Childcare Services Requirements Specification

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Kevin Dao

Linh Truong

Chance Noonan

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# Executive Summary

## Project Overview

This program is for a childcare facility to check in, bill, and search clients. The user is meant to be a worker at the facility that needs to register clients, make appointments, calculate the bill, and search for any existing clients for their information according to industry-standard architecture.

[Note] provide a link and a charter

## Purpose and Scope of this Specification

Aims to create an organized system in which childcare facilities are able to:

* Create and update user profiles for children
* Input check-in and check-out times
* Create billing information based off of inputs
* Search in specific for a patient and access the logged information
* Log certain events along with limited specifics

# Product/Service Description

## Product Context

The product is relatable to other school structural technologies. This product is self sufficient and will run offline. It creates a database that has information of children logged. While this information can be easily accessed, exporting it online would require the means of another platform.

## User Characteristics

Main user will be faculty, no need for a profile for each employee. However, a profile will be needed to be created for each parent/child to input specifications about them like

* Parent name/Child name
* Child’s age
* Contact information
* Parent information
* Financial details
* Emergency information

## Assumptions

Equipment available to us will be a general windows computer. Users will all be employees, so no need for a login system. This program will always be open during work hours, and needs to be constantly updated with every input from employees.

## Constraints

There aren’t many constraints. All we need is good functionality, and good design.

## Dependencies

* + Billing Statement Module will need the client module to be completed
  + Search Module will need both billing statement and client modules to be completed

# Requirements

* Describe all system requirements in enough detail for designers to design a system satisfying the requirements and testers to verify that the system satisfies requirements.
* Organize these requirements in a way that works best for your project. See Appendix DAppendix D, Organizing the Requirements for different ways to organize these requirements.
* Describe every input into the system, every output from the system, and every function performed by the system in response to an input or in support of an output. (Specify what functions are to be performed on what data to produce what results at what location for whom.)
* Each requirement should be numbered (or uniquely identifiable) and prioritized.

See the sample requirements in Functional Requirements, and System Interface/Integration, as well as these example priority definitions:

**Priority Definitions**

The following definitions are intended as a guideline to prioritize requirements.

* Priority 1 – The requirement is a “must have” as outlined by policy/law
* Priority 2 – The requirement is needed for improved processing, and the fulfillment of the requirement will create immediate benefits
* Priority 3 – The requirement is a “nice to have” which may include new functionality

It may be helpful to phrase the requirement in terms of its priority, e.g., "The value of the employee status sent to DIS **must be** either A or I" or "It **would be nice** if the application warned the user that the expiration date was 3 business days away". Another approach would be to group requirements by priority category.

* A good requirement is:
* Correct
* Unambiguous (all statements have exactly one interpretation)
* Complete (where TBDs are absolutely necessary, document why the information is unknown, who is responsible for resolution, and the deadline)
* Consistent
* Ranked for importance and/or stability
* Verifiable (avoid soft descriptions like “works well”, “is user friendly”; use concrete terms and specify measurable quantities)
* Modifiable (evolve the Requirements Specification only via a formal change process, preserving a complete audit trail of changes)
* Does not specify any particular design
* Traceable (cross-reference with source documents and spawned documents).

## Functional Requirements

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Req#** | **Requirement** | **Comments** | **Priority** | **Date Rvwd** | **SME Reviewed / Approved** |
| BR\_LR\_001 | The system should be able to amalgamate three required modules including client module, child module, and search/query module in order to maintain running offline. | Created 7/18/20 | 2 | Reviewed 7/21/20 | Amir Khan |
| BR\_LR\_002 | The client module should provide user specific instructions to enter or update the data of a particular client. | Created 7/18/20 | 3 | Reviewed 7/21/20 | Amir Khan |
| BR\_LR\_003 | The child module should allow the staff to update child check-in and check-out times to facilitate generating billing statements. | Created 7/18/20 | 3 | Reviewed 7/21/20 | Amir Khan |
| BR\_LR\_004 | The search/query module should allow the staff to search for a particular client or child by name or another unique identifier. | Created 7/18/20 | 3 | Reviewed 7/21/20 | Amir Khan |
| BR\_LR\_005 | The system should assign customers’ information based on demographic details which should include information about each child and the associated responsible party; financial details; and emergency information. | Created 7/18/20 | 3 | Reviewed 7/21/20 | Amir Khan |
| BR\_LR\_006 |  |  |  |  |  |

## User Interface Requirements

The interface requires a search function that looks through the patient list and brings up any logged information on that patient.

## Usability

With a simple and easy to learn interface, the product should be easily accessible for anyone that will be using it.

## Performance

The product is capable of processing inputs of the patient and

Specify static and dynamic numerical requirements placed on the system or on human interaction with the system:

* Static numerical requirements may include the number of terminals to be supported, the number of simultaneous users to be supported, and the amount and type of information to be handled.
* Dynamic numerical requirements may include the number of transactions and tasks and the amount of data to be processed within certain time period for both normal and peak workload conditions.

All of these requirements should be stated in measurable form. For example, "95% of the transactions shall be processed in less than 1 second" rather than “an operator shall not have to wait for the transaction to complete”.

### Capacity

Will only have a handful of users, and memory requirements for each user aren’t necessary. Only one user is needed to put aside for memory. Otherwise, we will need about 5 clients to input in storage.

### Availability

Include specific and measurable requirements for:

* 24/7 (offline database, information stored locally)
* User friendly (***see 3.2***)
* Globally available
* Downtime occurs if computer is shut down or inactive
* Automatically computes billing charge with custom set rate per hour

### Latency

As fast as possible would be preferred, however time constraints aren’t a big priority

## 3.8 Data Management

Specify the requirements for any information that is to be placed into a database, including

* client information
  + name
  + financial
  + contact
* everyday use of workdays
* employee should be able to access all data
* check-in/check-out should directly relate to billing