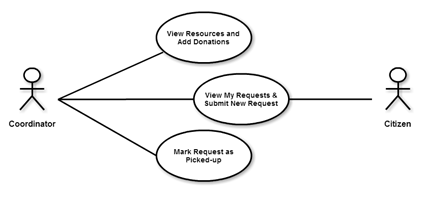
**Requirements Document**

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| **Student** | **Proposal** | **Approved** |
| **Tejal Shah** | **Step 1:**  **Use Case Name:** Donate/ Request Medical & Food Aid  **Use Case Description:** Any citizen can donate or request medical and food aid through this use case. This use case basically creates a marketplace for exchanging medical and food supplies. The use case starts with a user physically taking the supplies they would like to donate to the coordinator, who accepts the supplies and enters a donation form in the system. When a donation form is submitted, the inventory in the system is updated. Subsequently, any user can submit an aid request form. When the user submits the request form, the inventory is updated to reflect the reduction right away although the user hasn’t picked up the supplies. The coordinator will see the requested supplies in his/her queue as reserved items. For each aid request form in the delivery queue, the coordinator will see a checkbox called “Order Fulfilled”, that the coordinator will check off once the user picks up the supply. | Y  Value: 3 |
| **Faculty/TA Comments:** I think in order to make this complex enough, a user can also submit resource donation form.  You can easily turn this into a "marketplace"-like implementation. Usually in a disaster situation the distribution of help supplies is a problem. Some people just donate/send without knowing the demand. Depending on the functionality you implement, the value can be 3 instead of 2. | |
| **Step 2: UI Mockups Link**: <http://b7q0l6.axshare.com>  **Steps to follow:**   1. Click on Aid Inventory Icon (as a coordinator) 2. Click on + sign 3. Click Submit 4. Click back arrow 5. Click Aid Request Icon (as any citizen) 6. Click on + sign 7. Click on submit 8. Click on back arrow 9. Click on Aid Request Delivery Icon (as a coordinator) 10. Click on checkbox and submit 11. Click on back link 12. Click on Aid Inventory Icon and then back link 13. Click on Aid Request Icon and then back link 14. Click on Aid Request Delivery Icon and then back link | Y  Value: 3 |
| **Faculty/TA Comments:** | |
| **Step 3: Elaboration - Use Case Specification**  See below | Y  Value: 3 |
| **Faculty/TA Comments:** Good job | |

\*Value point might be revisited as the target user has a better understanding of the functionality.

**Resource Management Use Case Specification**

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**1.1 Participating Actors:**

* Coordinator – Initiates the add donation flow and marks requests as complete.
* Citizen – Initiates the resource request flow.

**1.2 Brief Description:**

This use case describes the resource (aid) management feature of SSNoC. The use case itself can be broken into three sub-flows.

* The first flow (1.4.1) would allow a coordinator to view existing inventory and add new donations in the system, which would in turn update the inventory of resources.
* The second flow (1.4.2) would allow the citizen to view previous requests and reserve resources by submitting a request form, which in turn would update the inventory immediately.  Once the resource request form is submitted, the request will appear as pending pick up in the citizen’s requests page.
* The third flow (1.4.3) would be initiated when the citizen approaches the coordinator to pick up the requested resources. The coordinator will mark the request as complete (as in picked-up) when this happens.

**1.3 Assumptions**

* The management of resources is centralized; all donations are given to the coordinator and all resources are distributed by the coordinator. So the coordinator is the one who physically manages the inventory. All citizens know where to find the coordinator (informed as part of the emergency drill).
* Citizens request resources responsibly. There are no restrictions in the quantity that can be requested as long as there is inventory.
* Citizens cannot request resources that are not in stock.
* The list of resource types is static and includes all standard aid types. No other kinds of resources need to be added or requested.
* Each resource type is measured with a consistent unit (e.g.: boxes, bottles, loaves, etc.)
* User is logged into system.

**1.4     Flow of Events**

**1.4.1           View Resources and Add Donation Flow**

Basic Flow

1. The use case starts when the coordinator accesses the “Resource Inventory” through the main menu.

2.  The system displays the list of all resources and their quantity in stock.

     3. The coordinator then accesses the resource donation form.

4. The system displays the resource donation form and asks user to select

resource type and resource name.

     5. The coordinator first selects resource type and then resource name.

6. The system displays the current available quantity of the selected resource

and the unit of measurement.

     7. The system asks user to enter quantity donated.

      8. The coordinator enters the quantity donated and hits submit.

     9. The system takes the coordinator back to the resource inventory page and

displays the updated inventory.

     10. The coordinator selects the back button

11. The system takes the user back to the home page. The use case ends.

Alternative Flow

* A1- In step 3, if coordinator selects back button instead, use case moves to step 11.
* A2 - In step 5 or 8, if coordinator selects cancel button instead, use case moves to step 2.
* A3 – In step 8, if quantity entered is not a whole number greater than zero (see rules), then system alerts user that it is invalid entry and asks to re-enter donated amount by moving to step 7.
* A4 – In step 8, if any of the mandatory fields are missing (see rules), then system displays an error message and asks to enter remaining fields, moving back to step 4.

Rules

* Quantity of stock is calculated at resource name level. It excludes requested items that have not been picked up yet (i.e.: reserved).
* Through add donation flow, stock quantity is incremented for the selected resource by the amount specified in the form.
* Resource type, resource name and quantity donated fields are mandatory for submission.
* Quantity donated must be a whole number that is greater than 0.
* Resource type values are dependent on resource category values. Static list of values is provided.

**1.4.2           View My Requests and Submit Resource Request Flow**

Basic Flow

1. The use case starts when the citizen accesses the “My Resource Requests” option through the main menu.

2. The system displays the list of all requests ever submitted by the citizen and

indicates whether they have been picked up.

    3. The citizen then accesses the new resource request form.

4. The system displays the resource request form and asks user to select

resource type and resource name.

    5. The citizen first selects resource type and then resource name.

6. The system displays current available quantity of the selected resource and

the unit of measurement.

     7. The system asks user to enter quantity requested.

    8. The citizen enters quantity requested and hits submit.

     9. The system takes the citizen back to the request history page and displays the

submitted request as pending pick-up.

   10. The citizen selects the back button

11. The system takes the citizen back to the home page. The use case ends.

Alternative Flow

* A1- In step 3, if citizen selects back button instead, use case moves to step 11.
* A2 - In step 5 or 8, if coordinator selects cancel button instead, use case moves to step 2.
* A3 – In step 8, if available quantity is zero, then form for that resource request cannot be submitted. An error message is displayed and use case moves to step 4.
* A4 – In step 8, if quantity entered is not a whole number greater than zero (see rules), then system alerts user that it is invalid entry and asks to re-enter requested amount. Use case moves to step 7.
* A5 – In step 8, if quantity entered is greater than quantity in stock, then system alerts user that it is invalid entry and asks to re-enter requested amount. Use case moves to step 7.
* A6 – In step 8, if any of the mandatory fields are missing (see rules), then system displays an error message and asks to enter remaining fields. Use case moves to step 4.

Rules

* Quantity of stock is calculated at resource name level. It excludes requested items that have not been picked up yet (i.e.: reserved).
* On resource request submission, stock quantity is decreased for the selected resource by the amount specified in the form.
* Resource type, resource name and quantity requested fields are mandatory for submission.
* Requests cannot be submitted for resources whose available stock value is zero.
* Quantity requested must be less than or equal to quantity available in stock.
* Quantity requested must be a whole number that is greater than 0.
* Resource name values are dependent on resource type values. Static list of values is provided.

**1.4.3           Mark Request as Picked-up**

Basic Flow

1. The use case starts when the citizen approaches the coordinator to pick-up reserved resources and the coordinator accesses the “Reserved Requests Queue” option through the main menu.

2. The system displays the list of all requests submitted by all citizens that have

not been picked-up yet.

    3. The coordinator then accesses the appropriate request item, checks it off as delivered and

        hits submit.

4. The system updates the request status to complete and displays the revised

pending requests list without the completed requests.

  5.   The coordinator selects the back button

6. The system takes the coordinator back to the home page. The use case ends.

Alternative Flow

* A1- In step 2, if coordinator selects back button instead, use case moves to step 6.
* A2 - In step 3, if coordinator selects back button instead of submit, use case moves to step 6.

Rules

* Reserved Requests queue only shows requests that are not complete yet