



Little Voices



Dhanashree Mane, Piyali Dey, Yu Liu

Table of Contents

| | |
|-----------------------------------|----|
| Business Description..... | 3 |
| Business Need | 3 |
| Business Requirements..... | 3 |
| Business Value..... | 4 |
| System Description..... | 4 |
| Functional Requirements | 7 |
| Information Requirements..... | 9 |
| Non-Functional Requirements | 10 |
| Use Cases | 11 |
| Context Diagram..... | 19 |
| LEVEL 0 DFD..... | 20 |
| LEVEL 1 DFD..... | 21 |
| Datastore Details..... | 24 |
| Program Structure Chart | 26 |
| Output Reports..... | 25 |
| Future Scope | 39 |
| Conclusion..... | 39 |

BUSINESS DESCRIPTION

Little Voices is an organization dedicated to help orphan kids from Silicon Valley area to find a proper home. Their mission is to cooperate and collaborate with local authorities and members of the community to offer a chance at life and a new start to orphans and other endangered children. They aim to give them a first-class education, access to necessary health services and, above all, the opportunity to grow up healthy and happy in a safe, caring, warm and familial environment.

We are designing an all-in-one information system that will allow 'Little Voices' to easily manage their kids, employees, funding, donations as well as adoption procedures. The system is internal to the companies and only employees of 'Little Voices' can access it. Every new employee can create a new account and track every kid to see if they have been adopted or available for adoption. The system can also track every employee as they go through their onboarding process, all the career facilities like dates of hosting webinars, career workshops, educational aid and counseling sessions. The system will also update itself as a kid(s) going through the adoption process which includes gathering the data, background check on prospective parents and dealing with the legal department in order to make sure the paperwork is correct and legit.

BUSINESS NEED

Little Voice's online tracking system is designed to help the organization maintain efficient tracking of the kids who are orphans and/or endangered. The system provides the kids with proper guidance for their well-being by fulfilling their educational and health related needs. It will ease the process of tracking the sponsors as well as secure the funds that are being raised for the kids. The system also does a great job to track all the employees within the organization in their hiring, onboarding and maintenance process.

BUSINESS REQUIREMENTS

Using this new online tracking system, the organization will help contact, accept and screen donations as well as funds from donors and sponsors and eventually help orphans to live a happy and normal life. The specific functionalities that the system has are listed below:

- Screen and collect money and donations from sponsors and donators.
- Organizing career/social events and collect money for kids' educational needs.
- Tracking information about incoming, adopted and available kids.
- Onboard new caretakers and employees by providing features like background checks, account creation etc.
- Organize adoption events in order to help kids get adopted. In the process, also perform adopters' background check and connect them to meet with kids before adoption.

BUSINESS VALUE

This information system aims to add the following business values.

- **Cost-Effective:** It is less expensive to pay once and build this system that can handle all the fund and sponsorship coming to the organization. With this system in place, our goal is to increase sponsorship fund by 30%.
- **Efficiency:** The system will increase kids' adoption rate by at least 5% per year as well as increase operational efficiency by 40%.
- **Convenience and Ease of Use:** The system is very convenient and easy to use. It conveniently tracks all the employees, kids, their status and store enough data on the adoption process to run analytics.
- **Reliability:** The system has three core values: Flexibility, Reliability and Ease of reporting. Manual processes are more prone to errors. Automating the steps takes out this vulnerability and makes the process more reliable.

SYSTEM DESCRIPTION

- **Log In**
The system allows all current employees (including Managers, Caretakers, full-time, part-time and volunteers) to login to the system using their employee ID.
 - Once an employee accepts the offer to join the organization, the recruiter adds all the relevant details of the employee into the system.
 - The employee then receives an email from the recruiter asking to create a password which will be used as his login password.
 - Employee follows the link mentioned in the email and creates a password by following all the password rules.
 - In the event where the employee forgets his current password, he can also request a reset for a forgotten password.
- **Managing incoming Donations**

- When donation arrives at the donation department from a sponsor, the employee enters all the details regarding the sponsor and his donation into the system. The details include Sponsor ID, Sponsor Name, Organization and What kind of donations he has made. The donations can be in term of money as well as in terms of materials. (For example, books, clothes, medicines etc.)
 - Employee then segregates all the donated items based on their categories and also checks for their quality.
 - If the donated items are in good condition, they get added to the inventory whereas all the discarded items get reflected into the record. The system keeps track of how many items (and of which categories) have been discarded.
 - And Finally, the employee sends out a 'Thank you' note to all the sponsors for their kind gestures.
- **Budgeting and Managing Funds for all the Departments**
 - The organization has many departments.
 - General Management
 - Donation
 - Adoption
 - Health
 - Education
 - Food
 - Housing
 - Organization Manager controls the flow of funds throughout the organization. He keeps tracks of the sponsored money and funds information.
 - Organization Manager can see and access all the fund information by accessing the sponsor details.
 - If a particular department needs money for their own activities, the department head needs to fill out a form stating their requirement details.
 - Upon submission, the form triggers an automated email to the organization Manager asking for a review.
 - The Organization Manager will then look up the details and approve/reject the request accordingly. He will also set up a maximum limit of the amount that can be spent by the department for that particular activity.
 - **Planning and Organizing Events for Kids**
 - Little Voices organizes many events throughout the year for everyone to attend. Employees, Kids, Foster Parents everyone is eligible to attend the events.
 - The employee at the Education Department select the Create Event Tab and enter the 'Event Title'.

- If the event title is not a duplicate one, the system creates a unique Event ID as well as present a form to the employee to fill up more details about the event. These details are, Event Description, Eligibility Requirements, Start Date, Event Capacity and Status.
 - Once all the event details have been successfully filled, the system sends out an event posting alert to every department of the organization.
 - Once the Kids find an event interesting, their respective caretakers are able to enroll them for the event using their ID (Kid ID) number.
- **Adding or Managing Employees**
 - Like any other Organization, Little voices have many kinds of employees working for the organization.
 - General Management Employees -> Caretakers, Recruiters
 - Donation Dept. Employees
 - Adoption Dept. Employees
 - Health Dept. Employees -> Doctors
 - Education Dept. Employees -> Event Managers
 - Food Dept. Employees
 - Housing Dept. Employees
 - Recruiters are authorized to hire and onboard new employees. Onboarding process begins once the employee receives a clear background check result.
 - Recruiter can enter all the relevant details of a new employee into the system. These details are Name, Age, Mailing Address, Department ID, Phone Number, Previous work Experience, Employment Type and Salary.
 - Once all the details have been successfully entered, the system generates a unique employee id for each employee.
 - The recruiter then assigns 5 kids to each employee for better supervision and personal care.
 - The system also generates bi-weekly feedback form for this employee to be shared with other staff in the organization.
 - Recruiter can also come back at a later time in case any details needs to be updated.
 - **Adding or Managing Kids**
 - Little Voices' mission is to provide better management by taking good care of kids.
 - Recruiters are authorized to add or edit a kid's details in the system. They can enter all relevant details of a new kid like name, age, sex, race, disability issues (if any), educational background, past history and status just by clicking the 'Add New kid' tab.
 - System generates a unique Kid ID upon successful submission of all the details.
 - Every kid will be assigned a personal caretaker for better supervision.

- Recruiter can also come back at a later time in case any details needs to be updated.
- **Matching the Kids with Prospective parents: Adoption/Fostering**
 - Prospective parents can go to Little Voices Website and fill out a form stating their name, age, contact details. They can also provide their preference details describing what kind of kid they are looking for.
 - Once the system gets the required parameters from the parent's description, it matches those with the kids details in the system. The system displays a list of kids that match the parameters provided by the prospective parents.
 - The parents then can schedule appointment with those kids based on the organization calendar.
 - The organization manager then confirms the appointment and the system also sends out automated emails to notify the same.
 - After completion of the parent-kid meeting, the system again sends out feedback forms to both the parents and the caretakers (of those kids) in order to gather feedback.
 - Once there is a positive feedback match from both the Kid and the parents, the system will walk the parents through the legal procedure of adoption and eventually completes the process.
 - The Organization manager changes the Kid's status to Adopted or Fostered.
 - However, in the case when there is no match (from either side), the system will set up a second appointment for the parent with the kid next in their preferred list.

FUNCTIONAL REQUIREMENTS

1. Screen Donations and Sponsored Money

- 1.1. The system will allow the employee to record the details about the sponsors.
- 1.2. The system will accept and record the sponsored money from governments, individuals, companies and nonprofit organizations.
- 1.3. The system can record funds in details as well as can track how it will be spent on kids.
- 1.4. The respective head of the department can utilize the money after the approval from Organization managers. And the system will report to manager if it finds that the money is not used properly.
- 1.5. The system will screen and record material donations such as books, clothes, food, medicines and so on. If the donation is not suitable for kids, like the books or clothes are clearly not suitable for kids, system will remind managers to return the donations to donors and kindly remind them with emails about what will be useful for kids.

2. Plan and Organize Event

- 2.1. The system will hold career workshops for kids, helping them build right career ambition and work in that direction. Professional experts in different fields will be invited to the organization and present career knowledge to kids in interesting and attracting ways.
- 2.2. The system will offer consulting and aptitude tests. Kids will have to go through psychological tests regularly and the system will arrange doctors for them if something is wrong.
- 2.3. The system will hold webinars with kid's experts every three months, and experts will share us experience and opinions about how we can improve our organization and take care of kids better.
- 2.4. The system will offer education aid for kids, helping them with educational resources. Kids can choose online study resources or make appointments with caring teachers in the organization to study better and more efficient.

3. Add/Manage Employees

- 3.1. The system will contact an external background check agency to perform background checks on all prospective employees. Only upon passing those checks successfully, they will be allowed to join the organization.
- 3.2. The system should then present the user an option to add new employee details into the system. The employee will only be added in the system when all the information entered has been verified.
- 3.3. The system will assign a certain number of kids to each employee. The kids can be chosen based on several parameters like their age group, amount of care needed and/or any special disability issue.
- 3.4. The system will periodically generate Employee Feedback form which will be sent to all the organization staff for a peer review as well as to all the foster parents for their satisfaction rating.

4. Add/Manage kids

- 4.1. The system should present the user an option to add new kid details into the system.
- 4.2. The system will keep a track of adopted kids, foster kids, existing kids.
- 4.3. The system will allow employee to enter the inspection details of the kids on a bi-weekly basis.

5. Fostering Facilities

- 5.1. The system will ask the prospective foster parent to upload the eligibility letter from legal authority that there are no criminal records present on their name.
- 5.2. The system will allow the eligible foster parents to enter some information about the kind of kids they are looking for. The characteristics of the kids could be

related to the age group, race/sex preference, accommodation to any disability issues etc.

- 5.3. Once all the preference data have been gathered, the system will then match the data with the available kids in the system. The system will generate the list of kids' names who match the criteria given by the foster parents.
- 5.4. The system will also handle the scheduling of appointments between the kids and the foster parents.
- 5.5. Once the parent-kid selection is done, the system will generate paperwork to be handled by the legal department of the organization in order to finalize the foster process.

6. Adoption Facilities

- 6.1. The system will ask the prospective parents to upload the eligibility letter from legal authority that there are no criminal records on their name.
- 6.2. The system will generate a form for each parent to enter some information about the kind of kids they are looking for. Few such information could be the age group, race/ sex preference, accommodation to any disability issue etc.
- 6.3. Once all the preference data have been gathered, the system will then match those data with the information available for all the kids in the system. It will then generate a list of kids' names who match the description given by their prospective parents.
- 6.4. The system will also handle the scheduling of appointments between the kids and the parents.
- 6.5. Once the parent-kid selection is done, the system will generate paperwork to be handled by the legal department of the organization in order to finalize the adoption process.

7. Housing & Food Facilities

- 7.1. The system will keep a track of allocation of kids per rooms and bathrooms.
- 7.2. The system will keep track of the room requirements
- 7.3. The system will keep track of weekly inspection report on cleaning of the rooms and bathrooms.
- 7.4. The system will store the weekly inspection and quality check details on food.
- 7.5. The system will allow the catering in-charge to decide the menu of the food.

INFORMATION REQUIREMENTS

- 1. The system should always hold the updated information, be it changes in employee or Kid's status or adoption application status.
- 2. The system should store all the information related to user according to the hierarchy of user, i.e. regular full-time employee, volunteer, director etc.
- 3. The system should provide suggestions for frequently asked feedback questions.

4. The system should maintain data for analytical purpose. For example, number of applications coming in for adoption, number of applications getting approved, condition of the kids' post-adoption etc.

NON-FUNCTIONAL REQUIREMENTS

1. Operational

- 1.1. The system should run on any web browser.
- 1.2. User should be able to navigate through the system easily. i.e. User-friendly.
- 1.3. The data throughout the system should be consistent while system communicates with the user.
- 1.4. System must be able to communicate with all the appropriate data stores from different business modules.
- 1.5. The system should support hardware and software up-gradation without any unnecessary modifications.

2. Security

- 2.1. System should keep all Kids, Prospective Parents and Adoption application related data confidential.
- 2.2. System should enforce valid authentication and authorization.
- 2.3. The system should be accessible only to the registered users. Strong password policies should be enforced.
- 2.4. System should include all available safeguards from viruses, worms, trojan horses etc.

3. Performance

- 3.1. The system should be active 24/7.
- 3.2. The system should not have a downtime of more than 1 hour.
- 3.3. All the data transaction must be carried out accurately.
- 3.4. Real-time data should be available.
- 3.5. The response time should be very less.
- 3.6. The navigating speed from one page to another page should be seamless.

4. Cultural/Political

- 4.1. The system shall support English language only.
- 4.2. The system shall not display any religious symbols.
- 4.3. The system should run the antivirus recommended by the Organization.
- 4.4. The adoption process must be ethical and unbiased. No bias/favor/preference should be given on any kids/prospective parents/employees.

USE CASES

| | | | |
|--|--------------------|---|-------------------|
| Use Case Name: Manage incoming donations | | ID: UC_01 | Priority: High |
| Brief Description: This will describe how employees will manage the donations that are coming from the sponsors | | | |
| Actor: Employee from Donation Department | | | |
| Trigger: Whenever some donations are received from donors. Type <input checked="" type="checkbox"/> External <input type="checkbox"/> Temporal | | | |
| Preconditions: 1. Employees are authorized to have access to manage donations and sponsored money. 2. The system is available, always online and can be accessed by multiple employees from different machines. | | | |
| Normal Course: 1. At the Donation Department, employee enters the sponsor ID and system returns the sponsor details. Sponsor Details: a) Sponsor ID b) Sponsor Name c) Organization d) Add donation details 2. Employee segregates the items based on categories from the donations. He screens each item for quality. 3. If the item is in good condition, then employee adds the items to the inventory. If not in good condition, then he discards the items and updates the system by clicking on the Add donation details such as a) Number of items b) Category c) Discarded item count 4. The employee sends a ‘Thank you!’ note with all the donation details to the respective Sponsors via their email ID. | | Information for Steps | |
| | | ← Sponsor ID → Sponsor Details | |
| | | ← Add Donation details | |
| | | ← Sponsor Email ID → Thank you email | |
| Postconditions: The system is up to date with all the information. All the donations should be moved to inventory location. | | | |
| Exceptions: E1: If the items are not appropriate for the kids, then employee will return the stuff. E2: If employee enters wrong Sponsor ID, then system displays “Invalid Sponsor ID” | | | |
| Summary: | | | |
| Inputs | Source | Outputs | Destination |
| Sponsor ID | Employee | Sponsor Details | Employee |
| Sponsor Details | Sponsors Datastore | Add Donation Details | Donations & Funds |
| Add Donation Details | Employee | | Datastore |
| Sponsor Email ID | Sponsors Datastore | Thank you email | Sponsor |
| Thank you email | Employee | | |

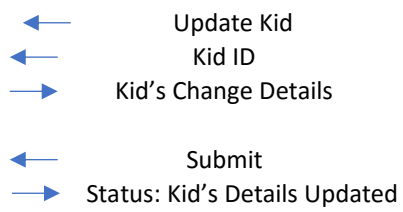
| | | | |
|--|---|---|---|
| Use Case Name: Manage the budgeting for each department. | | ID: UC_02 | Priority: High |
| Brief Description: This will describe how the manager will take care of the funds and sponsored money by allocating budget to each department. | | | |
| Actor: Organization Manager, Manager at each department | | | |
| Trigger: Whenever there are some money/funds that are received from donors. Type <input checked="" type="checkbox"/> External <input type="checkbox"/> Temporal | | | |
| Preconditions: 1. Only managers are authorized to have access to manage donations and sponsored money. 2. The system is available, always online and can be accessed by multiple employees from different machines. 3. The information of sponsored money is confidential and secured within the system. | | | |
| Normal Course: 1. Each department will have their own manager who will be responsible for spending the money effectively. Manager of each department enters the Budget Request. 1.1. Required fund 1.2. Reason 1.3. Ask for Approval The system stores the Budget request details in the datastore. 2. This triggers an automated email to the organization manager. 3. The Organization Manager tracks the sponsored money and funds information by entering their sponsor ID in the system. 4. The organization manager receives the money and fund information from the Sponsor datastore through the system. 5. The Organization Manager will then approve/reject the request based on the validity. The manager of each department can utilize the amount only up to the approved amount set by the organization manager as withdraw limit. | | Information for Steps ←→ Budget Request ←→ Budget request details → Approval status: Pending → Email for Approval ← Sponsor ID → Sponsored money Info ← Approve Request or Reject Request → Approval status: Approved/Rejected | |
| Postconditions: The funds are transferred securely to each department account. | | | |
| Exceptions: E1: If manager enters invalid Sponsor ID then system will show the message “Invalid Sponsor ID”. | | | |
| Summary: | | | |
| Inputs | Source | Outputs | Destination |
| Budget Request Sponsor ID Sponsored money Info Approval status Approve/ Reject Request | Department Manager Organization Manager Sponsors Datastore Donations & Funds Organization Manager | Approval status Sponsored money Info Email for Approval Budget Request | Department Manager Organization Manager Organization Manager Sponsors Datastores |

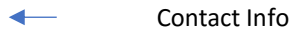
| | | | |
|---|------------------|--|---------------------|
| Use Case Name: Plan and Organizing events for kids | | ID: UC-03 | Priority: High |
| Brief Description: This use case will describe how the system will take care of organizing and enrolling process of the events for kids. | | | |
| Actor: Employees at Education Department, Caretakers at Organization | | | |
| Trigger: Whenever there is a new event planned. And the kids need to register for events that are already posted online. | | | |
| Type <input checked="" type="checkbox"/> External <input type="checkbox"/> Temporal | | | |
| Preconditions: 1. The employees at the Events Department should have the authorization to add or update an event. 2. The event posting can be seen online. | | | |
| Normal Course: 1. The employee selects 'Create Event' with an event title and system returns a new Event ID 2. The system presents a blank event post form to fill up the event details. 3. Employee enters all the relevant information about the event. a. Description b. Eligibility Requirement c. Start Date d. Status e. Venue 4. The system sends Event posting alert to all caretakers of the kids via system. | | Information for Steps <div>←→</div> Event Title →Event ID →Blank Form for Event Details <div>←</div> Event Details <div>→</div> Event Posting Alert | |
| Alternative Course(s): The event has already been created and the kids want to register for it. 1. Kids/caretakers are able to looks at the public event posting page and get all the available details. 2. Caretakers will add the kid's names who are interested in a particular event. | | <div>←←→</div> Event Details Register Kid ID Registration details | |
| Post conditions: 1. All the Datastores are up to date. 2. The events are successfully created. | | | |
| Exceptions: E1: If the user tries to create a duplicate event, the system displays 'Event Already exists' E2: If an employee outside the Events department tries to create an event, the system displays 'You do not have access to create an event' E3: If the event capacity is full, the system displays a message saying 'Event Registration is Full' E4: If the event is cancelled, the system deletes the data related to the event and displays 'Event Cancelled'. | | | |
| Summary: | | | |
| Inputs | Source | Outputs | Destination |
| Event Title | Employee | Event ID | Employee |
| Event Details | Employee | Blank Form for Event | |
| Register Kid ID | Caretaker | Details | Employee |
| Event Details | Events Datastore | Event Details | Events Datastore |
| Registration details | Events Datastore | Event Posting Alert | Events Datastore |
| | | Registration details | Employee, Events DS |

| | | |
|---|---|-----------------------|
| Use Case Name: Add/Manage Employees | ID: UC-04 | Priority: High |
| Brief Description: This use case allows the Organization Recruiter to maintain employee information. This includes adding and changing employee information from the system | | |
| Actor: Recruiter | | |
| Trigger: When a new employee joins or the manager needs to manage an existing employee | | |
| Type <input checked="" type="checkbox"/> External <input type="checkbox"/> Temporal | | |
| Preconditions: 1. The Organization Recruiter is authorized to add a new employee. 2. The Employee datastore should already have the employee’s background check details. | | |
| Normal Course: <div><div>1. The recruiter selects ‘Add Employee’.</div><div>2. The system displays a blank employee input form.</div><div>3. The recruiter then enters the employees’ information. This includes:<div><div>a. Name</div><div>b. Age</div><div>c. Mailing Address</div><div>d. Phone number</div><div>e. Department ID for which he has been hired</div><div>f. Employment Type (Full-time, Part-time or Volunteer)</div><div>g. Salary</div><div>h. Previous Work Experience</div></div></div><div>4. The recruiter then selects ‘Submit’ after all the information has been entered.</div><div>5. The system generates and assigns a unique employee id number to the employee.</div><div>6. And recruiter sends the email to the employee with Employee ID and a link to set their password.</div><div>7. The recruiter then assigns 5 kids to be taken care of by this particular employee (Caretaker) by retrieving unassigned Kid IDs from datastore.</div><div>8. The system links the Employee ID to 5 Kid IDs and stores the details in the respective databases.</div></div> | Information for Steps <div><div>←Add Employee</div><div>→Employee Input Form</div><div>←Employee Details</div><div>←Submit</div><div>→Employee ID</div><div>←Recruiter Email</div><div>←Unassigned Kid IDs</div><div>→Assigned Kid IDs</div><div>→Employee Details</div></div> | |
| Alternative Course(s): Employee already exists in the system. The manager wants to update the employee information <div><div>1. The recruiter selects ‘Update Employee’</div><div>2. The system displays a form asking for an employee id.</div><div>3. The recruiter enters employee id and the system retrieves the employee details.</div><div>4. The recruiter makes the desired changes to the employee information and hits ‘Submit’ again.</div><div>5. The system updates the employee record.</div></div> | <div><div>←Update Employee</div><div>←Employee ID</div><div>→Employee’s Change Details</div><div>←Submit</div><div>→Updated Employee Details</div><div>→Status: Employee Details Updated</div></div> | |
| Post conditions: 1. All the datastores are up to date. 2. The new employee has been successfully added to the system. 3. The existing employee details has been successfully updated in the system. | | |

| | | | |
|--|----------------|--|---------------------|
| Exceptions: E1: If the background check of the prospective employee is not positive. E2: If the Employee is not found with the name specified. E3: Somebody outside the Accounting Department is trying to access the employee record. In that case, an error message will pop up saying 'You do not have Access'. | | | |
| Summary: | | | |
| Inputs | Source | Outputs | Destination |
| Add Employee | Recruiter | Employee Input Form | Employees Datastore |
| Employee Details | Recruiter | Employee ID | Employees Datastore |
| Update Employee | Recruiter | Recruiter Email | Employees |
| Employee's Change Details | Recruiter | Employee Details | Employees Datastore |
| Employee ID | Recruiter | Assigned Kid IDs | Kids Datastore |
| Search unassigned Kid IDs | Recruiter | Status: Employee Details | Recruiter |
| Unassigned Kid IDs | Kids Datastore | Updated Updated Employee Details | Employees Datastore |

| | | |
|---|--|-----------------------|
| Use Case Name: Add/Manage Kids | ID: UC-05 | Priority: High |
| Brief Description: This use case allows the Recruiter to maintain Kids information. This includes adding, or updating information of the kids. | | |
| Actor: Recruiter | | |
| Trigger: When a new kid joins the organization, or needs to manage an existing kid details | | |
| Type <input checked="" type="checkbox"/> <u>External</u> <input type="checkbox"/> Temporal | | |
| Preconditions: 1. The recruiter is authorized to add a new kid or edit a kid's details. | | |
| Normal Course: <ol style="list-style-type: none"> Recruiter selects 'Add Kid'. System displays a blank kids details input form. Recruiter then enters the kid's information. This includes: <ol style="list-style-type: none"> Name Age Sex Any Dissability Issue Past Known History Educational Background Medical Records Kids present Status: Available Recruiter then again selects 'Submit' after all the information has been entered. System generates and assigns a unique kid id to the new kid. System will then generate bi-weekly Inspection Details form for this kid to be filled out by the authority. (Caretaker) | Information for Steps <div> <div> <div>←</div> <div>→</div> <div>Add Kid Kids Input Form</div> </div> <div> <div>←</div> <div>Kids Details</div> </div> <div> <div>←</div> <div>Submit</div> </div> <div> <div>→</div> <div>Kid ID</div> </div> <div> <div>→</div> <div>Inspection Details Form</div> </div> </div> | |

| | | | |
|--|--|---|--|
| Alternative Course(s): Kid already exists in the system. The manager wants to update the kid’s status (from in-shelter to adopted/fostered) 1. Recruiter selects ‘Update Kid’ 2. The system displays a form asking for a Kid’s id. 3. Recruiter enters Kid’s id and the system retrieves the kid’s details. 4. Recruiter makes the desired changes to the Kid’s information and hits ‘Submit’ again. 5. The system updates the Kid’s record. |  | | |
| Post conditions: 1. All the datastores are up to date. 2. New kids have been successfully added to the system. 3. An existing kid’s details has been successfully updated in the system. | | | |
| Exceptions: E1: If the Kid is not found with the name specified. E2: Somebody outside the Organization Management Department is trying to access the kids records. In that case, an error message will pop up saying ‘You do not have the required Access’. | | | |
| Summary: | | | |
| Inputs | Source | Outputs | Destination |
| Add New Kid Kid’s Details Kid’s name Update Kid Submit | Recruiter Recruiter, Kids DS Recruiter Recruiter Recruiter | Kid’s Details Input Form Kid ID Inspection Details Form Kids Details Updated Kid’s Details Status: Kids Details Updated | Recruiter Recruiter Caretaker Kids Datastore Kids Datastore Recruiter |

| | | |
|--|------------------|---|
| Use Case Name: Matching of the kid-parent. | ID: UC-06 | Priority: High |
| Brief Description: This will describe how the system will take care of the matching of the kid-parent based on the preference. | | |
| Actor: Organization Manager, Caretaker & Parent | | |
| Trigger: When the parent is interested in adoption or fostering. | | |
| Type <input checked="" type="checkbox"/> External <input type="checkbox"/> Temporal | | |
| Preconditions: <ol style="list-style-type: none"> 1. The prospective parent should be eligible to adopt. 2. The Prospective Parents datastore should have the respective parent's background check details. | | |
| Normal Course: <ol style="list-style-type: none"> 1. The parent enters their contact information in the form. Contact information includes: <ol style="list-style-type: none"> a) Parent Name b) Phone Number c) Age d) Email ID e) Address 2. The parent enters the preference details of the kid in the | | Information for Steps  |

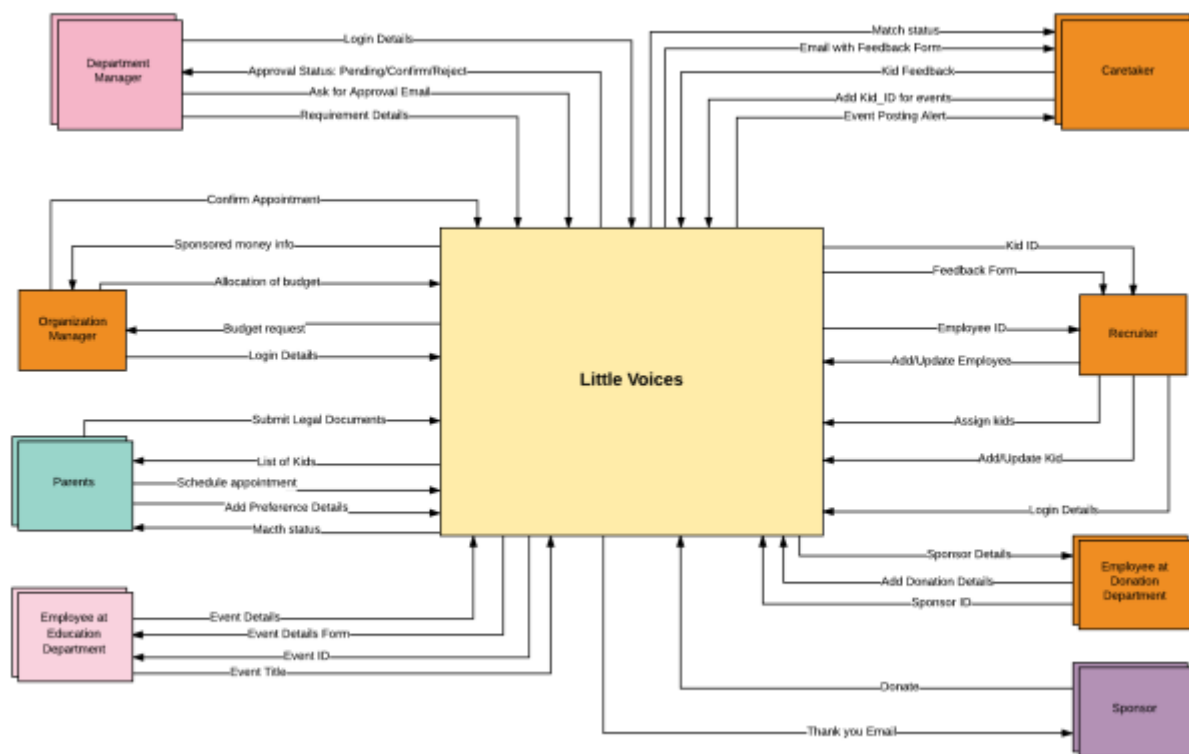
| | |
|---|--|
| <p>system. Preference Details includes</p> <ol style="list-style-type: none"> Age Sex Race Disability <ol style="list-style-type: none"> The system displays the list of kids matching the preference details. The parent will schedule the appointment according to the schedule mentioned by the organization. The appointment details will be sent to Organization manager. The manager will confirm the appointment and system will send the automated email to the parent for confirmation. Once the meeting is done, the system will send the automated email to Parent and Caretaker for their feedback. The parent will fill out the feedback form. (which kid they liked based on the preferred list of kids.) Once the meeting is done, the caretaker of that kid will give the feedback from the kid if they liked the parent or not. If both kid and parent have positive reply then the match is successful. It gives the Match status to Parent and Caretaker and Organization manager. The parent will go through the legal adoption procedure and will submit the related documents in the system. Once all the documents are validated by the manager, the kid is actually announced as 'Adopted' or 'Fostered'. The Organization Manager will change the status of kid as 'Adopted' or 'Fostered'. | <ul style="list-style-type: none"> ← Add Preference details → List of kids ← Schedule an appointment → Appointment details ← Appointment confirmation ← Automated confirmation email → Email with Feedback link ← Parent's Feedback ← Kids Feedback → Match status: Successful ← Submit legal documents ← Kid status: Adopted/Fostered |
| <p>Alternative Course(s): If the feedback from kid is not positive, then branch at 7th step in normal course</p> <ol style="list-style-type: none"> If kid gives negative feedback, then system will send the email to parent and ask to choose different kid. If parent wants to adopt/foster another kid, then they will send the email to the manager. Once approved, the caretaker of another kid will give the feedback from the kid. <p>Again, branch at step 8 to complete the adoption.</p> | <ul style="list-style-type: none"> → Match status: Unsuccessful ← Email Request for second match |
| <p>Post conditions: All the datastores are up to date. The kid should be officially sent to the parent's house.</p> | |
| <p>Exceptions: E1: If the background check of the prospective parent is not positive. E2: If the appointment is not approved by the manager then parent will have to reschedule the appointment. E3: If there is no positive feedback match at all, then system will send the sorry letter to the parent.</p> | |
| <p>Summary:</p> | |

| Inputs | Source | Outputs | Destination |
|-------------------------------------|--------------------|---|------------------------|
| Contact Info | Parents | Preference Details | Kids Datastore |
| Add Preference Details | Parents | List of Kids | Parents |
| Matching Kid IDs | Kids Datastore | Automated confirmation | Parents |
| Schedule an appointment | Parents | email | |
| Appointment confirmation | Organization | Email with a link for | Parent, Caretaker |
| | Manager | Feedback | |
| Parent's Feedback | Parents | Parent's Feedback details | Adoption datastore |
| Kid's Feedback | Caretaker | Kid's Feedback details | Adoption datastore |
| Caretaker Email ID | Employee Datastore | Match Status | Parents, caretaker, |
| Org Manager Email ID | Employee Datastore | Email Request for 2 nd match | Organization Manager |
| Parent Email ID | Adoption | Kid's details | Updated Kids Datastore |
| Kid status: | Organization | | |
| Adopted/Fostered | Manager | | |
| Email req for 2 nd match | Parents | | |
| Submit legal documents | Parents | | |

| | | |
|--|--|-----------------------|
| Use Case Name: Log-in | ID: UC_07 | Priority: High |
| Brief Description: This will describe how the managers; caretakers and all employees will be able to log in to the system. | | |
| Actor: Managers, Caretakers, All Employees | | |
| Trigger: Whenever the employees want to access the system Type <input checked="" type="checkbox"/> External <input type="checkbox"/> Temporal | | |
| Preconditions: <div>1. The Managers, Caretakers and employees should have a clear background check and an official joining letter to join the organization.</div> <div>2. Recruiter has already added the employee details to the system.</div> | | |
| Normal Course: <div>1. Employee receives an email from the recruiter asking to create a password.</div> <div>2. Employee clicks on the link given in the email to set the password. The system will navigate to the login page.</div> <div>3. Employee enters their Employee ID to the system.</div> <div>4. Employee sets new password in the system. The system will store the login information entered by the employee in the datastore.</div> <div>5. Employee can also request a reset for a forgotten password and have the system send a reset link to their entered email ID.</div> | Information for Steps <div>→ Recruiter Email</div> <div>→ Login Page</div> <div>← Employee ID</div> <div>← Password</div> <div>← Email ID</div> <div>→ Password Reset Link</div> | |
| Post conditions: <div>1. Everyone will be able to log into the system successfully.</div> <div>2. All employees are authenticated through their Employee ID.</div> | | |
| Exceptions: E1: Details entered by employee is incorrect. The system displays ‘Invalid Employee ID’. E2: The password set does not match the criteria provided for setting password. The system displays ‘Invalid Password’. E3: An existing employee is trying to access the ‘Set Password’ link from the recruiter’s email. The system displays ‘You are already in the system.’ | | |

| Summary: | | | |
|---|--|--|------------------------|
| Inputs | Source | Outputs | Destination |
| Recruiter Email Employee ID Password Employee Email ID | Recruiter Employees Employees Employees Datastore | Recruiter Email Password Reset Link | Employees Employees |

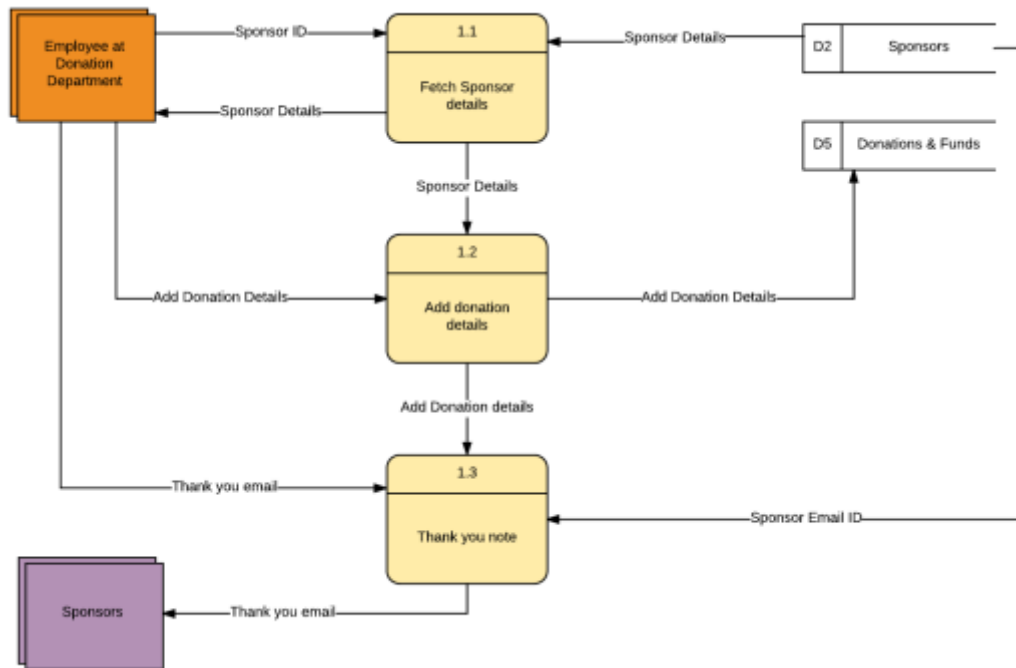
CONTEXT DIAGRAM



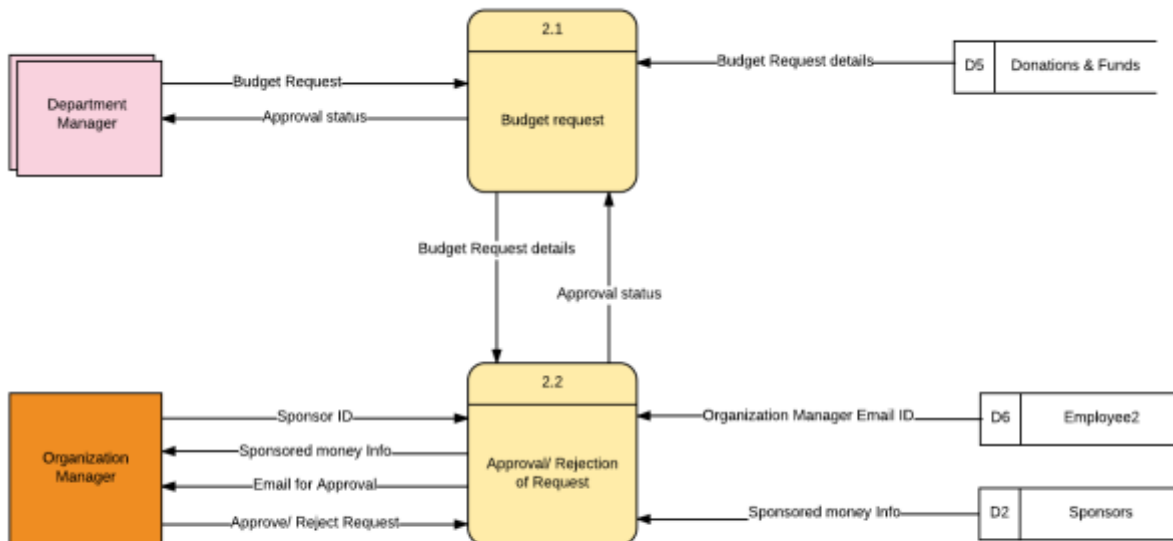


LEVEL 1 DFD

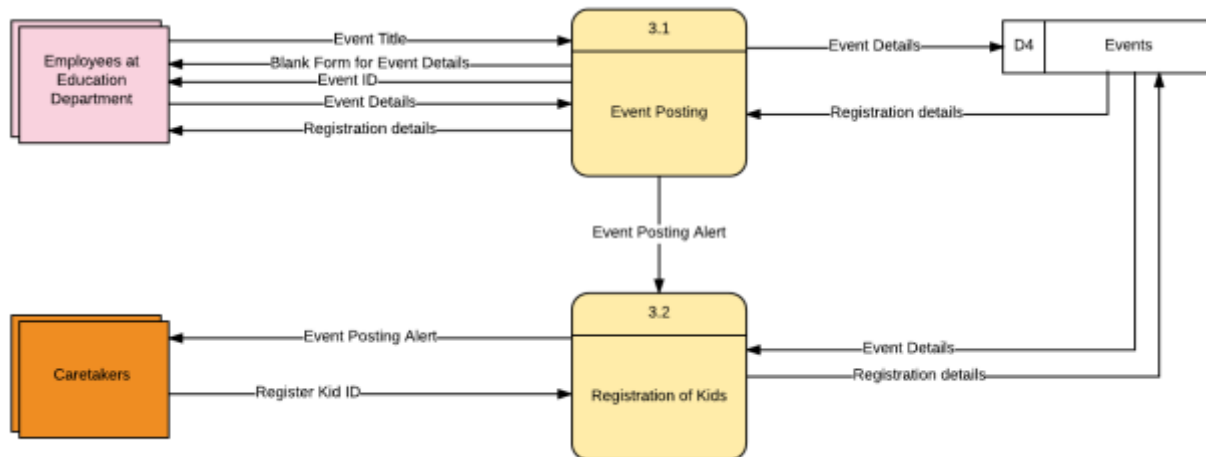
Process 1:



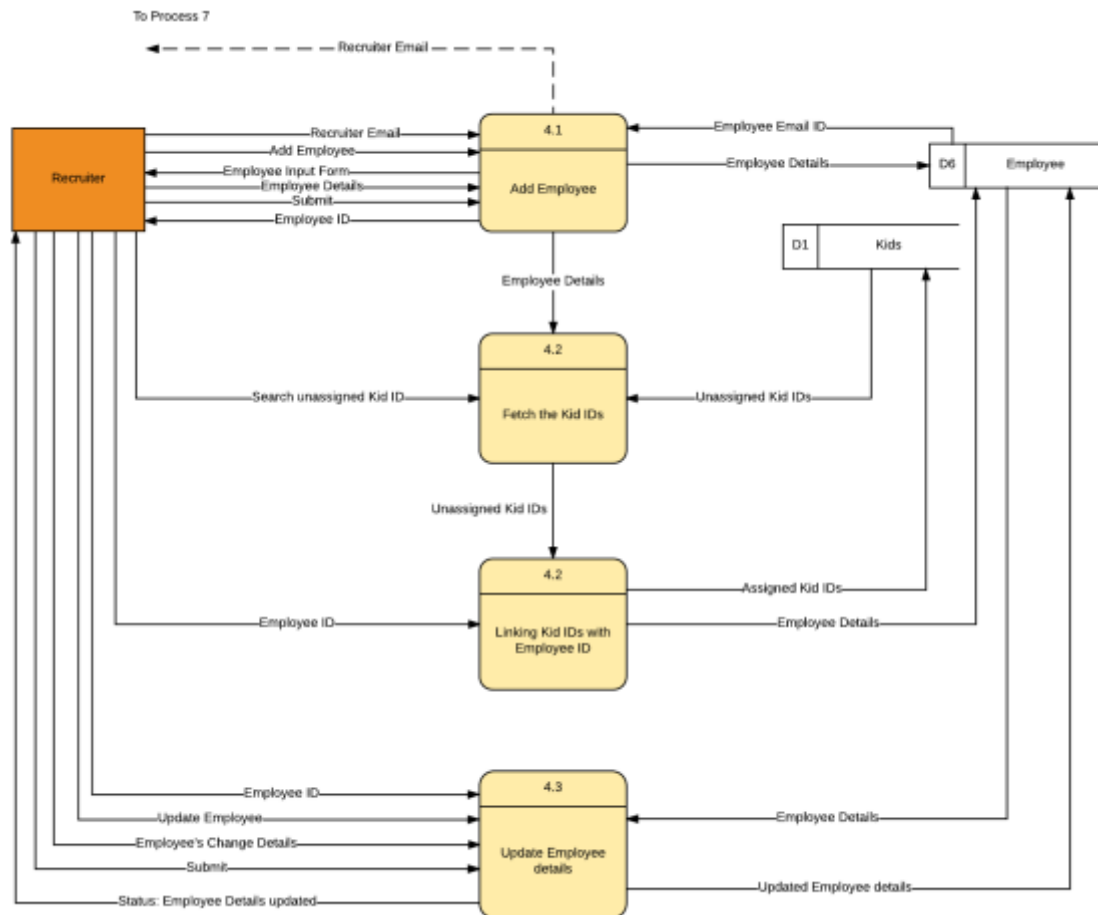
Process 2:



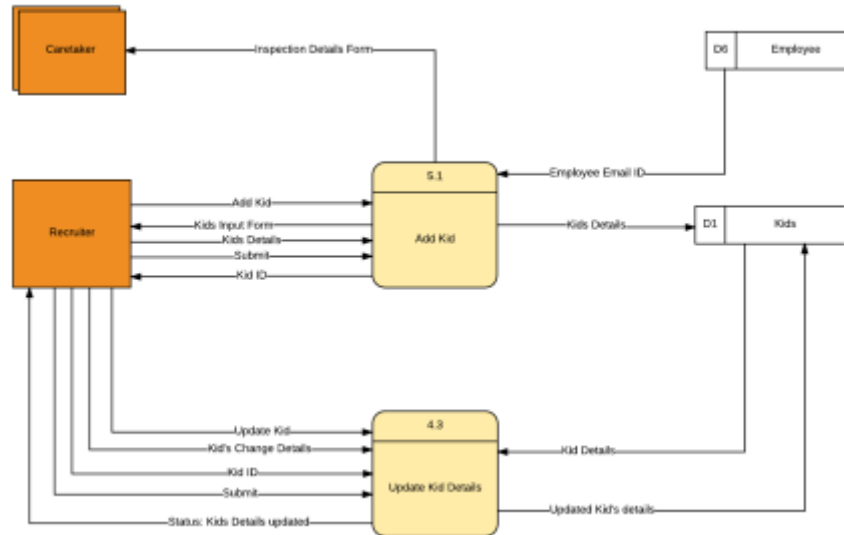
Process 3:



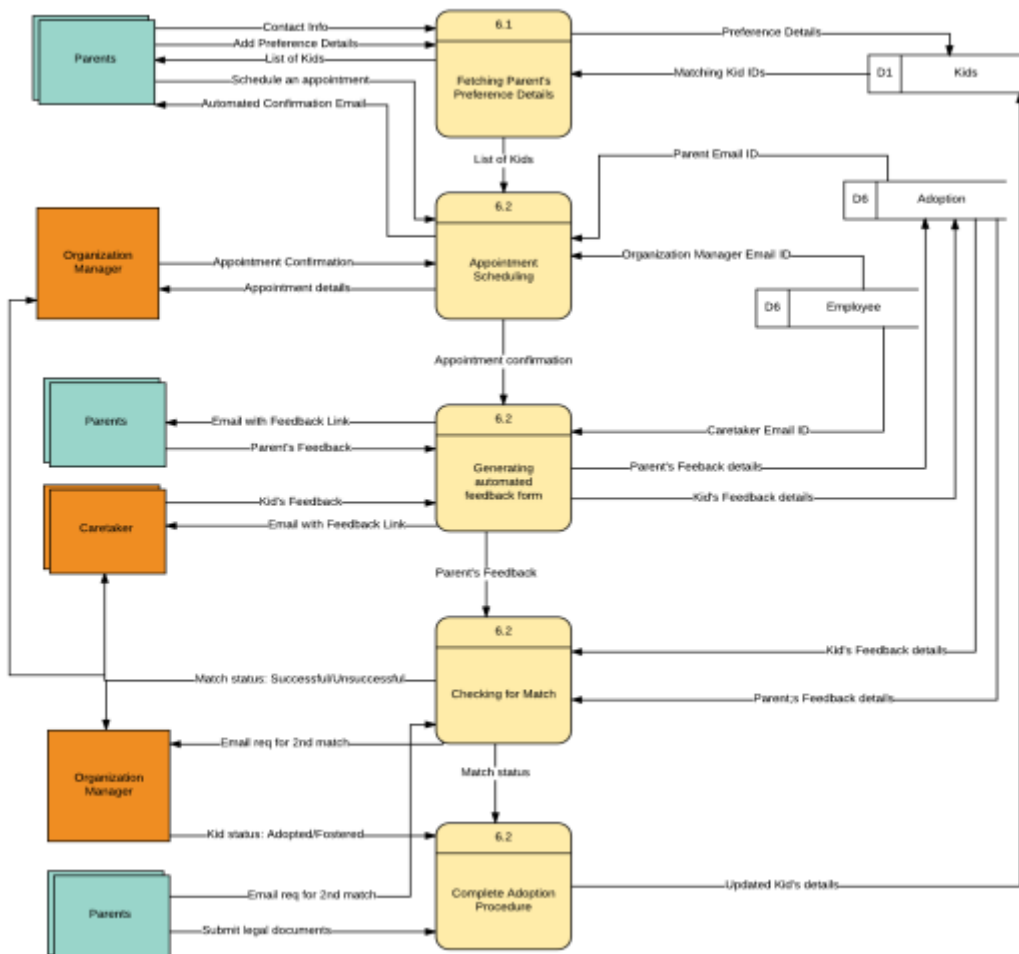
Process 4:



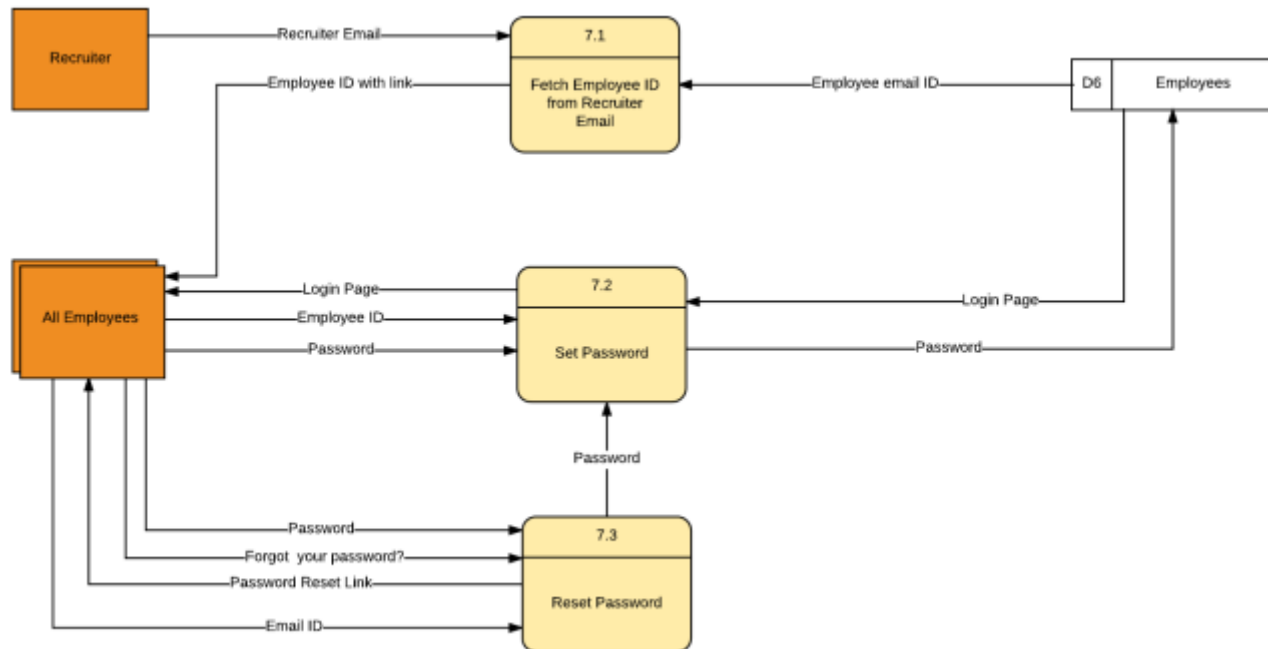
Process 5:



Process 6:



Process 7:



DATASTORE DETAILS

Kids

| Attribute Name | Data Type | Length |
|--------------------|-----------|--------|
| Kids ID (P.K) | Varchar | 10 |
| Kids Name | Char | 50 |
| Age | Number | 5 |
| Sex | Char | 5 |
| Disability Status | Varchar | 20 |
| Education Level | Varchar | 100 |
| Past History | Varchar | 100 |
| Medical Record | Varchar | 100 |
| Adoption Status | Varchar | 50 |
| Preference Details | Varchar | 10 |

Sponsors

| Attribute Name | Data Type | Length |
|------------------|-----------|--------|
| Sponsor ID (P.K) | Varchar | 10 |
| Name | Char | 20 |
| Email ID | Varchar | 35 |
| Organization | Char | 50 |
| Money | Varchar | 20 |
| Budget Request | Varchar | 20 |

Adoption

| Attribute Name | Data Type | Length |
|-------------------------|-----------|--------|
| Parent ID (P.K) | Varchar | 10 |
| Parent Name | Char | 20 |
| Age | Number | 5 |
| Email ID | Varchar | 35 |
| Address | Varchar | 100 |
| Parent's Feedback | Varchar | 100 |
| Kid's Feedback | Varchar | 100 |
| Background Check Result | Varchar | 100 |

Event

| Attribute Name | Data Type | Length |
|----------------------------|-----------|--------|
| Event ID (P.K) | Varchar | 10 |
| Event title | Char | 20 |
| Event Description | Varchar | 100 |
| Start Date | Date | |
| Venue | Varchar | 50 |
| Event Posting Alert Status | Boolean | 2 |
| Event Status | Boolean | 2 |

Donation and Funds

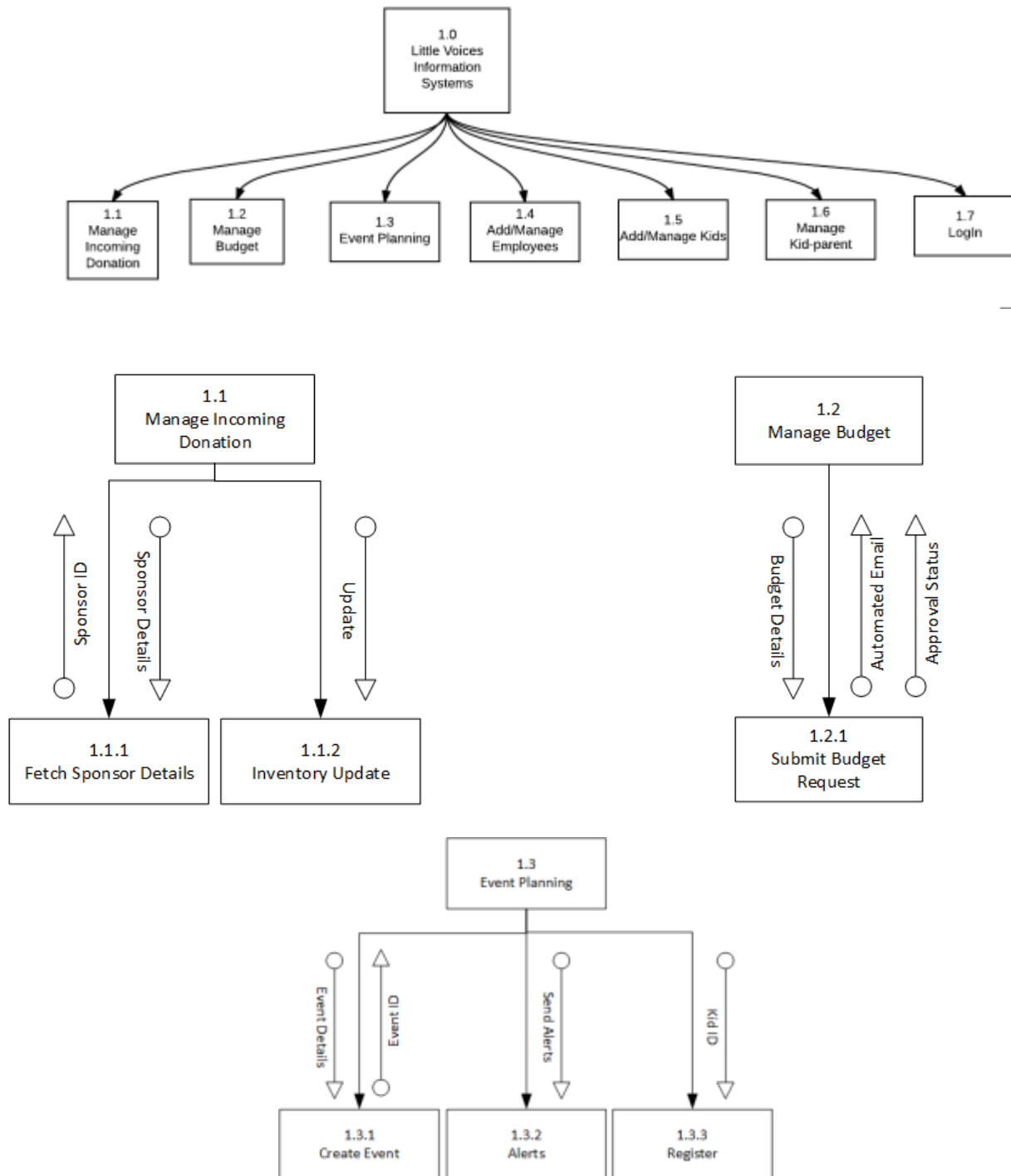
| Attribute Name | Data Type | Length |
|---------------------------|-----------|--------|
| Donation ID (P.K) | Varchar | 10 |
| Number of Items | Number | 10 |
| Items Category | Varchar | 10 |
| Number of Discarded Items | Number | 5 |
| Approval Status | Varchar | 10 |

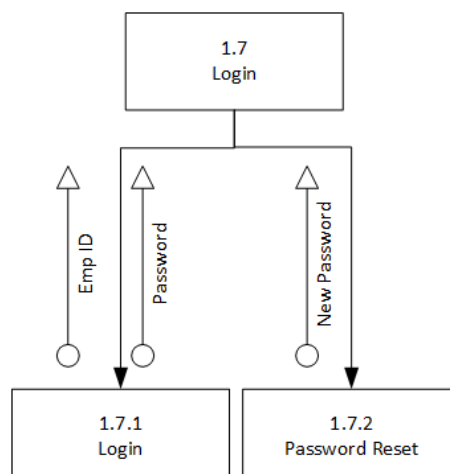
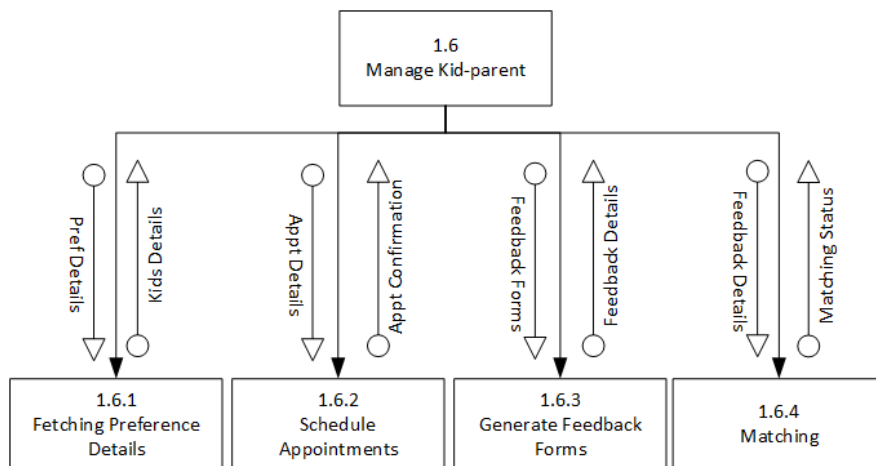
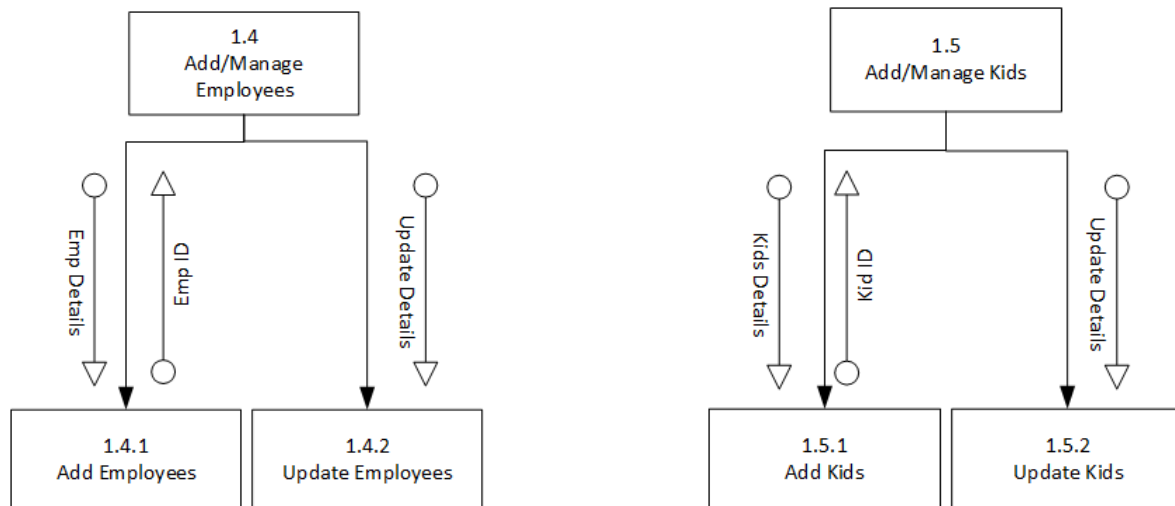
Employee

| Attribute Name | Data Type | Length |
|-------------------|-----------|--------|
| Employee ID (P.K) | Varchar | 10 |
| Name | Char | 20 |
| Age | Number | 5 |
| Department ID | Varchar | 10 |
| Start Date | Varchar | 10 |
| Mailing Address | Varchar | 50 |
| Phone Number | Varchar | 15 |
| Employment Type | Varchar | 10 |
| Salary | Varchar | 20 |
| Account Password | Varchar | 20 |

| | | |
|--------------------------|---------|-----|
| Previous Work Experience | Varchar | 100 |
|--------------------------|---------|-----|

PROGRAM STRUCTURE CHART

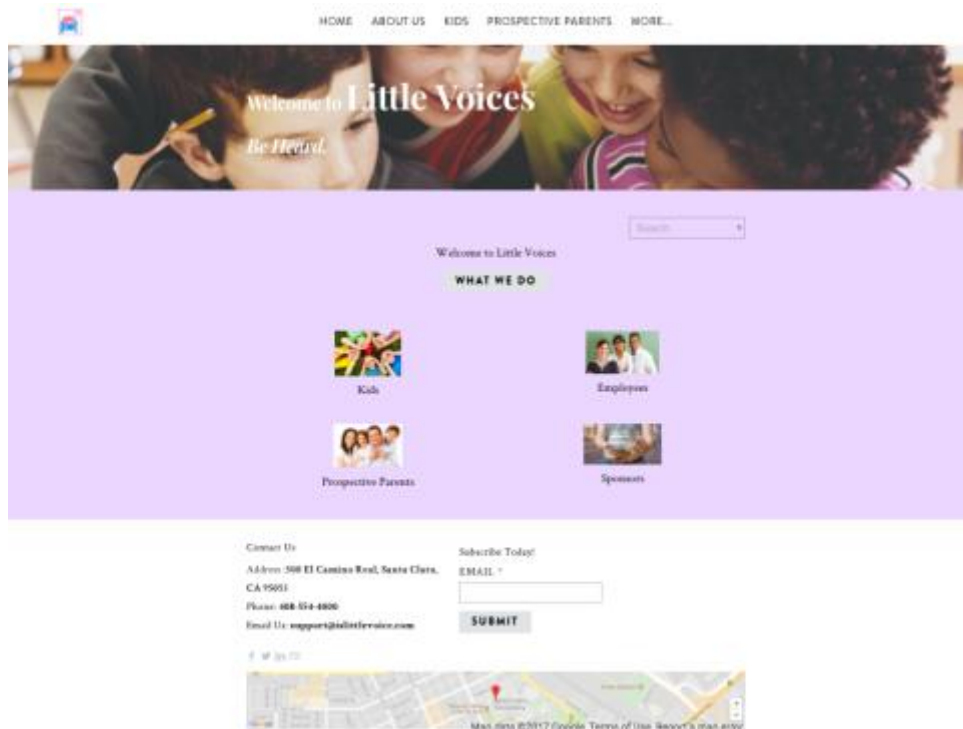




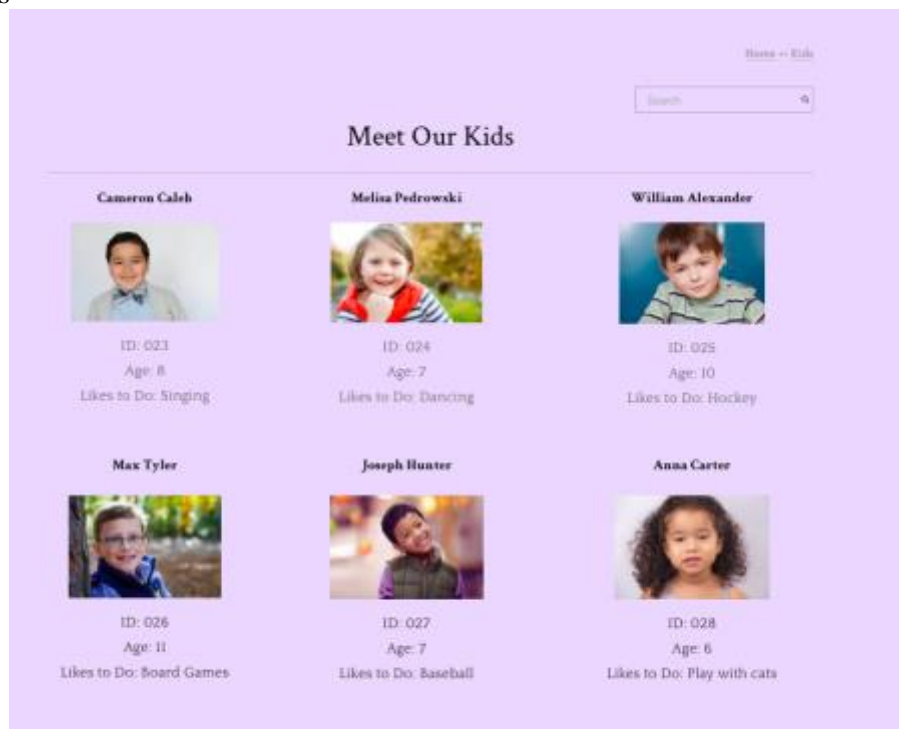
USER INTERFACES

<https://islittlevoice.weebly.com/>

Home page



Meeting Kids



Employee Login



Employee Login

HOME ABOUT US KIDS PROSPECTIVE PARENTS SPONSORS EMPLOYEES

Home » Employees

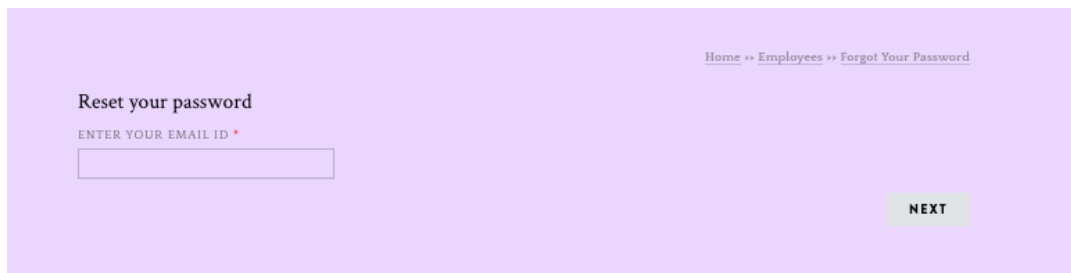
USER ID *

4004040

PASSWORD *

forgot your password?

LOGIN



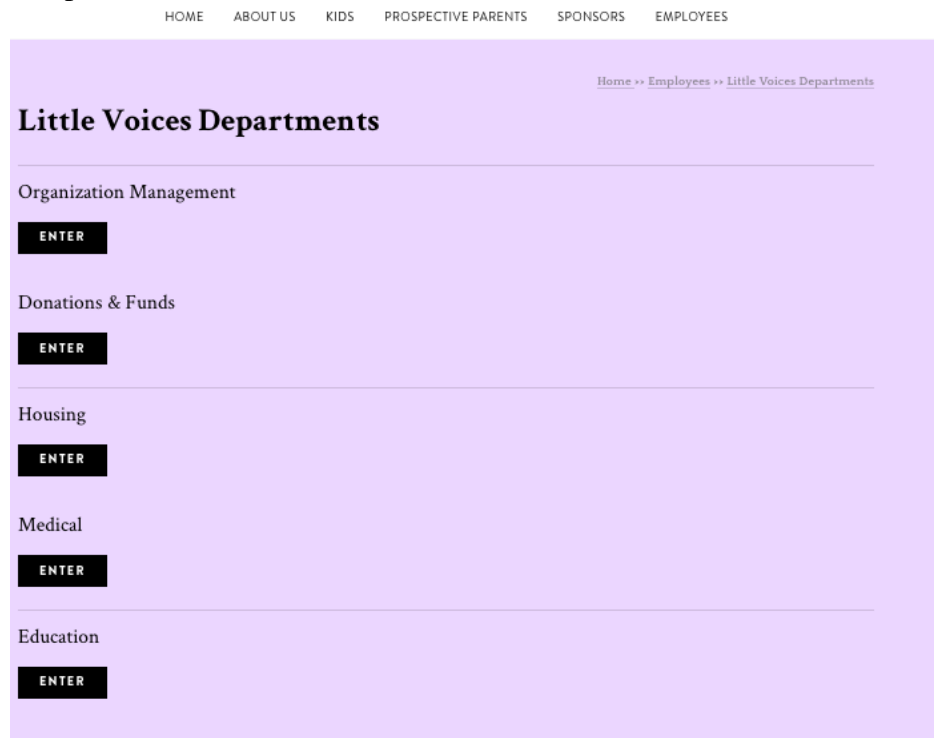
Reset your password

Home » Employees » Forgot Your Password

ENTER YOUR EMAIL ID *

NEXT

Little Voices Departments



HOME ABOUT US KIDS PROSPECTIVE PARENTS SPONSORS EMPLOYEES

Home » Employees » Little Voices Departments

Little Voices Departments

Organization Management

ENTER

Donations & Funds

ENTER

Housing

ENTER

Medical

ENTER

Education

ENTER

Department 1: Organization Management Department

[Home](#) >> [Employees](#) >> [Little Voices Departments](#) >> [Organization Management](#)

| | |
|--|---------------------------------|
| Add Employee | Update Employee |
| Add Kid | Update Kid |
| Adoption & Fostering | |

Add Employee

[Home](#) >> [Employees](#) >> [Little Voices Departments](#) >> [Add Employee](#)

New Employee Profile

NAME *

AGE *

PHONE NUMBER *

EMPLOYMENT TYPE *

☐ Full-time
☐ Part-time
☐ Volunteer

EMAIL *

MAILING ADDRESS *

DEPARTMENT NAME *


☐ Organization management
☐ Funds or donation
☐ Housing
☐ Medical
☐ Education

SALARY DETAILS *

PREVIOUS WORK EXPERIENCE

[SUBMIT](#)

Upload Photo



Update Employees by providing Employee ID

[Home](#) >> [Employees](#) >> [Little Voices Departments](#) >> [Update Employee Login](#)

EMPLOYEE ID *

[SUBMIT](#)

Add Kid

[Home](#) >> [Employees](#) >> [Little Voices Departments](#) >> [Add Kid](#)

New Kid Profile

KID'S STATUS *

☐ Available
☐ Fostered
☐ Adopted

NAME *

AGE *

ANY DISABILITY ISSUE *

CHOOSE ONE *

☐ Male
☐ Female

EDUCATIONAL BACKGROUND *


MEDICAL RECORDS *

KIDS PRESENT STATUS *

PAST KNOWN HISTORY

SUBMIT

Upload Photo



Update Kid by providing Kid's ID

[Home](#) >> [Employees](#) >> [Little Voices Departments](#) >> [Organization Management](#) >> [Update Kid ID](#)

KID ID *

SUBMIT

Adoption and Fostering Page

[HOME](#) [ABOUT US](#) [KIDS](#) [PROSPECTIVE PARENTS](#) [SPONSORS](#) [EMPLOYEES](#)

[Home](#) >> [Employees](#) >> [Little Voices Departments](#) >> [Organization Management](#) >> [Adoption Kid ID](#) >> [Adoption and Fostering](#)

Adoption and Fostering

NAME *

STATUS OF KID *

☐ Available


☐ Adopted

☐ Fostered

SUBMITTED LEGAL PAPERS *

☐ Yes

☐ No



Parent Details

Parent 1

NAME *

AGE *

PHONE NUMBER *

ADDRESS *

CITY *

STATE *

ZIP CODE *

32

Parent 2

NAME *

AGE *

PHONE NUMBER *

ADDRESS *

CITY *


STATE *

ZIP CODE *

SUBMIT

Department 2: Donations & Funds Department

(1) Submit sponsor ID




HOME ABOUT US KIDS PROSPECTIVE PARENTS SPONSORS EMPLOYEES

[Home](#) >> [Employees](#) >> [Little Voices Departments](#) >> [Sponsor ID](#)

SPONSOR ID *

SUBMIT




HOME ABOUT US KIDS PROSPECTIVE PARENTS SPONSORS EMPLOYEES

[Home](#) >> [Employees](#) >> [Little Voices Departments](#) >> [Sponsor ID](#) >> [Donations & Funds](#)

Sponsor Information

SPONSOR NAME *

ORGANIZATION *

Add Donation Details 

ENTER

(3). If you want to add more donation details

[Home](#) >> [Employees](#) >> [Little Voices Departments](#) >> [Sponsor ID](#) >> [Donations & Funds](#) >> [Add Donation Details](#)

Donation Details

NUMBER OF ITEMS *

CATEGORY *

☐ Clothes
☐ Book
☐ Medicine

DISCARDED ITEM COUNT *

SUBMIT

Department 3: Housing Department

[Home](#) >> [Employees](#) >> [Little Voices Departments](#) >> [Organization Management](#) >> [Housing](#)

Housing

ROOM DETAILS

BUDGET REQUEST

Budget Request Page


[Home](#) >> [Employees](#) >> [Little Voices Departments](#) >> [Organization Management](#) >> [Housing](#) >> [Budget Request](#)

Budget Request

REQUIRED FUND *

REASON *

ASK FOR APPROVAL



Event page

[Home](#) >> [Employees](#) >> [Little Voices Departments](#) >> [Sponsor ID](#) >> [Donations & Funds](#) >> [Education](#)

Event CREATE NEW EVENT

1. Webinar on "How to use computer"

DETAILS ENROLL

2. Aptitude Tests

DETAILS ENROLL

Create new events

[Home](#) >> [Employees](#) >> [Little Voices Departments](#) >> [Sponsor ID](#) >> [Donations & Funds](#) >> [Education](#) >> [Create Event](#)

Create Event

EVENT NAME *

EVENT EMAIL *


ADDRESS *

COORDINATOR NAME *

EVENT SPEAKER NAME *

DATE *

SUBMIT



Event Detail Page



Enroll Kids

Home >> Employees >> Little Voices Departments >> Sponsor ID >> Donations & Funds >> Education >> Enroll Event

Little Voices SPRING 2018 Event

KID'S NAME *

KID'S ID *

SUBMIT

Map data ©2017 Google Terms of Use Report a map error

Prospective Parents application



[Home](#) > [Prospective Parents](#)

Search 

Prospective Parent Application

CHOOSE ONE *

- ☐ Adoption
☐ Fostering

Parent 1

NAME *

AGE *

EMAIL *

PHONE NUMBER *

ADDRESS *

CITY *

STATE *



Preference Details of Kids

AGE *

SEX *

RACE *

WOULD YOU CONSIDER A KID WITH DISABILITY? *

☐ Yes
☐ No

ANY OTHER INFORMATION? *

Background Check

BACKGROUND CHECK COMPLETED? *

☐ Yes
☐ No

SUBMIT

Sponsors

HOMEABOUT USKIDSPROSPECTIVE PARENTSSPONSORSEMPLOYEES

home » sponsors

Donate to Little Voices

A
AMERICAN
RED CROSS

Norton
SECURITY SOLUTIONS

For all material donations (books, clothes,
medicine, toys) or checks please mail to:

Little Voices
500 El Camino Real
Santa Clara, CA 95053

Pay with Credit Card

I WOULD LIKE THIS TO BE A MONTHLY GIFT *

☐ Yes☐ No

CREDIT CARD TYPE *

☒ Visa☐ Master☐ American Express☐ Discover

CREDIT CARD NUMBER *

CVV *

EXPIRATION DATE *

NAME *

EMAIL *

PHONE *

ADDRESS *

CITY *

STATE *

ZIP CODE *

DONATE

FUTURE SCOPE

In future phases, we hope to incorporate more medical and housing related functionalities in our system. We also envision our system may be growing to become more robust, secured and scalable. Beyond collecting feedbacks from employees, parents and kids, our system could also be useful in analyzing those data and provide even more meaningful input in Little voices decision-making process.

CONCLUSION

Little Voices system is the perfect system for any organization who value the need to provide a healthy and happy home for the orphan kids. Our system is designed for employees, allowing them to manage the incoming kids, accept funds and donations from the sponsors, distribute them across several departments, educate the kid, taking care of their medical needs and finally felicitate a convenience and unbiased adoption process. Our system also encourages prospective parents to meet the kids and eventually help them to decide on a successful adoption/fostering process.

Children are the future of our society. Let's bring them from the slum to safety and into the loving arms of caretakers that will educate, love and raise them to become future leaders in their generation.