MALAMULELE ONWARD PEER SUPPORTER SYSTEM

FEEDBACK DOCUMENT

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Abstract

This document is to provide feedback to the stakeholder(s) on our progress thus far on the peer supporter system being developed for Malamulele Onward. Contact person: Dr. Gillian Saloojee (T: 0114849456, E: Gillian@cpchildren.org)

**Purpose**

The purpose of this document is to communicate our progress and findings made to the client. The aim is to reach mutual understanding by means of discussion and negotiation with the client and once that is done, a sign-off is required from the client in order for the project to progress

**Executive Summary**

In this document we have included everything we have been working on. We’ve mainly been investigating the different technologies we could use to develop the system and created logical models illustrating our understanding of the needs and processes of the system and how actors will interact with it.

The use case set, *Table 1: Peer Supporter System Use Case Set,* is structured by entities within the client’s environment. The entities that will be the focal point of the system will be; “Facilitator” (the parent facilitator), “Visit” (Home visits conducted by parent facilitators) and “Workshop” (The workshops conducted by parent facilitators). *Diagram 1: Use Case Diagram*s is a visual depiction of the use case set.

The fully-dressed use case descriptions cover what the system does, the requirements, who interacts with the system and the set of steps performed to achieve the result. One was made for each of the “Create” use cases, *Table 2: Create Parent Fully-Dressed Use Case Description, Table 3: Create Visit Fully-dressed Use Case Description, Table 4: Create Workshop Fully-Dressed Use Case Description.*

The flow of activities from the fully-dressed use case descriptions were translated into system sequence diagrams depicting the sequential exchange of messages between the users and the system*. Diagram 2: Create Facilitator System Sequence Diagram, Diagram 3: Create Visit System Sequence Diagram, Diagram 4: Create Workshop System Sequence Diagram*. These system sequence diagrams will be used to designing user interfaces.

The entity-relationship (ER) diagram*,* *Diagram 5: Entity-Relationship Diagram*, is a graphical representation of entities and their relationships to each other, typically used in computing in regard to the organization of data within a database or information system.

**Use Case Set**

A use case set organizes functional requirements, models the goals of system/actor (user), interactions and records paths (called *scenarios*) from trigger events to goals. We have modelled it from the main entities identified from the source documents received from MO, mainly the “Facilitator” (Parent facilitator), “Visit” (Home visits) and “Workshop” (Register of workshops attended by mothers).

**Table 1: Peer Supporter System Use Case Set**

|  |  |  |
| --- | --- | --- |
| Entity | Use Case | Goal |
| Facilitator (Parent Facilitator) | Create | To create a new facilitator’s record in the system |
|  | Read Facilitator | To retrieve the facilitator’s records |
|  | Update Facilitator | To update any of the information a facilitator has recorded |
|  | Archive Facilitator | To store the data of an inactive facilitator |
| Visit (Home Visits) | Create Visit | To create a record of a new home visit |
|  | Read Visit | To retrieve stored records of home visits |
|  | Update Visit | To update the records stored of home visits |
| Workshop | Create Workshop | To create a record of a new workshop |
|  | Read Workshop | To retrieve stored records of workshops |
|  | Update Workshop | To update the records stored of workshops |

**Use Case Diagram**

The main purpose of a use case diagram is to show who interacts with your system, and how use cases link together. The human figures represent the actors in the system which may be classes of people, organizations, other systems, software or devices that interact with your system or subsystem. The actors in the system will be the parent facilitators and Malamulele Onward staff member (Referred to as “Administrator”). This use case diagram also serves as a guideline for the analysts and programmers towards the development of the system. From the documents received (expense sheet, time sheet, home visit form and attendance register) we have identified the create facilitator, create visit and create workshop as base use cases.

**Diagram 1: Use Case Diagram**



**Fully-Dressed Use Cases**

**Create Parent**

**Table 2: Create Parent Fully-Dressed Use Case Description**

|  |  |  |
| --- | --- | --- |
| **Use case name:** | Create Parent | |
| **Scope:** | Peer Supporter System | |
| **Triggering event:** | Admin requests to create facilitator. | |
| **Brief description:** | The Administrator requests to create facilitator, the system then prompts for the parent facilitators details. When these details are entered they’re then stored into a data store. The system will then generate a facilitator ID which the facilitator will use to login into the system. The administrator will then requests that ID be sent to the facilitator via an external system. A confirmation of delivery will then appear. | |
| **Actor(s):** | Administrator (Primary) | |
| **Related use cases:** | None | |
| **Stakeholders & interests:** | Administrator: Wants to create a Parent Facilitator in the database to be able to store s/he’s records | |
| **Pre-conditions:** | N/A | |
| **Post-conditions:** | * Creates a new facilitator in the FACILITATOR data store using facilitator\_name, facilitator\_cellnumber, facilitator\_area * Displays confirmation of creation of a facilitator\_id. * Display confirmation of delivery. | |
| **Flow of activities:** | **Actor** | **System** |
| 1. Administrator requests to create facilitator.  2. Administrator enters the facilitator’s name, cell phone number and area.  3. Administrator requests to send facilitator\_id to facilitator\_cellnumber. | 1.1 Prompts for facilitator’s name, cell phone number and area.  2.1 Creates a new facilitator in the FACILITATOR data store using facilitator\_name, facilitator\_cellnumber, facilitator\_area  2.2 Generates a facilitator\_id.  2.3 Displays confirmation of creation of a facilitator\_id.  3.1 Retrieves facilitator\_cellnumber from FACILITATOR data store.  3.2 Sends facilitator\_id to facilitator\_cellnumber.  3.3 Display confirmation of delivery. |

The purpose of the **create facilitator system sequence diagram** is to illustrate the time-based flow of data between the actor and the system. The user interface designer would use this diagram to create an intuitive system. It only illustrates exchange of messages not the intricacies of the message. The actor in this diagram would be the administrator (a Malamulele Onward staff member)

**Diagram 2: Create Facilitator System Sequence Diagram**



**Create Visit**

**Table 3: Create Visit Fully-dressed Use Case Description**

|  |  |  |
| --- | --- | --- |
| **Use case name:** | Create visit | |
| **Scope:** | Peer supporter system | |
| **Triggering event:** | The parent facilitator requests to create a visit | |
| **Brief description:** | The parent facilitator will create a new record of the home visit after visiting the home of the child. The parent facilitator will first enter the child’s name and area and will then record how well the child is doing, what they did and any additional feedback. A visit report will then be generated from this data. | |
| **Actor(s):** | Parent Facilitator (Primary) | |
| **Related use cases:** | None | |
| **Stakeholders & interests:** | * Parent Facilitator: to record the progress of the children in the program * Administrator: to check the progress of both the children in the program and the parent facilitator | |
| **Pre-conditions:** | N/A | |
| **Post-conditions:** | * Creates a new visit in the VISIT data store using vist\_area, vist\_childname, visit\_feedback, visit\_activities and visit\_followupplan * Display confirmation of creation of the new visit | |
| **Flow of activities:** | **Actor** | **System** |
| 1. The parent facilitator requests to create a visit  2. The parent facilitator enters the child’s name and area  3. The parent facilitator enters the visit\_feedback visit\_activities and visit\_followupplan | 1.1 Prompt for the child’s name and area  2.1 Creates a new visit in the VISIT data store using vist\_area, vist\_childname,  visit\_feedback, visit\_activities and visit\_followupplan  2.2 Display confirmation of creation of the new visit  3.1 Generate a visit report |

The purpose of the **create visit system sequence diagram** is to illustrate the time-based flow of data between the actor and the system. The actor in this diagram is the parent facilitator. The user interface designer would use this diagram to create an intuitive home visit form.

**Diagram 3: Create Visit System Sequence Diagram**



**Create Workshop**

**Table 4: Create Workshop Fully-Dressed Use Case Description**

|  |  |  |
| --- | --- | --- |
| **Use case name:** | Create Workshop | |
| **Scope:** | Peer Supporter System | |
| **Triggering event:** | Parent Facilitator requests to create workshop. | |
| **Brief description:** | The parent facilitator would requests to create workshop when administering one. The system will create a new workshop and then prompt the parent facilitator to enter the workshop attendee’s details such as, the caregiver, child’s name, relation to child, cell phone number, and the date. A confirmation of the details being stored onto the database will be displayed and a workshop report generated. | |
| **Actor(s):** | Parent Facilitator (primary) | |
| **Related use cases:** | None | |
| **Stakeholders & interests:** | * Parent Facilitator: Wants to create a new record of a workshop. * Administrator: Wants the data collected to be compiled into a report | |
| **Pre-conditions:** | N/A | |
| **Post-conditions:** | * The attendee\_caregiver, attendee\_childname, attendee\_relationtochild, attendee\_cellnumber, attendee\_date into WORKSHOP data store. * Display Confirmation of details. | |
| **Flow of activities:** | **Actor** | **System** |
| 1. Parent Facilitator requests to create workshop.  2.Parent Facilitator enters workshop\_caregiver, workshop\_childname, workshop\_relationtochild, workshop\_cellnumber, workshop\_date | * 1. Create a new workshop in the WORKSHOP data store using workshop\_caregiver, workshop\_childname, workshop\_relationtochild, workshop\_cellnumber, workshop\_date.   2. Prompt for workshop\_caregiver, workshop\_childname, workshop\_relationtochild, workshop\_cellnumber, workshop\_date   2.1 Displays confirmation of creation of new work shop  2.2 Generate a workshop report |

In the **create workshop system sequence diagram**, only the parent facilitator is the actor. Once again only the inputs and output between the actor (parent facilitator) and the system are depicted.

**Diagram 4: Create Workshop System Sequence Diagram**



**Peer Supporter System: ERD Diagram**

An entity-relationship diagram (ERD) is a data modelling technique that graphically illustrates an information system’s entities and the relationships between those entities. It is also crucial to creating a good database design.

**Diagram 5: Entity-Relationship Diagram**

