Orange County Head Start, Inc.
System Requirements Document

Written by:
Team Sour Patch Kids 117

Cynthia Aguilar
Yaneli Estrada
Hahnara Hyun
Alicia Nunez
Tyler Richardson
John Shipley

Table of Contents

1. Introduction

1.1 Purpose

The project is intended to improve the channel of communication between the OC Head Start employees and the families, specifically the parents, applying to the program. Currently, the parents do not have a clear idea of what documents are required to participate in the enrollment process. The steps to enroll are unclear resulting in many families never making it past the initial registration due to missing paperwork. Furthermore, the parents have to be manually contacted for crucial information such as document arrival dates and missing documents to be relayed. The project intends to facilitate the process and make it easier for parents to keep track of the documents required of them as well as, alleviate some of the pressure of communication from the staff working in the OC Head Start program.

1.2 Scope

The project is focusing primarily in developing a system that connects to the pre-existing OC Head Start database which will allow for the timely updates of received documents. The project should take into consideration families with multiple children and adjust accordingly. In addition to providing document information, the team may also include a push notification system which would alert a parent when their documents are received and prompt them to ensure all their documents have been sent. Lastly, an OC Head Start office locator may also be included within the project. Actions such as submitting electronic documents, having an internal chat system, and allowing any additional submission of information are currently not within the scope of the program.

1.3 Overview

The project involves creating a web page which displays a checklist of documents which have or have not been entered into the client's main system. The objective is to give an authorized "parent" or "guardian" access to this list to see their progress in entering forms in order to qualify for enlistment into the client's system.

2. General description

2.1 Product Perspective

ChildPlus database/CMS

"THE Software" is the outward public display of a registrants status in their application to enroll their children in the Head Start program. The purpose of "THE Software" is to give parents the status of their documents, a checklist, in order to show them what they have done and what still needs to be done. Currently clients call Head Start in order to discover their current status, which results in a slowdown of entry of other peoples records since the person answering the phone does both. The existence of "THE Software" will allow clients to view their status on their own time without a need to call in, thus allowing the people who answer the phones to do their data entry with fewer interruptions.

"THE Software" operates in conjunction with a CSV database transfer of recently changed records from the ChildPlus CMS Database on a daily basis. The resulting CSV file is then processed, adding new files or updating old files in a local database associated with "THE Software." When a new record is created, or a file is updated, an email is generated and then sent to the client associated to that record. The email will only indicate that a change was made, not what the change is. If the associated client wishes to know their status then they can visit a web page, login with their child's Child ID, and then view the status.

2.2 Product Functions
- The product will be a two way interface for both parents and staff members to communicate effectively by allowing staff members of Head Start to easily show parents their application status through a webpage.
- Display missing, submitted, or incomplete documents to users.
- Send notifications to users about upcoming deadlines or meetings.

2.3 User Characteristics
- Users will use the software to check on their application status and view any forms they still need to submit.
- Users want to stay up to date on their child's enrollment status.
- Users are from low-income backgrounds.

2.4 General Constraints
- The software must follow the strict regulations that the government imposes on Head Start and its processes.

2.5 Assumptions

- The CSV files required to make updates to a parent's application will be dumped to the server on a daily basis.
- Parents will be successful in checking their application status as well as other forms.

3. Specific Requirements

3.1 Essential Requirements

3.1.1 Functional Requirements

3.1.1.1 Login

ID: ER1

TITLE: Login to account

DESCRIPTION: A user of the intended system will be allowed to log in to the system, where they can access information about the application status, and other settings. The user will be prompted to enter both their Child ID and their child's birthday.

EVENT/USE CASE:
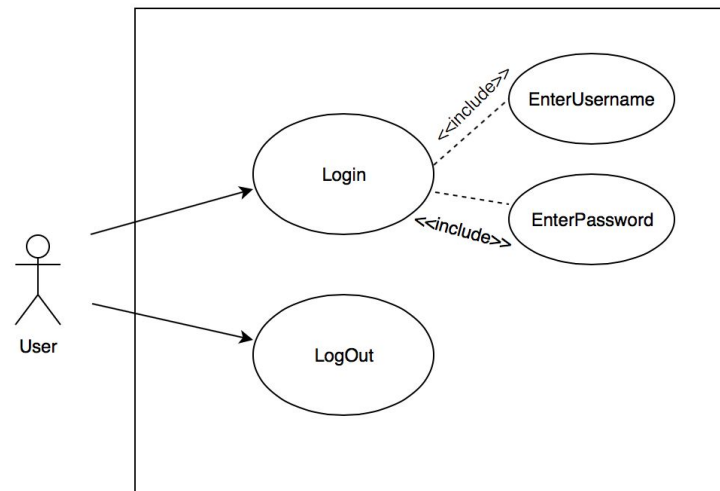
SOURCE: Requirements elicitation interview, April 13, 2018

FIT CRITERION: The user has to fit the criteria to use the application in order to avoid unauthorized access to the system.

DEPENDENCIES: The user must have a Child ID, which is automatically given to them by OCHSINC once they have submitted their application, and their child's birthday to be able to perform this action.

HISTORY: Raised by Sour-Patch Kids and OCHSINC associates, April 13, 2018

3.1.1.2 Push Notifications

ID: ER2

TITLE: Push notifications

DESCRIPTION: A user of the intended system will receive notifications from the system. These notifications are to remind the user of pending or missing documents required for the enrollment of their child. Notifications will automatically be generated when a change of a document's status occurs, and will be sent via email. Other notifications can include document deadlines or meeting requirements.

EVENT/USE CASE:
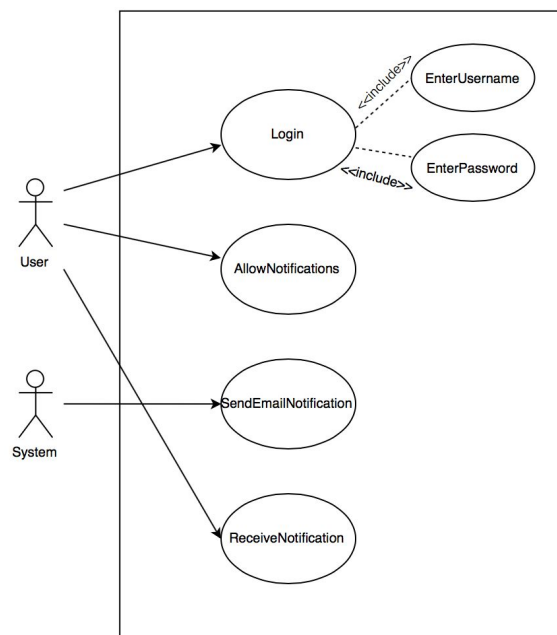
SOURCE: Requirements elicitation interview, April 13, 2018

FIT CRITERION: The user has to fit the criteria to use the application in order to avoid unauthorized access to the system.

DEPENDENCIES: The user must have an account with the system and agree to receive notifications

HISTORY: Raised by Sour-Patch Kids and OCHSINC associates, April 13, 2018

ID: ER3
TITLE: Document checklist
DESCRIPTION: Present users of the system a 'checklist' of all the forms required to enroll their child into the program. The checklist will have the statuses of the document (missing, incomplete, received). The document status will be derived from the Child Plus database.
EVENT/USE CASE: N/A
SOURCE: Requirements elicitation interview, April 15, 2018
FIT CRITERION: The user has to fit the criteria to use the application in order to avoid unauthorized access to the system.
DEPENDENCIES: The user must have an account with the system.
HISTORY: Raised by Sour-Patch Kids and OCHSINC associates, April 15, 2018

ID: ER4
TITLE: Application Status
DESCRIPTION: The user of the system will have the capability to see the current status of their application and will be able to determine what further steps are required to take based on the information.
EVENT/USE CASE: N/A
SOURCE: Requirements elicitation interview, April 13, 2018
FIT CRITERION: The user has to fit the criteria to use the application in order to avoid unauthorized access to the system.
DEPENDENCIES: The user must have an account with the system and must have an application started in order for this functionality to occur or be displayed.
HISTORY: Raised by Sour-Patch Kids and OCHSINC associates, April 13, 2018

3.1.2 Non-functional Requirements

3.1.2.1 Expandability

The product needs to allow future change. What we create now is likely to not be the final product. Sponsor would like for us (or other future employees) to expand more on the site. The organization is also likely to add or change required documents so we must accommodate for these changes.

3.1.2.2 Confidentiality

It is mandated by law to keep all child information private. The site will not be gathering personal information from families, but instead use the information generated by ChildPlus to authenticate logins and display document statuses. It is mandatory that all information is kept confidential and does not go past Head Start employees.

3.1.2.3 Security

Because Head Start is heavily regulated, it is mandatory that our product will be secure enough so that bad actors cannot compromise their current software, ChildPlus. Because of the possibilities of HIPAA violations, our product will also not handle any sensitive medical information of children. When parents begin the application process at HeadStart, they are issued a unique Child ID. Only the parents will know both their Child ID and child's birthday, and will use that to login to the system.

3.1.2.4 Correctness

It is critical that the information displayed accurately reflects where the child is in the enrollment process. Each document must show the current status, including if it has been received, missing, completed, etc. Showing the wrong status could cause parents to unnecessarily re-submit forms, or create confusion about their enrollment standing.

3.1.3 External Interface Requirements

3.1.3.1 User Interface

When users first enter the site, they will be required to login using the child ID number they attained at their initial register and their child's birthday. Users who do not have a child ID will need to register their child on the original OC Head Start webpage.

After the user has successfully completed their login, they will be greeted by a page with information regarding their child's enrollment into the program. The interface will display a list of documents necessary for enrollment and users will be able to see which documents are missing, incomplete or submitted. The interface will also display an enrollment status for the child: new, accepted, waitlist, enrolled.

Along with the displayed information, users will also be given the ability to print out documents that are needed.

3.2 Extension Requirements

3.2.1 Functional Requirements

      3.2.1.1 Chat Support - It is optional for there to be a chatting feature once the system is implemented, in which there will be an agent which will communicate with parents who are confused about the new system or who have questions.

      3.2.1.2 Site localization (Map/GPS) - It is optional for there to be a map on the website for which parents can find which Head Start center is closest to them and will help them determine where they will contact for further information.

Appendices

A.1 Glossary

Term or Acronym	Definition
Child ID number	An encrypted number which uniquely identifies the child for which the application is being processed. The system automatically assigns each child this number when they have submitted the application.
OCHSINC	Orange County Head Start, Inc.
ChildPlus	Database that HeadStart currently uses to store information about its clients and to process child applications.
HIPAA	Health Insurance Portability and Accountability Act
CSV file	(Comma-Separated Values), File used to store tabular data
LAMP Stack	Open source software containing a Linux operating system used for website creation.

A.2 Analysis Models

A.2.1 User Stories

1. Parent makes account
    a. As a parent, I want to create an account in order to be able to submit documents required to enroll my child in Head Start and be able to have a place to check my child's enrollment status.
2. Staff verifies completion of documents
    a. As a staff member, I want to let parents know if the documents they submitted were approved or have any errors.
3. Parent checks nearest Head Start via Google map with pinned locations

      a. As a parent, I want to be able to find the nearest Head Start facility, so as to enroll my child into the program closest to home, which is the most convenient.

4. Parents login to check if documents are verified
      a. As a parent, I want to check whether the documents I submitted have been verified, so that I can get a better sense of where I am in the application process and which documents I still need to submit.

5. Automated push notifications by text
      a. As a parent, I want to receive notifications exactly when my documents have been processed and verified, so that I can make sure I have filled out the documents correctly and begin submitting the next required document.

6. Parent download documents to fill out.
      a. As a parent, I want accessibility to the documents required to fully enroll into the Head Start program, so that I can more quickly ensure their completeness before sending them to the Head Start team.

7. FAQ/Popups page
      a. As a parent, I want access to commonly asked questions, so I can verify if the question I have has been previously answered before reaching out to the Head Start staff directly.
      b. As a Head Start staff member, I want a place to provide answers to frequently asked questions, so I can reduce the amount of phone calls I receive from parents and increase the efficiency of my time.
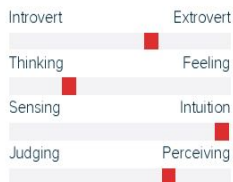
A.3 Personas and Scenarios

A.3.1 Laura Ramirez

Laura Ramirez

"I want to be comfortable knowing my kids get a better chance at life than I did."

Age: 34
Work: Janitor
Family: Single
Location: Santa Ana, California

Personality

Introvert — Extrovert

Thinking — Feeling

Sensing — Intuition

Judging — Perceiving

Strong   **Hopeful**

Hard-working

Bio

Laura is a hard-working single mom of 2 kids. She works two janitorial jobs at a school and an office. Having two different jobs is difficult, as she only has time to drop off her kids to her sister's house and to pick them up very late in the evening. In addition, she only gets enough help from child support and food stamps to be able to provide her kids with some resources but often times she finds it is not enough. With the help of her sister's friends, she was recommended to look into OC Head Start, to be able to give more resources for her kids. She submitted applications for both of her kids and is awaiting notifications of their application statuses. However, this has proven to be a difficult task as she can never get any answers when she calls Head Start's centers. In addition, she only has time in the morning to call them before she has to go to work and the wait times are often times too long.
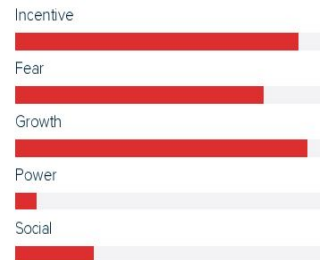
Goals

- Ensure her kids get a proper education.
- Work hard enough to keep her family afloat.
- Ensure that her kids' futures are secure.

Frustrations

- Having to constantly call the center without getting immediate answers.
- In addition, sometimes she doesn't even get to speak to a representative to know about her kids' applications because the lines are always busy.
- It seems like the applications are getting nowhere as a result and she needs to figure out whether she should wait for Head Start to give her answers or to enroll her kids in public school.
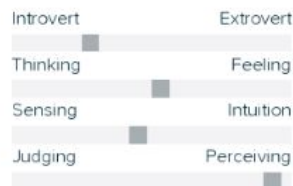
Motivation

Incentive

Fear

Growth

Power

Social

Preferred Channels

Online & Social Media

Referral

Steve Rylan

"I want a place where my children will learn and be safe."

Age: 29
Work: Unemployed
Family: Married
Location: Irvine, CA

Personality

Introvert	Extrovert

Thinking	Feeling

Sensing	Intuition

Judging	Perceiving

Goals

- Find a safe haven for his children.
- Ensure that his children are learning while he's away searching for employment.
- Find a communication channel that will alert him to opportunities for low-income families.

Frustrations

- Does not like being asked for documents at the last minute.
- Anything disorganized makes him anxious and less likely to finish applying for the program.

Bio

Steve has been unemployed for six months and is on the verge of securing a full time job. The job will require long hours and will reduce the amount of time he can spend teaching his children and preparing them for school. Steve wishes to find a program that will not only feed his children while he is at work but also ensure that they are being prepared to enter primary school. As Steve will soon begin a full time job he is worried he will lose track of the documents required for the OC HeadStart program. Steve wants an easy way to see which documents he must submit so his children can be entered into the wait list as soon as possible.

Motivation

Incentive

Fear

Growth

Power

Social

Organized   Nervous

Focused

Preferred Channels

Traditional Ads

Online & Social Media

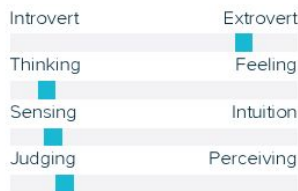Referral

Larissa Tucker

"My family is my life and I will find a way to secure a stable living for them."

Age: 27
Work: Unemployed
Family: Married
Location: Buena Park, California

Personality

Introvert — Extrovert

Thinking — Feeling

Sensing — Intuition

Judging — Perceiving

Determined   Loyal

Humble

Bio

Larissa is married with 2 kids, Lily (3) and Kyle (2). Ever since the birth of her youngest child, Larissa and her husband Greg have had a hard time paying for bills around the house. Greg is the only one in the household who has a job, since Larissa sustained an arm injury and was forced to quit her part-time job 5 months ago. This has left the family vulnerable, and the increasing rent costs in addition to the hospital bills, have forced them to move around cities, searching for cheaper means of living. Because bills are tight, Larissa also does not have a stable phone number. However, Larissa and Greg have reached out for help at local family centers and they were offered resources that could alleviate their situation. Larissa was interested in finding out information on how to enroll her kids in a program for her kids. Although Larissa would like to spend time with her kids, she has to help her husband out with the bills and thus Larissa is looking into working again. The employee at the center provided her with the information for OC Head Start. However, Larissa is unsure of which location to submit her applications to, since there is the chance her family might move again.

Goals

- To have a stable place of living for her family.
- To eventually be able to help pay for housing and utility costs.
- To send her kids off to school so they receive the proper resources.

Frustrations

- She has moved from apartment to apartment frequently in the last 5 years, and she is afraid she will have to move again due to the increasing costs of rent, in addition to hospital bills.
- Therefore, she is unsure of what center to submit the application for her kids.
- She does not have a stable phone number, and contacting the Head Start centers is a hard task when she is not even sure which one she needs to call to get information.

Motivation

Incentive

Fear

Growth

Power

Social

Preferred Channels

Online & Social Media
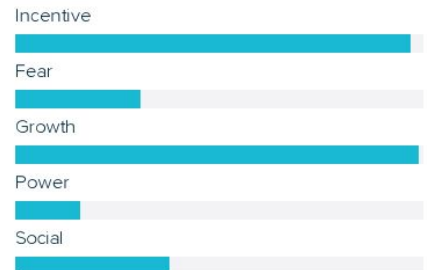
Referral

Scenario A.3.1.1

Laura is getting ready for work and preparing to drop off her kids at her sister's house. She had recently used her smartphone to look up what was going on with Head Start since she had been unsuccessful in figuring out her kids' application statuses but nothing came of it. However, she decided to do so again because her sister had heard from her friends that there was a new way for her to check the application statuses without having to call the center. She was told this was a

quick and easy way and since she only has time before going to work to check, she pulls up her phone.

- Laura navigates to the OC Head Start website. Once on the page, she sees a banner she had not seen in previous visits to the website. The banner reads, "Parents, wondering what your application status is? Click here to find out!".
- Laura taps on the banner which redirects her to the page. There, she is asked to input the Child ID and birthday to access her child's application status.
- She does not remember what the Child ID is for each of her kid's application and she is about to pull up the call center's number when she sees a question mark button at the side of the Child ID field. She presses it and it informs her that the Child ID is a number given to each applicant and is e-mailed to parents once they submit the application.
- Laura recalls receiving that e-mail and she navigates to Gmail to look for it.
- After thoroughly browsing through the app, she finds the e-mails in question and writes the numbers down for each child on a piece of paper.
- She then visits the page again and inputs the Child ID as well as their birthday and she is able to successfully log in.
- She is able to view both application statuses for her kids in a timely matter, which allows her to make extra time to spend time with her kids before she leaves to work.

Scenario A.3.1.2

Laura is the mother of two children and has recently submitted her registration online. She received her children's ID numbers and used one to login to the system. She noted that she was being asked to submit her immunization forms for both children. Laura made copies of the records and mailed them into the office.

- A few days later Laura logged into the system and checked the site to see if the immunization records had been received.
- Laura saw that they were but one of the forms had an error.
- She hovers her mouse over the error message but nothing happens so she clicks the error box.
- A small popup shows up with a simple message detailing the nature of the error, "The Immunization Record is incomplete".
- Laura realized she forgot to put the sheet into the envelope and quickly sent a new letter containing the missing page.
- A few days later Laura checks the site once again using her child's ID and birthdate.
- She sees that the page had been received and her children's immunization records were marked as received with no errors.

Scenario A.3.2.1

Steve has finally secured an interview for the job he was been working hard to obtain. With the help of friends, he has been running errands and ensuring that everything goes perfectly well for the interview. His friends have been taking care of the kids and they have kept Steve at ease since they take care of them until Steve is available to pick them up. Steve is grateful for their help, but now he seeks to successfully enroll them in the Head Start program, although he is feeling anxious about the process.

- He has heard from friends that the current process is like a black box, in which he cannot view his application status or anything else for that matter.
- This makes Steve nervous since he feels like he needs constant notifications and a checklist to see what documents he needs to submit, since he recently has not had time as a result of securing the interview.
- Nonetheless, Steve gathers the courage to call the closest center, where he is informed there is a new feature on the website which allows him to view the forms required, as well as sign up for email notifications.
- This is a huge relief for Steve, and he decides to follow through and submit applications for his kids.

Scenario A.3.2.2

Everything has been running smoothly for Steve; he has secured the job and has successfully submitted applications for the Head Start program for his kids. Nevertheless, money is tight and Steve knows that these resources provided by the program will be of great relief and impactful in his kids' lives. Steve has been keeping up with the status of their applications through the feature on the OC Head Start page. However, he recently was required to make a separate email address for his job. Steve finds that he has been using this new email address more than the previous email address which alerts him of his kids' application status. This makes Steve anxious so he decides to explore the OC Head Start page to figure out if he can change the email preference for his account.

- Steve logs on to his account by using the Child ID and birthday of one of his kids. He navigates to his account's settings, where he clicks under the notification preferences.
- Steve selects the text box that has his old email address and deletes the old information. He updates his work email address to be the primary form of notification.
- Steve successfully saves his notification preferences and logs out of his account.
- A few days later, Steve receives a notification on his work email that alerts him he is lacking 3 more forms for each child.
- This makes him feel anxious, but he is relieved that he was alerted on time. He makes a note of this alert on his mobile calendar to view when he gets home from work.

Scenario A.3.3.1

Larissa is looking to find a job, since her doctor has informed her that she can start working once again. This is great news as she will be able to help her husband Greg with their housing costs, as well as any of her kids' needs. In addition, she is interested in enrolling both her kids, Lily and Kyle in an educational program and remembered that she was recommended to submit applications for both her kids at OC Head Start. Larissa hesitated to submit applications to the centers nearby since she felt that her family would relocate to a different city. However, she has an interview for a possible part-time job, so there is a good chance they will stay in Buena Park.

- Larissa goes to the local library with her kids, where she uses the computers to visit the OC Head Start website. There is a banner advertising a new extension to the website which allows parents to select which center to apply to.
- She clicks on the link, and she is presented with a page that lets her see a Google Maps page and a section to input her location.
- She inputs her address and clicks a button that says "Find closest center!". Then, she is presented with a list of centers in order from closest to furthest location. The map also displays this information with numbers, in which 1 is the closest location.
- From the list, Larissa picks the closest center to apply to and she pulls up the application link from the website.
- Larissa successfully submits applications for both her kids and she is now wondering how she will submit her forms to the center.

Scenario A.3.3.2

Larissa has successfully submitted applications for both her kids and she visited the center with her kids to submit the forms needed for each application. After her visit, she was informed that she could use her phone to access their website in which there is a way for her to view the status of each application. The employee lets her know that all she will need are the Child ID numbers and her kids' birthdays in order to access this information.

- Although Larissa is working now, she makes time during her day off to take her kids with her to the library and visits the OC Head Start page. There she successfully checks each application status and she finds out that she accidentally submitted the wrong form for Kyle's immunization records.
- With this information, she knows that she needs to pay a visit to the Head Start center again, where she will deliver the correct form. After she does so, she checks the application status for Kyle and she sees that the new information has been updated.
- A few days later, she receives a notification that informs her both applications have been accepted and both kids are now on the waitlist for the Head Start program.

Revision History

Date	Change	Reason for Change
4/24/18	Add individual requirements template and IDs	To account for traceability and to have requirements that are easily identifiable
4/30/18	Edit requirements with new details, Formatting	Living document
5/9/18	Edit requirements with new details. Formatting. Added product perspective, use cases, personas and scenarios.	Living document.