Software Requirements Specification

for

E-Annapurna

Version 2.0 approved

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1. Introduction

1.1 Purpose

In India, many people don't get daily food for a living. Whereas more amount of food is wasted through functions, weddings, schools and all. Today, in the global hunger index India ranks 102nd out of 117 qualifying countries. In India, many people don't get daily food for a living.

We have developed a system to help such needy people to provide them food from these functions. People who wish to donate their leftover food contact us via our website.

We store their details with us. When someone requests for food, we check available food and the same areas as sponsors and allocate that much amount of food to them. Common people get involved in our system by becoming volunteers. They register themselves as per their available days. Our system checks the availability of them and allocates tasks to collect and deliver food according to their suitable time.

1.2 Document Conventions

Term	Meaning
Consumer	Who requests the food
Volunteer	Who wants to Deliver the food to the people
Donor	Who wants to Donate Food / Fund to NGO
NGO	Non-Governmental Organization (Admin)

1.3 Product Scope

Our Scope allow the NGO to,

- Allocate specific volunteers to specific requests based on areas.
- Check the monthly performance of volunteers, donors, sponsors and consumers.
- Download the overall current report of the NGO.

1.4 References

- https://robinhoodarmy.com/
- https://www.feedingindia.org/
- Global hunger index of india
- Food wasted in functions such as wedding
- https://github.com/AyanGadpal/E-Annapurna

2. Overall Description

2.1 Product Perspective

The E-Annapurna is a volunteer based organization that works to get surplus food from restaurants to the less fortunate sections of society in cities across India. The organization functions on and propagates the basic ideology of self-sustained communities across the city i.e. each locality/community within the city will contribute towards providing food to the needy through its local volunteers and restaurants. The traditional food distributed to the needy is sourced from restaurants, which regularly provide surplus or freshly cooked food on a goodwill basis.

Our System provides both Website and Admin Panel for the E Annapurna.

The Websites showcase the work of the organization to attract volunteers, Sponsors and donors. Also we get the information of those who are in need of food through the website.

The second part of the system is the Admin Panel. It is used to Manage and analyze the NGO. It provides in-depth reports with graphs of donations, volunteers, sponsors and requests of food. It enables the NGO Admin to allocate volunteers to the specific consumer and analyze their report.

2.2 Product Functions

- Volunteer will register himself and will perform given tasks
- Consumer will provide required food and quantity
- Donator will donate according to his will
- NGO will monitor all work and will get report of its performance

2.3 User Classes and Characteristics

• Volunteer : Can register himself and will perform given tasks

• Consumer : Requests for food

• Donor : Who wants to Donate Food / Fund to NGO

NGO : Admin

2.4 Operating Environment

1. Operating system: Windows, Linux

2. Platform: Any Web-Browser with strong Bandwidth.

2.5 Design and Implementation Constraints

- 1. User End
 - 1.1. HTML5 supported Browser
- 2. Deployment (server)
 - 2.1. Memory requirement : 2GB
 - 2.2. Database: Firebase
 - 2.3. Language requirement : English
 - 2.4. Communication protocols: HTTPS
 - 2.5. Technologies: HTML5, CSS3, PHP

2.6 User Documentation

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The second part of the system is the Admin Panel. It is used to Manage and analyze the NGO. It provides in-depth reports with graphs of donations, volunteers, sponsors and requests of food. It enables the NGO Admin to allocate volunteers to the specific consumer and analyze their report.

2.7 Assumptions

Our Assumptions Are:

- 1. The NGO is Operating in Single City
- 2. NGO/ Volunteer have means of transport to transfer the food
- 3. There is a point of contact available with Consumers
- 4. All non-Admin Users have Email

3. External Interface Requirements

3.1 User Interfaces

The application is very user friendly and uses a GUI interface implemented in PHP and HTML to Communicate with the user. Various features are self – explanatory. Forms are easy to fill in and components can be added, removed and updated very easily through a Single dialog box. The application includes tool-tip hints to give a brief description of the particular input Field. List boxes are used to display all the components at once so that users can see all the components of a Particular type at once. One can just select the component and modify and remove the component (based on the access control of the person).

3.2 Software Interfaces

- 1. Any Network Operating System
- 2. Any web browser on user side for accessing the internet

3.3 Communications Interfaces

We will use **Hypertext Transfer Protocol** (HTTP) with default port 80

4. System Features

- 1. Volunteer Registration will involve suitable location and time, and this is one time
- 2. Consumer Registration will automatically estimate the quantity of food required based on quantity and age of people
- 3. Donor will have facility to donate fund or food or both
- 4. NGO Interface is password protected, only key people will have access to it
- 5. Rigorous report and data analytics is provided on NGO interface
- 6. Automation of Mapping and allocation of the volunteer will based on predefined policy
- 7. Volunteers will get notification via mail or text message automatically
- 8. Volunteer Interface will assist the volunteers with their task, providing pickup and drop locations
- 9. NGO admin can see, and modify the mapping if required
- 10. Recent Donations will be shown on the Frontpage of the website and the donor will also receive certificate and acknowledgement via email automatically
- 11. Once consumers provide data, there is no need to provide data other times, consumer registration is one time process

5. Other Nonfunctional Requirements

5.1 Performance Requirements

The Performance of the system depends on the network bandwidth as well as minimum requirement of the system as mentioned.

5.2 Safety and Security Requirements

- There should be a proper rollback policy maintained such that if the donor donates food or money and at that instance of time, the server goes down then rollback policy must be maintained.
- Every request of the consumer maintained properly such that if user requests for food, then proper acknowledgement should be provided.
- Users should enter strong passwords in order to maintain security.
- If a user forgets his/her password then he/she should be able to reset password in order to maintain security.

5.3 Software Quality Attributes

- **5.3.1 AVAILABILITY**: System should be available without any delay or latency.
- **5.3.2 CORRECTNESS**: Proper acknowledgements should be provided to Volunteers, Consumers as well as Donors.
- **5.3.3 MAINTAINABILITY**: The NGO (Admin) should properly maintain all the modules of system also volunteers of system.
- **5.3.4 USABILITY:** System should satisfy maximum number of consumer requests at any instance of time.

5.4 Business Rules

This Project is to help NGO, and is a nonprofit organization thus, When someone is Donating funds, they are expected to enter their PAN card number. This is necessary to account for all the funds getting in the system.

6. Other Requirements

Appendix B: Analysis Models

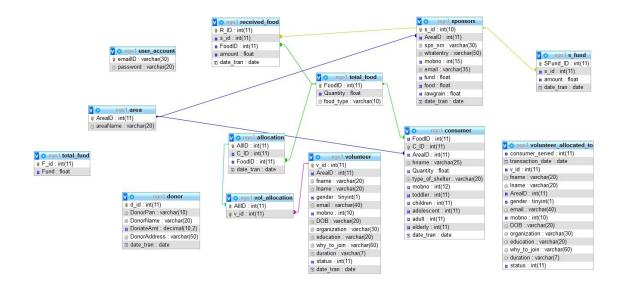


Fig. 1. SCHEMA DIAGRAM