staff, and parents, aiming to improve efficiency, reduce manual work, and enhance communication within daycare centers.

3. Definitions, Acronyms, and Abbreviations

- **UI** – User Interface
- **PHP** – Hypertext Preprocessor
- **DB** – Database
- **SRS** – Software Requirements Specification

1.4 References

- Tailwind CSS Documentation
- PHP Manual
- MySQL Documentation
- IEEE SRS Template

1.5 Overview

This project, *Doodle Desk*, is designed as a comprehensive daycare management system to assist in the smooth functioning of daycare centers. It integrates various administrative tasks such as enrollment, attendance, fee management, staff coordination, and communication into a single platform. The system provides role-based access for admins, staff, and parents, ensuring secure and efficient data handling. The goal is to enhance daycare operations, minimize paperwork, and offer better service to parents through real-time updates and transparency. This SRS outlines the system's functionality, user roles, and technical requirements to guide the development process.

2. General Description

1. Product Perspective

The **Doodle Desk daycare management system** is a standalone, web-based application designed to facilitate the management of daycare center operations. The system will be developed using HTML, Tailwind CSS, JavaScript, and PHP, and it will interface with a MySQL database to manage and store essential data such as child enrollment information, attendance records, staff details, fee transactions, and activity schedules.

This application operates independently and is not part of a larger software suite. However, it follows modular design principles to ensure future scalability and integration possibilities, such as adding a parent mobile app, online payment gateway, or advanced reporting modules.

The product is intended to provide a seamless user experience across multiple platforms (desktop, tablet, and mobile devices) and will employ responsive design practices. The frontend (user interface) is focused on ease of navigation and visual appeal using Tailwind CSS, while the backend, built with PHP, handles data processing, validation, and database operations.

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2. Product Functions

- Provide Login/ sign Up section for new users
- Gallery page for details.
- Classes Page for Proper Schdeule
- About us Section.
- Enrollment Page

2.3 User Characteristics

The primary users of the Doodle Desk daycare management system include parents, staff members, and administrators:

1. Parents:

- Expected to have basic web browsing knowledge, including familiarity with navigating websites, viewing child profiles, receiving updates, and making online payments.
- Parents are likely to access the system on a variety of devices, such as desktops, tablets, and smartphones

2. Staff Members:

- Responsible for marking attendance, managing daily activity plans, and updating child progress records.
- Interaction with the system assumes basic familiarity with web forms and data entry processes

2.4 General Constraints

- Internet access required
- Mobile responsive layout
- PHP & MySQL hosting needed

2.5 Assumptions and Dependencies

- The system will run on Local Host.
- Tailwind CSS is used for frontend styling
- Payment gateway integration is included in this version

3. Specific Requirements

1. External Interface Requirements

1. User Interfaces

- HTML pages styled with Tailwind CSS.
- JavaScript for interactivity (Login , Enrollment).
- PHP for server-side logic and database interaction.

2. Hardware Interfaces

- Client devices: desktop, tablet, mobile.
- Server hosting with PHP and MySQL support.

3. Software Interfaces

- MySQL for database management
- PHP for backend logic

4. Communications Interfaces

- HTTP/HTTPS protocols

1. Functional Requirements

1. Child Enrollment Browsing

1. Introduction

- This feature allows users (administrators and staff) to seamlessly explore the list of enrolled children, enhancing management efficiency through easy navigation and visual clarity.

2. Inputs

- User action to navigate to the "Enrollment" or "Children" section.
- User selection of filters such as age group, enrollment status, or class/group assignment.

3. Processing

- Fetch relevant child enrollment data from the MySQL database based on selected filters.
- Display child profiles with information such as name, age, assigned class, parent contact, and enrollment status using HTML and Tailwind CSS.

2. Outputs

- A visually organized list or grid of enrolled children, categorized appropriately.
- Real-time filtering based on class, age group, or enrollment status.
- Option to view detailed child information by clicking on a specific child's profile.

3.2.1.5 Error Handling

- If no enrolled children are found under a selected class, age group, or filter, a user-friendly message will be displayed:
"No enrolled children found for this selection."
- In case of server or database failure, an error message will be shown:
"Unable to load data. Please try again later."

3.3 Non-Functional Requirements

1. Performance

- Load time should be less than 3 seconds for all major pages (e.g., Dashboard, Enrollment List, Classes)..

2. Reliability

- System should maintain at least 99% uptime for the hosted application

3. Availability

- Accessible 9A.M to 7P.M .

4. Security

- Basic form validation and input sanitization.

5. Maintainability

- Modular code with comments.

6. Portability

- Fully functional on modern browsers and devices.

3. Design Constraints

The development of the **Doodle Desk daycare management system** is subject to the following design constraints:

- **Technology Stack Constraints:**
 - The frontend must be developed using HTML, Tailwind CSS, and JavaScript to ensure responsiveness, maintainability, and modern UI/UX design.
 - The backend must be implemented using PHP to handle server-side logic, data processing, and database connectivity.

- **Hosting Environment:**

- The application must be hosted on a server that supports PHP and MySQL, such as an Apache-based LAMP (Linux, Apache, MySQL, PHP) stack. Compatibility with PHP 7.4 or later is required.

- **Responsiveness Requirement:**

- The user interface must be fully responsive and optimized for mobile, tablet, and desktop devices using Tailwind CSS utility classes.

- **Database Constraint:**

- MySQL is the designated database management system and must be used for storing and retrieving all application data.

- **Browser Compatibility:**

- The website must function consistently across modern browsers, including Chrome, Firefox.

4. Analysis Models

This section provides a visual representation of the data flow within the **Doodle Desk daycare management system**. The **Data Flow Diagrams (DFDs)** illustrate how information moves between processes, data stores, and external entities. These models aid in understanding system behavior and support the design and implementation of various components.

1. Data Flow Diagrams (DFD)

Level 0 – Context Diagram

The **Level 0 DFD** provides a high-level overview of the system. It identifies the major processes and interactions between the user and the system components..

Flow:

**User (Parent/Staff/Admin) → Login & Navigate → System →
→ View/Manage Child Info → Track Attendance → Communicate or Update
Records**

Diagram Description:

The user interacts with the system to:

- View or update child enrollment details

- Communicate with staff or administrators
- Mark or view attendance

Level 1 – Detailed Diagram

The Level 1 DFD breaks down the core functionalities of the Daycare Management System into more detailed processes and data stores.

Processes:

1. Child Management

- Fetch child details (e.g., demographics, medical information, emergency contacts) from the Child Database.

2. Staff Management

- Authenticate or register staff information (e.g., credentials, schedules) from the Staff Database.

3. Activity Scheduling & Management:

- Plan and manage daily activities, and store activity details in the Activity Schedule Data Store

4. Checkout & Payment

- Generate invoices based on attendance and services, and process payments, storing finalized billing information in the Billing Database.

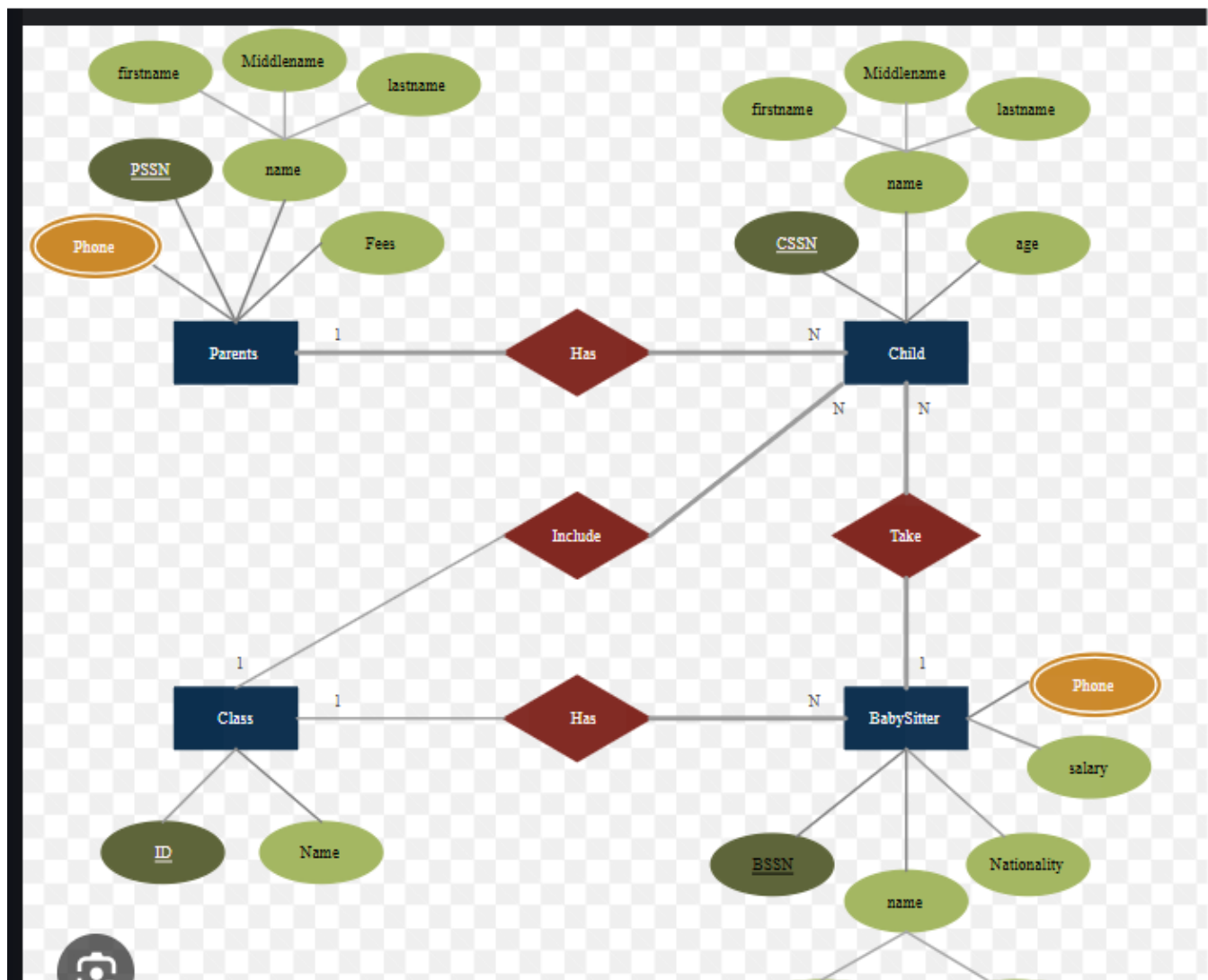
5. Communication & Notification

- Generate and send notifications (e.g., daily reports, emergency alerts) to parents/guardians.

1. Data Stores:

- Child DB
- Parents DB
- Staff DB
- Activity Schedule DB

External Entity:



Doodle Desk

5. GITHUB LINK:

<https://github.com/shivi9155/INT-219-220>

6. VIDEO LINK:

https://www.linkedin.com/posts/sharmashivani9155_webdevelopment-softwareproject-daycare-activity-7318560614233120770-zIL-?utm_source=share&utm_medium=member_android&rcm=ACoAAEdAy2YBblVmEi6IDhqw4LMQVgIpRor3HqU