# **NMS TESTING**

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# **LOGIN TESTING:**

Inputs: Login ID (String) and password (String) Equivalence classes:

- Manager
- Helper
- Donor
- Invalid user

# Manager Login

| Class   | Input              | Expected Output        | Actual Output          |
|---------|--------------------|------------------------|------------------------|
| Manager | User - M5          | Error Page - Incorrect | Error Page - Incorrect |
|         | Password - qwerty  | Login                  | Login                  |
| Manager | User - M0          | Error Page - Incorrect | Error Page - Incorrect |
|         | Password - qwerty1 | Login                  | Login                  |
| Manager | User - M0          | Directed To Manager    | Directed To Manager    |
|         | Password - qwerty  | Home Screen            | Home Screen            |



# **INCORRECT USERNAME**



INCORRECT PASSWORD

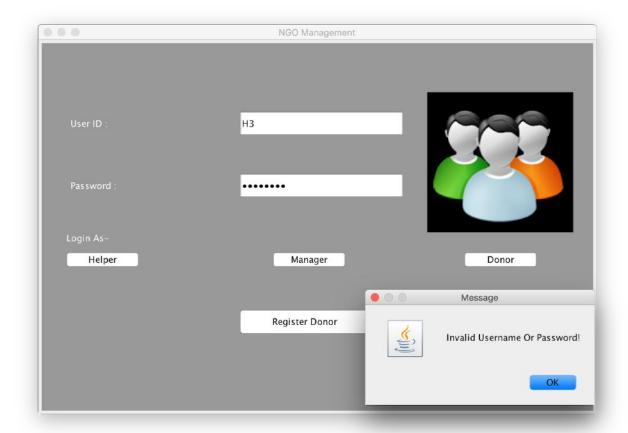


**CORRECT** 

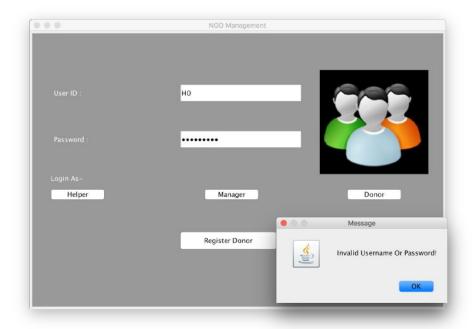
# PASSWORD AND USERNAME MANAGER LOGIN PAGE

#### Helper Login

| Class  | Input                | Expected Output        | Actual Output          |
|--------|----------------------|------------------------|------------------------|
| Helper | User - H3            | Error Page - Incorrect | Error Page - Incorrect |
|        | Password - password  | Login                  | Login                  |
| Helper | User - H0            | Error Page - Incorrect | Error Page - Incorrect |
|        | Password - password1 | Login                  | Login                  |
| Helper | User - H0            | Directed To Helper     | Directed To Helper     |
|        | Password - password  | Home Screen            | Home Screen            |



**INCORRECT USERNAME** 



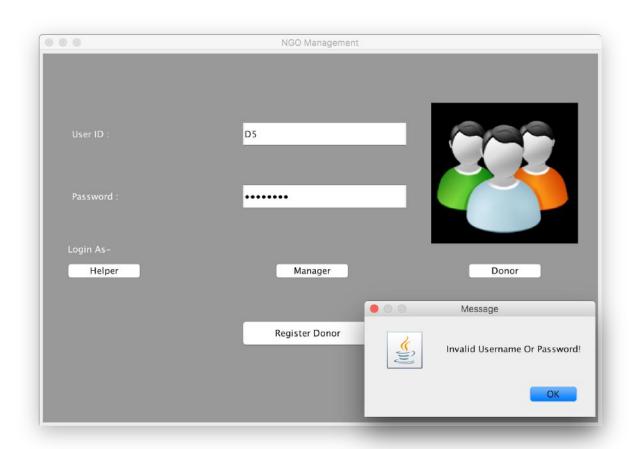
#### **INCORRECT PASSWORD**



CORRECT PASSWORD CORRECT USERNAME

# Donor Login

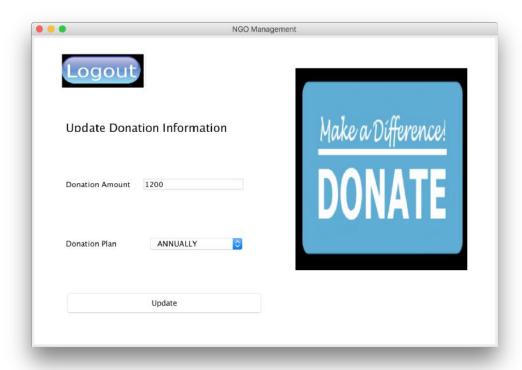
| Class | Input                | Expected Output        | Actual Output          |
|-------|----------------------|------------------------|------------------------|
| Donor | User - H3            | Error Page - Incorrect | Error Page - Incorrect |
|       | Password - password  | Login                  | Login                  |
| Donor | User - D0            | Error Page - Incorrect | Error Page - Incorrect |
|       | Password - password1 | Login                  | Login                  |
| Donor | User - D0            | Directed To Donor      | Directed To Donor      |
|       | Password - password  | Home Screen            | Home Screen            |



# **INCORRECT USERNAME**



# **INCORRECT PASSWORD**



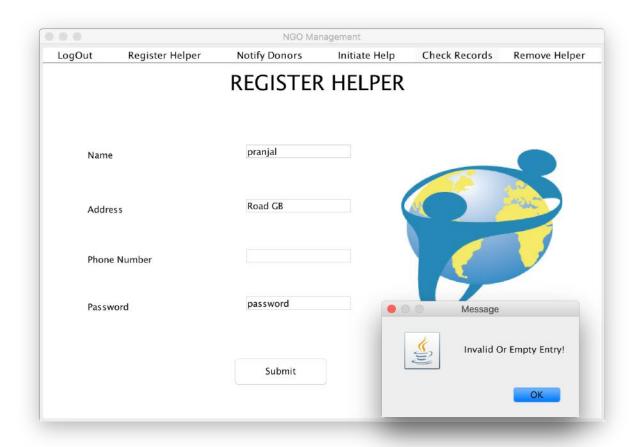
CORRECT USERNAME CORRECT PASSWORD

DONOR LOGIN PAGE

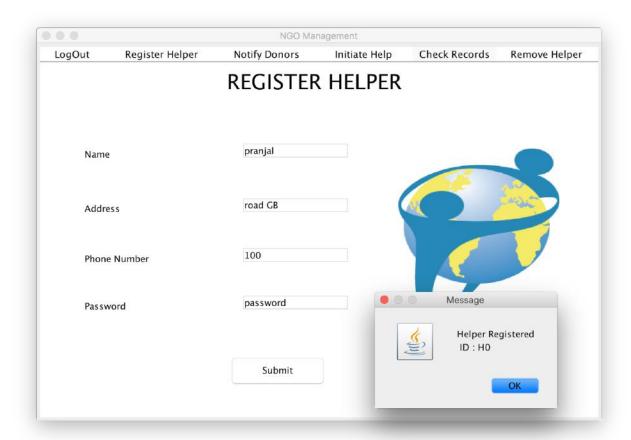
# **REGISTRATION TESTING:**

# Helper Registration

| Class  | Input                                | Expected Output                           | Actual Output                             |
|--------|--------------------------------------|---|---|
| Helper | Registration With<br>Empty Fields    | Error Page -<br>Incomplete<br>Information | Error Page -<br>Incomplete<br>Information |
| Helper | Registration With<br>Complete Fields | Helper Registered                         | Helper Registered                         |



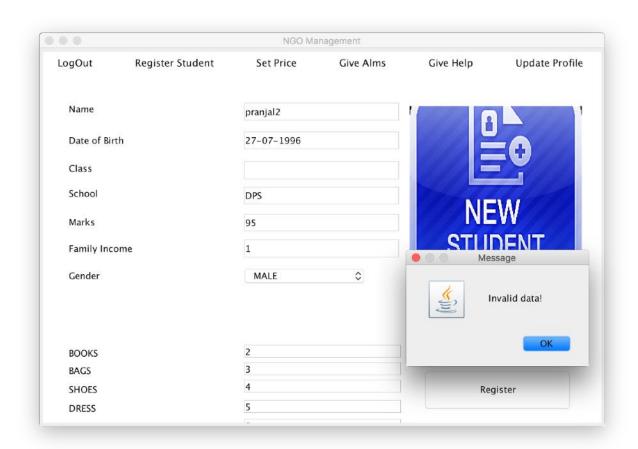
**EMPTY FIELDS REGISTRATION** 



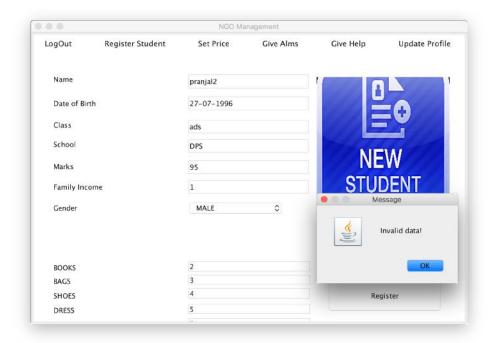
CORRECT INPUTS
HELPER REGISTERED

# Student Registration

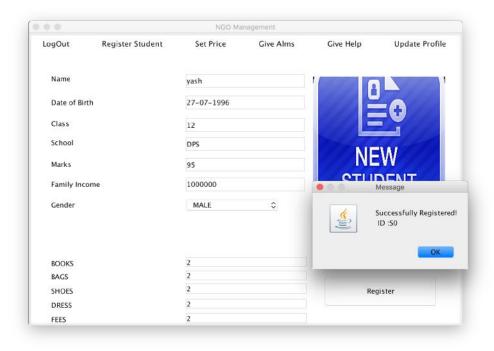
| Class   | Input                                | Expected Output                           | Actual Output                             |
|---------|--------------------------------------|---|---|
| Student | Registration With<br>Empty Fields    | Error Page -<br>Incomplete<br>Information | Error Page -<br>Incomplete<br>Information |
| Student | Registration With<br>Invalid Data    | Error Page - Invalid<br>Information       | Error Page - Invalid<br>Information       |
| Student | Registration With<br>Complete Fields | Student Registered                        | Student Registered                        |



**REGISTRATION WITH EMPTY FIELDS** 



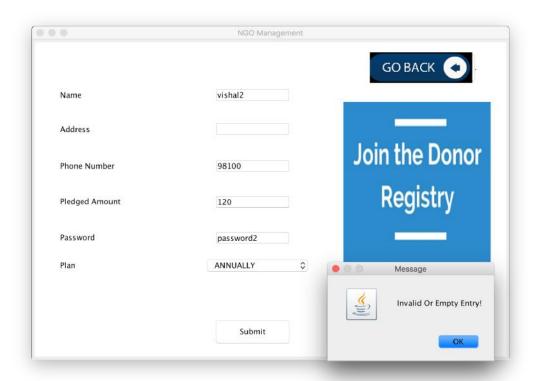
#### **REGISTRATION WITH INVALID DATA**



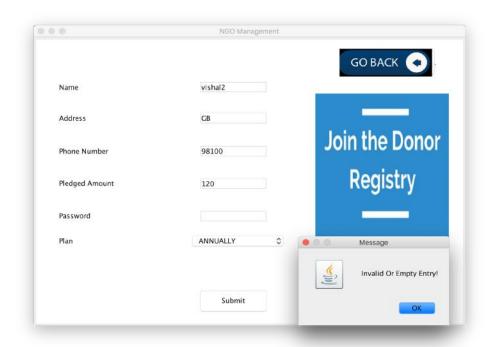
REGISTRATION WITH CORRECT DATA STUDENT REGISTERED

# **Donor Registration**

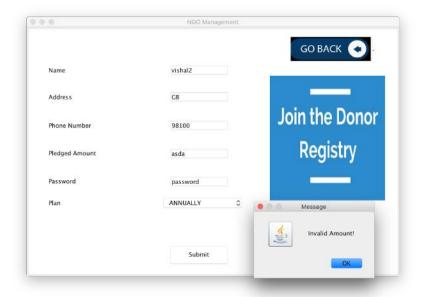
| Class | Input  | Expected Output                           | Actual Output                             |
|-------|--|---|---|
| Donor | Registration With Empty Fields                           | Error Page -<br>Incomplete<br>Information | Error Page -<br>Incomplete<br>Information |
| Donor | Registration With<br>Empty Password Fields               | Error Page -<br>Incomplete<br>Information | Error Page -<br>Incomplete<br>Information |
| Donor | Registration With<br>Invalid Data                        | Error Page - Invalid<br>Information       | Error Page - Invalid<br>Information       |
| Donor | Registration With<br>Negative Pledged<br>Amount          | Error Page - Invalid<br>Information       | Error Page - Invalid<br>Information       |
| Donor | Registration With<br>Correct and Complete<br>Information | Donor Registered                          | Donor Registered                          |



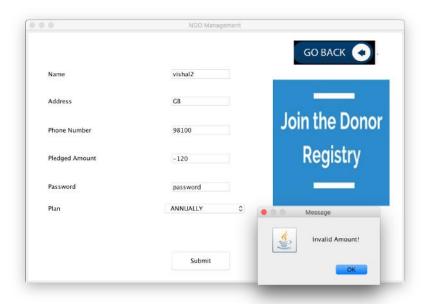
#### **REGISTRATION WITH EMPTY FIELDS**



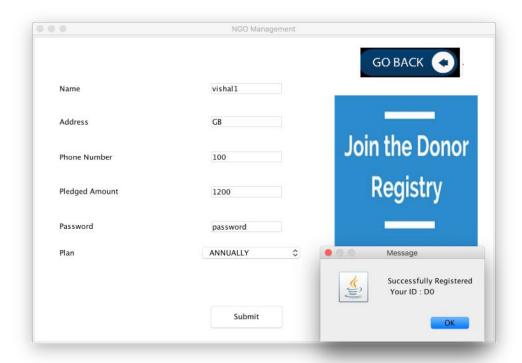
REGISTRATION WITH EMPTY PASSWORD FIELD



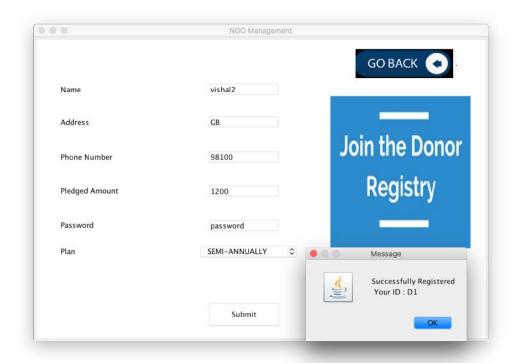
#### **REGISTRATION WITH INVALID DATA**



REGISTRATION WITH NEGATIVE PLEDGED AMOUNT



#### **CORRECT REGISTRATION ANNUAL DONOR**

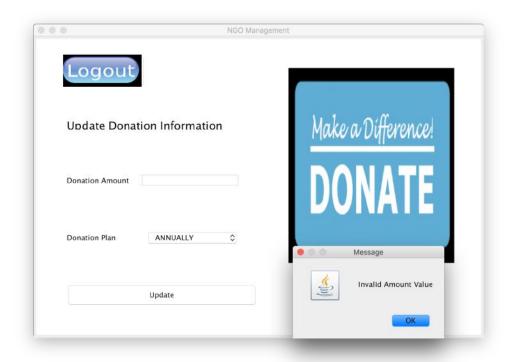


**CORRECT REGISTRATION SEMIANNUAL DONOR** 

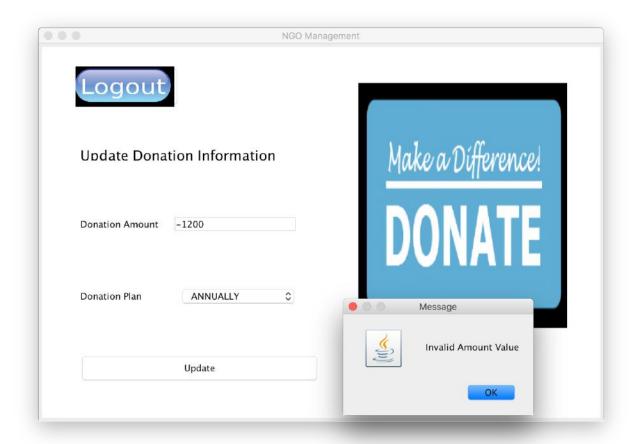
# **UPDATE TESTING:**

#### **Donor Update**

| Class | Input  | Expected Output                           | Actual Output                             |
|-------|--|---|---|
| Donor | Update With Empty<br>Fields                              | Error Page -<br>Incomplete<br>Information | Error Page -<br>Incomplete<br>Information |
| Donor | Update With Invalid<br>Data (Negative<br>Pledged Amount) | Error Page - Invalid<br>Information       | Error Page - Invalid<br>Information       |
| Donor | Update With Correct<br>and Complete<br>Information       | Donor Updated                             | Donor Updated                             |



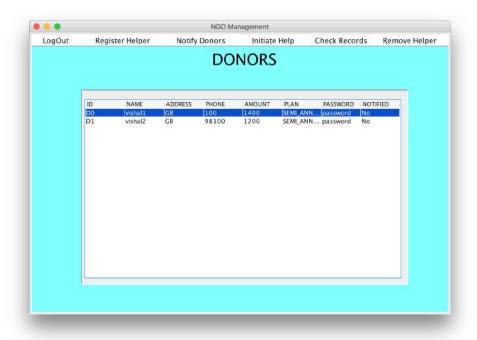
**UPDATE DONOR WITH EMPTY FIELDS** 



**UPDATE DONOR WITH INVALID DATA** 



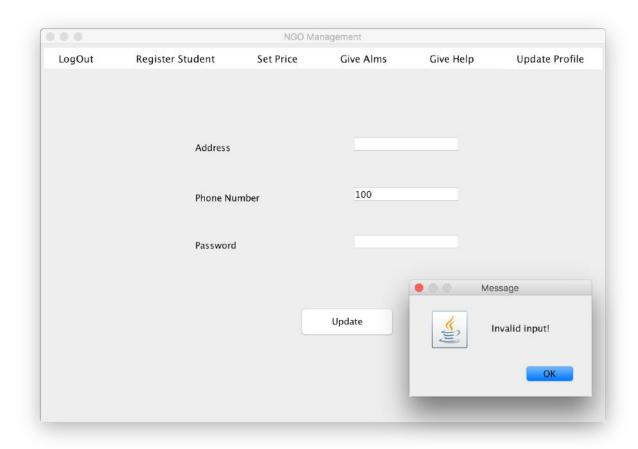
#### **UPDATE WITH CORRECT FIELDS**



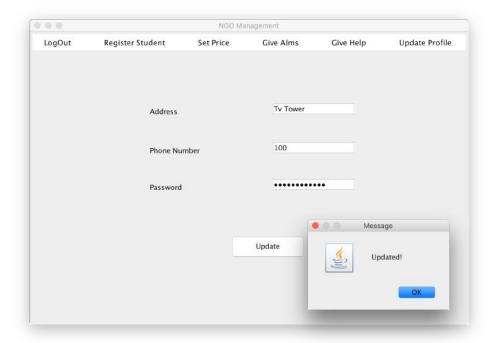
**DONOR UPDATED IN DATABASE** 

# Helper Update

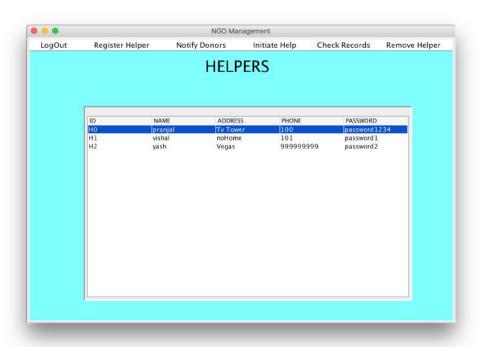
| Class  | Input  | Expected Output                           | Actual Output                             |
|--------|--|---|---|
| Helper | Update With Empty<br>Fields                        | Error Page -<br>Incomplete<br>Information | Error Page -<br>Incomplete<br>Information |
| Helper | Update With Correct<br>and Complete<br>Information | Donor Updated                             | Donor Updated                             |



PROOF
UPDATE HELPER WITH EMPTY FIELDS



# **UPDATE HELPER - CORRECT UPDATE**

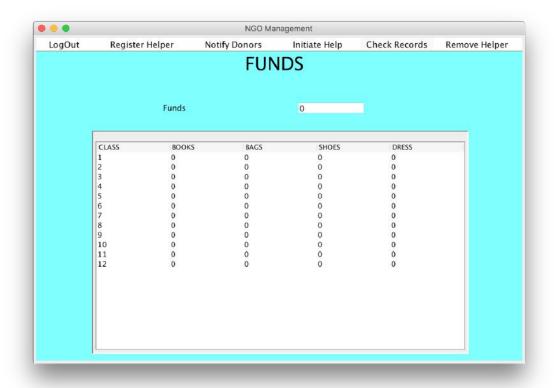


PROOF
HELPER UPDATED IN DATABASE

# **USE CASE TESTING:**

# Manager Use Case

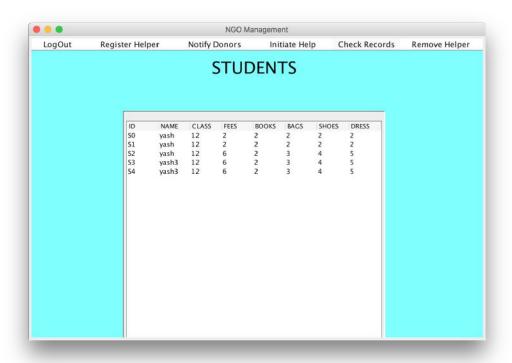
| Class   | Input                | Expected Output            | Actual Output              |
|---------|----------------------|----------------------------|----------------------------|
| Manager | Click Check Funds    | Funds Table Displayed      | Funds Table Displayed      |
| Manager | Click Check Helpers  | Helper Table<br>Displayed  | Helper Table Displayed     |
| Manager | Click Check Students | Student Table<br>Displayed | Student Table<br>Displayed |
| Manager | Click Check Donors   | Donor Table Displayed      | Donor Table Displayed      |



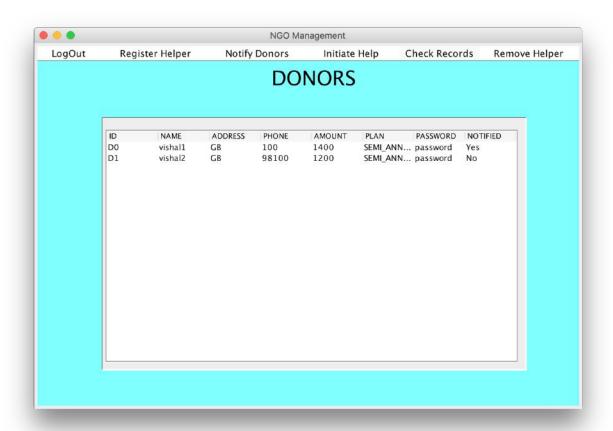
**CHECK FUNDS** 



# **CHECK HELPERS**

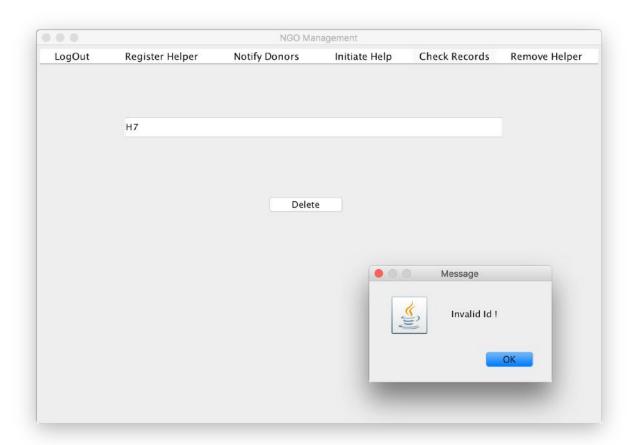


**CHECK STUDENTS** 

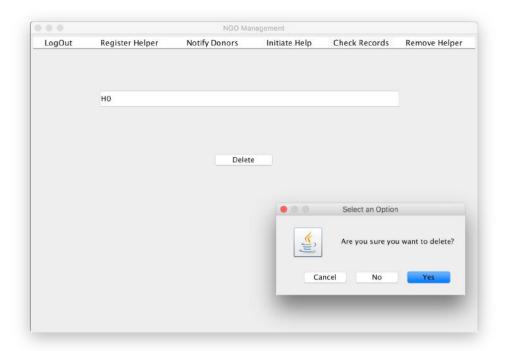


**CHECK DONORS** 

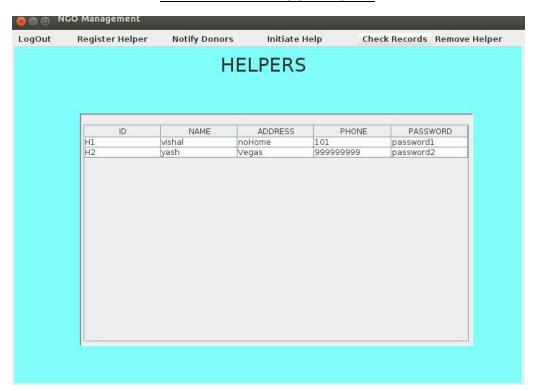
| Class   | Input                        | Expected Output                     | Actual Output                       |
|---------|------------------------------|-------------------------------------|-------------------------------------|
| Manager | Delete Helpers<br>Invalid Id | Error Page - Invalid<br>Information | Error Page - Invalid<br>Information |
| Manager | Delete Helpers<br>Correct Id | Helper Deleted                      | Helper Deleted                      |



DELETE HELPER INVALID ID



# **DELETE HELPER CORRECT ID**



**HELPER DELETED IN DATABASE** 

# Helper Use Case

| Class  | Input  | Expected Output              | Actual Output                |
|--------|--|------------------------------|------------------------------|
| Helper | Minor Donation With Invalid Donation                           | Error- Invalid Donation      | Error- Invalid Donation      |
| Helper | Minor Donation With<br>Invalid Donation<br>Negative Donation   | Error- Invalid Donation      | Error- Invalid Donation      |
| Helper | Minor Donation With<br>Invalid Class(Negative<br>Class)        | Error- Invalid Class<br>Type | Error- Invalid Class<br>Type |
| Helper | Minor Donation With<br>Invalid Class(Class<br>greater than 12) | Error- Invalid Class<br>Type | Error- Invalid Class<br>Type |
| Helper | Minor Donation With<br>Correct Fields                          | Donation Recorder            | Donation Recorder            |



MINOR DONATION WITH INVALID DONATION



MINOR DONATION WITH NEGATIVE DONATION



#### MINOR DONATION WITH NEGATIVE CLASS INPUT



#### MINOR DONATION WITH CLASS INPUT GREATER THAN 12



MINOR DONATION CORRECT INPUT - DONATION RECORDED

Testing of the donation and helping of students:

First case covers the case where we have sufficient funds and we can help all students. 2 of the donors of notified as only 2 are necessary. When notified, donors receive a donate button which disappears when donated. Helpers get a list of students to help when manager clicks "Initiate Help".

In this case, all students are helped. Other options like Give Alms(Minor Donation), Check Expenses and Give Help are tested alongside with the flow.

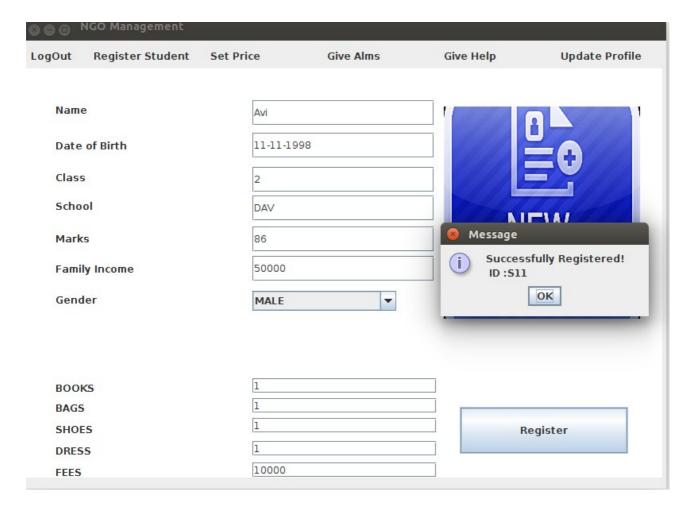
#### FLOW:

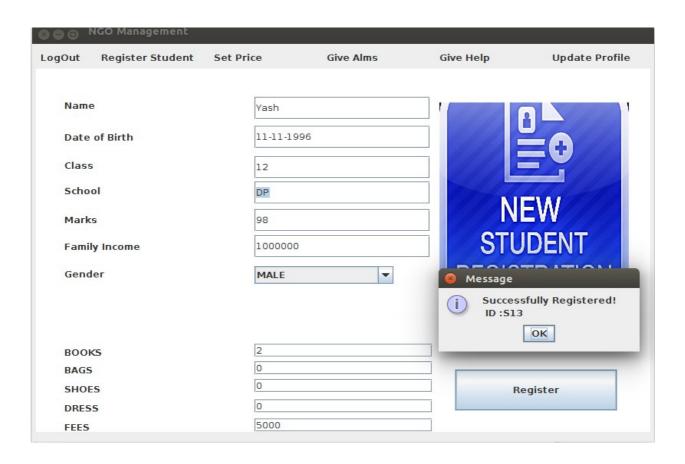
Helper::Register Student → Manager::Notify Donors → Donor::Donate →

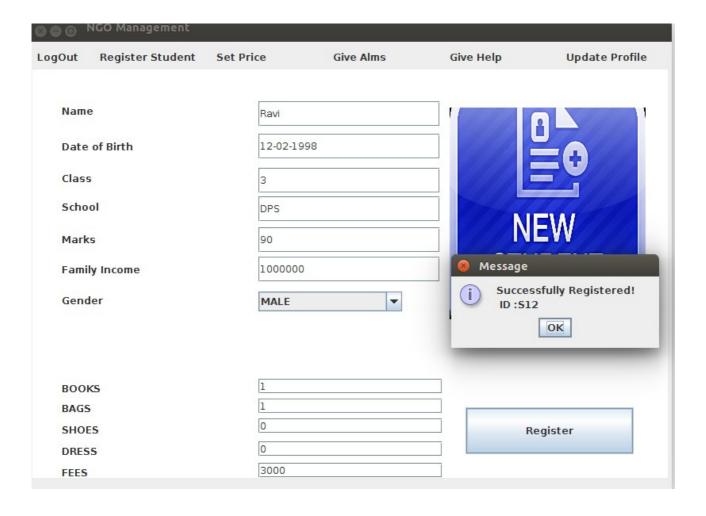
Manager::Initiate Help → Helper:: Give Help

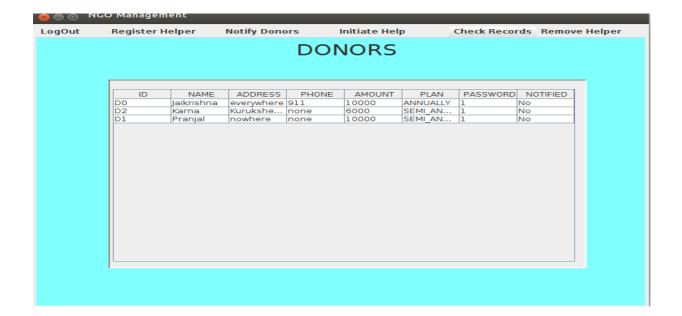
Testing: Sufficient Funds

Adding Students:

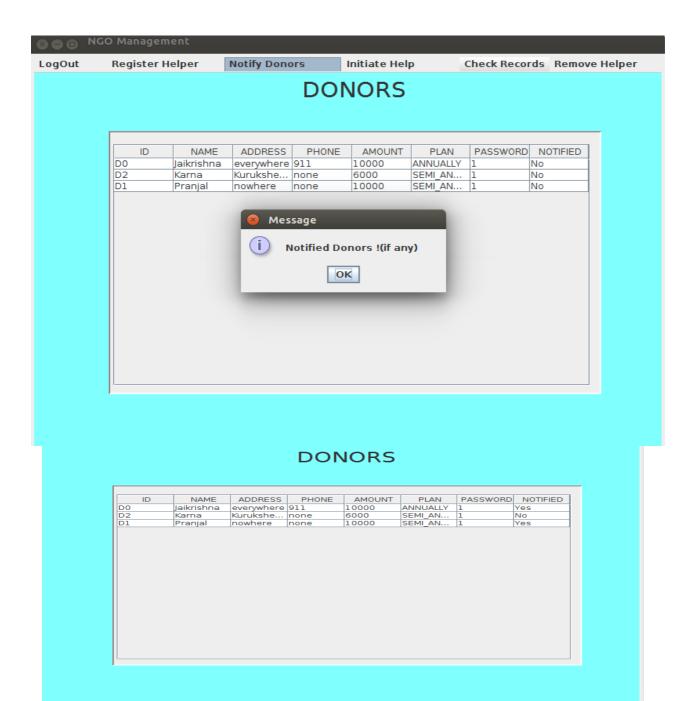




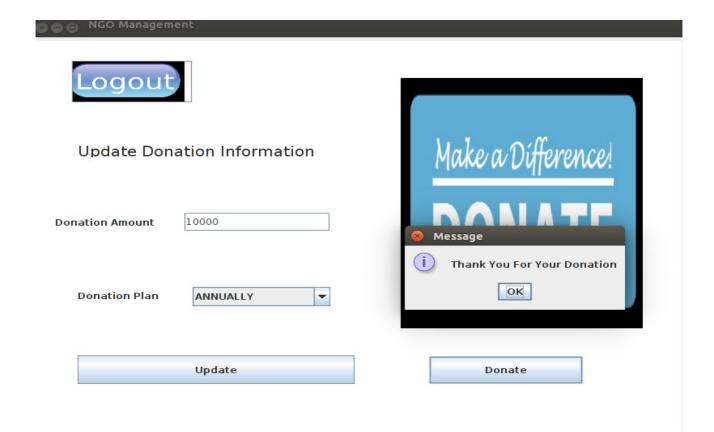




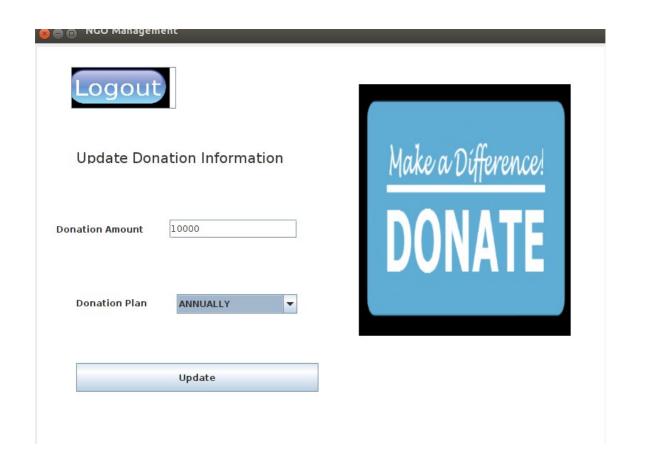
# Notify Donors:



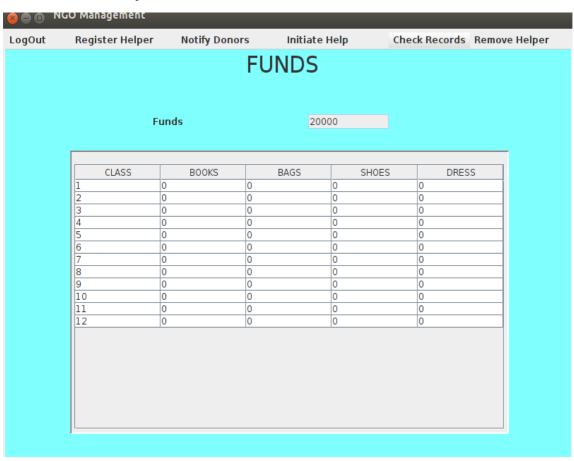
#### Donor:

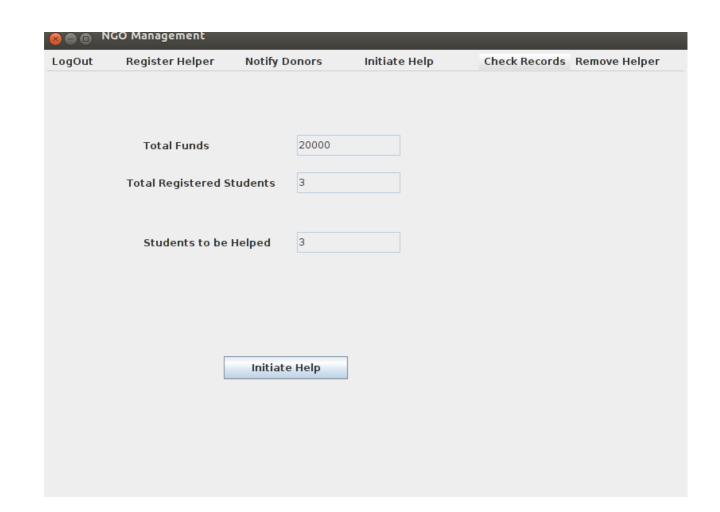


After Donation : No button to update



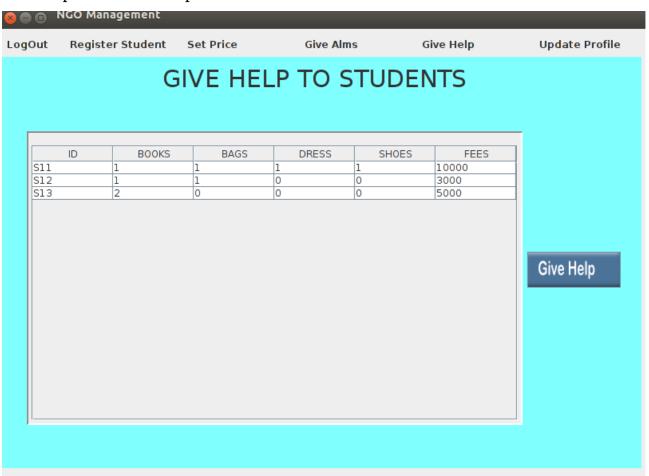
# Check Inventory:



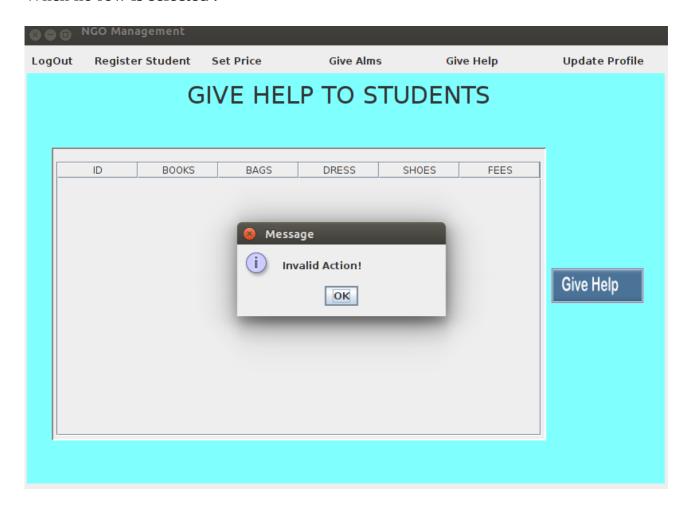


| ⊗ <u>■</u> <u>■</u> NGO Management |               |               |               |               |
|------------------------------------|---------------|---------------|---------------|---------------|
| LogOut Register Helper             | Notify Donors | Initiate Help | Check Records | Remove Helper |
|                                    |               |               |               |               |
| Total Funds                        | 1992          |               |               |               |
| Total Registered Stu               | dents 0       |               |               |               |
| Students to be He                  | lped 0        |               |               |               |
|                                    | Initiate Help |               |               |               |
|                                    |               |               |               |               |

Helper - > Give Help



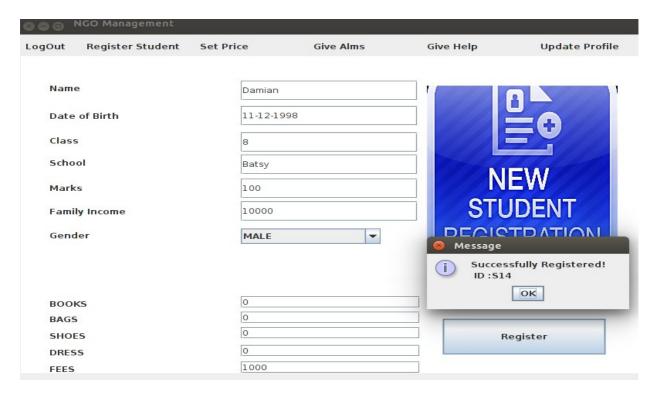
#### When no row is selected:

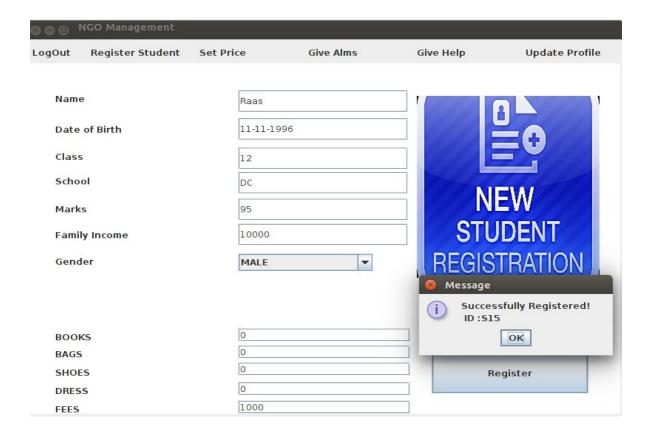


### Case : Insufficient Funds + Checking priority(marks)

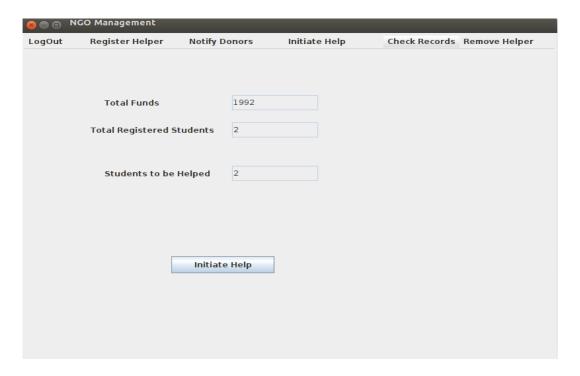
Now, funds will be insufficient to help all students and the student with higher marks will be helped(income,gender are same).

### Registering students:

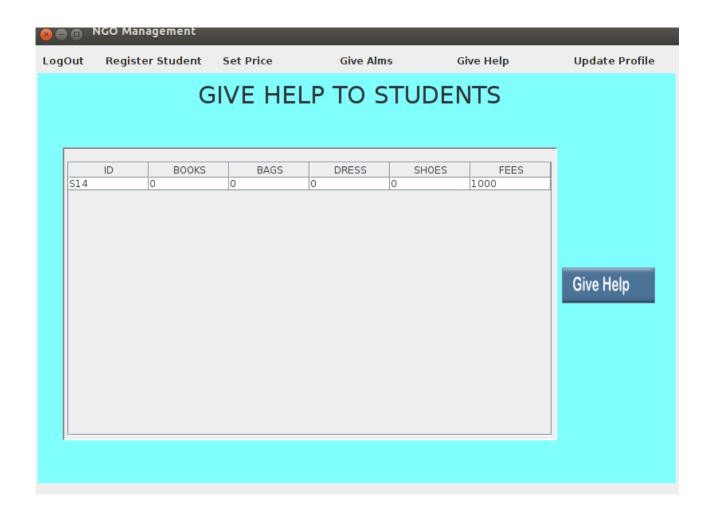




# Initiate Help:



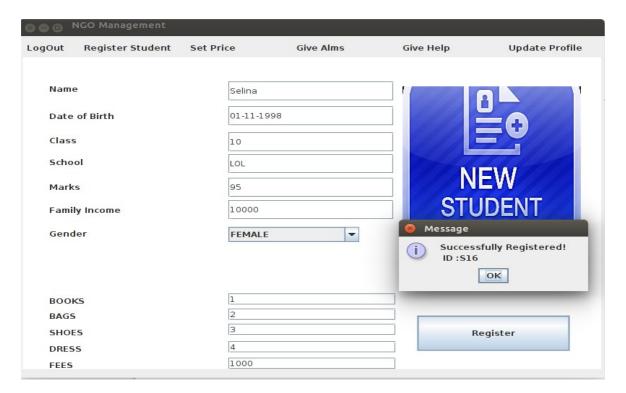
Student with more marks selected:



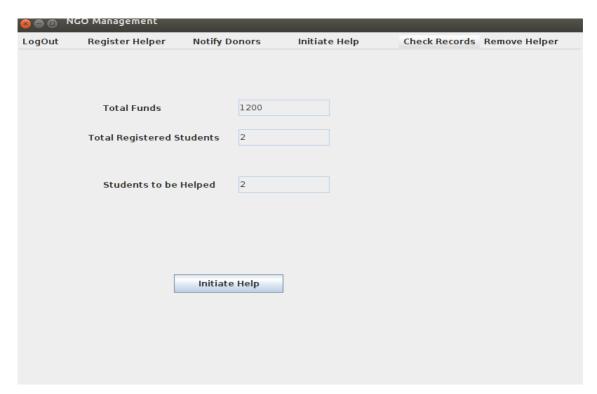
## **Checking Priority (Gender)**

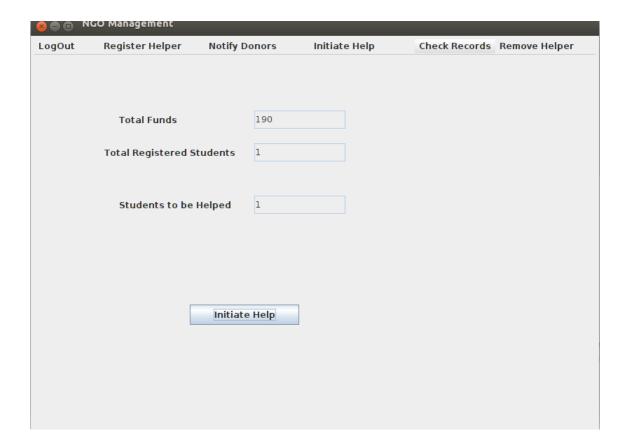
Now, funds will be insufficient to help all students and the female student will be helped(income,marks are same).

Add Students: (S15 still remaining)

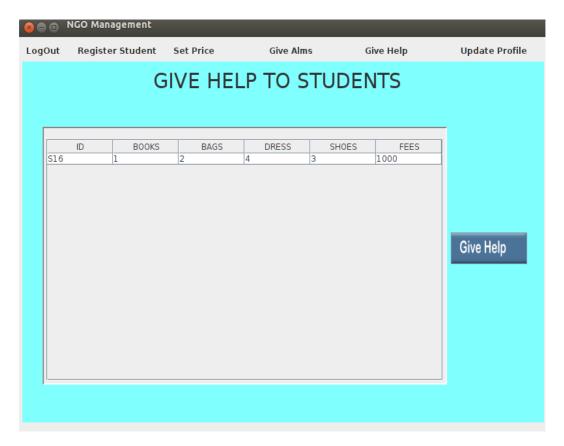


## Initiate Help:





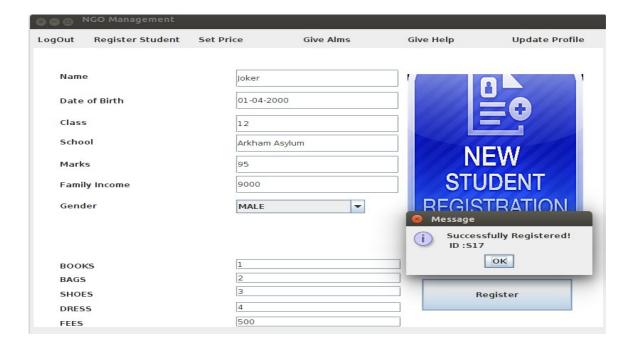
# Girl given preference:



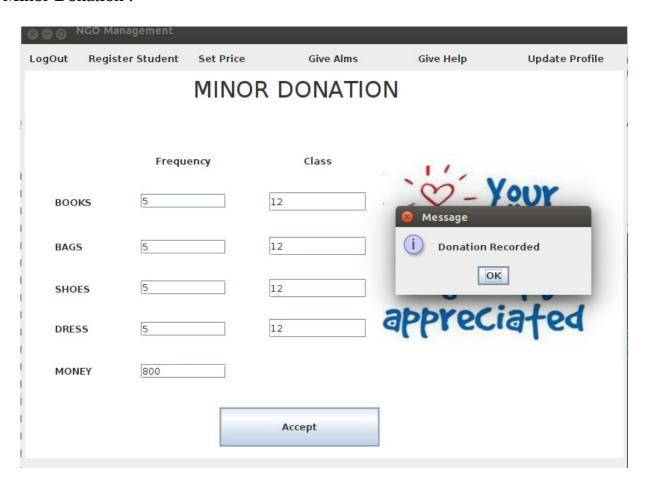
#### **ALL CORRECT**

### **Check Inventory+ Check Priority(Income) + Check Expenses**

Now, funds will be insufficient to help all students and the student with lower family income will be helped(marks,gender are same). Also, change of inventory will be monitored.



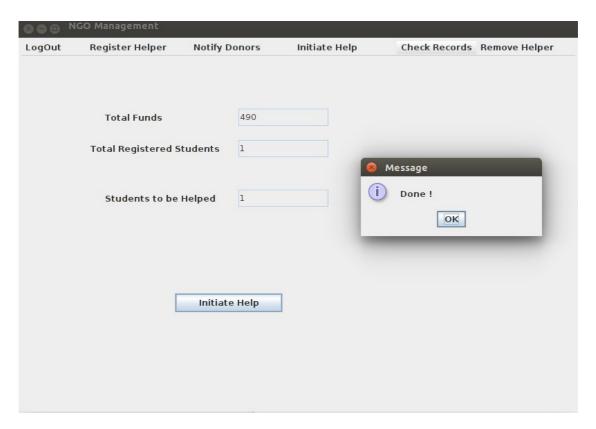
#### Minor Donation:



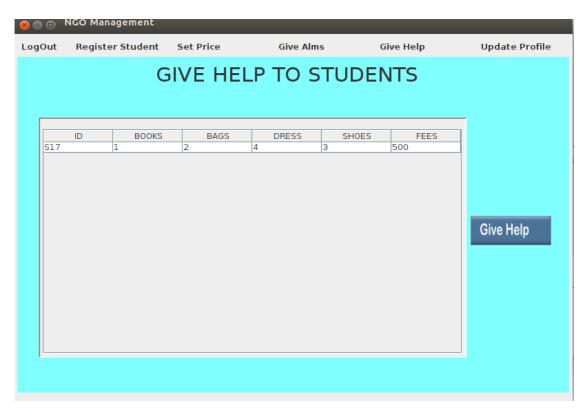
### Check Inventory:



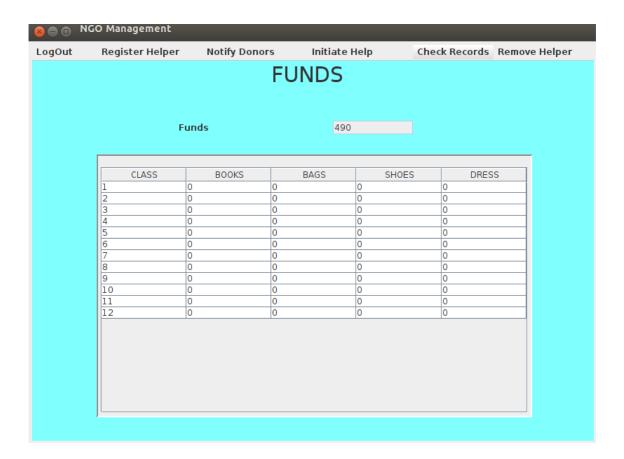
# Initiate Help:



Help given to student with low family income :



Check Inventory (again):



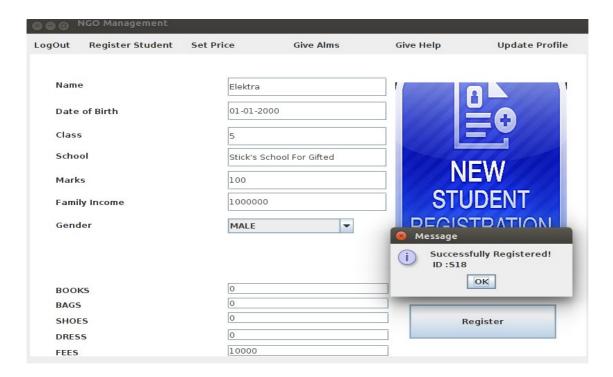
# Check Expenses:

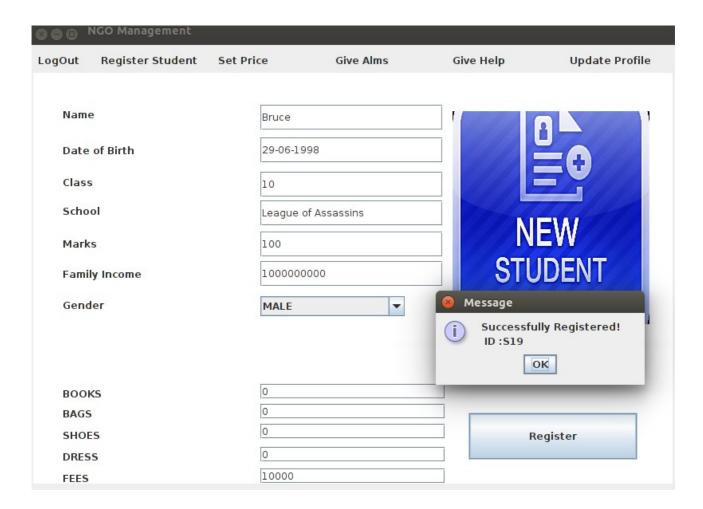


### **ALL CORRECT**

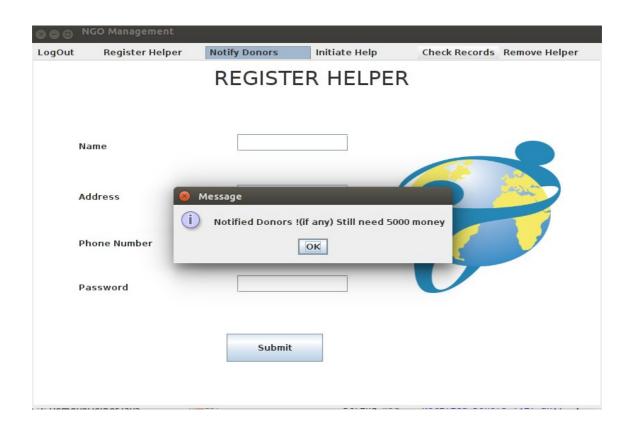
## **Check Donation Plan + Notify Donors :**

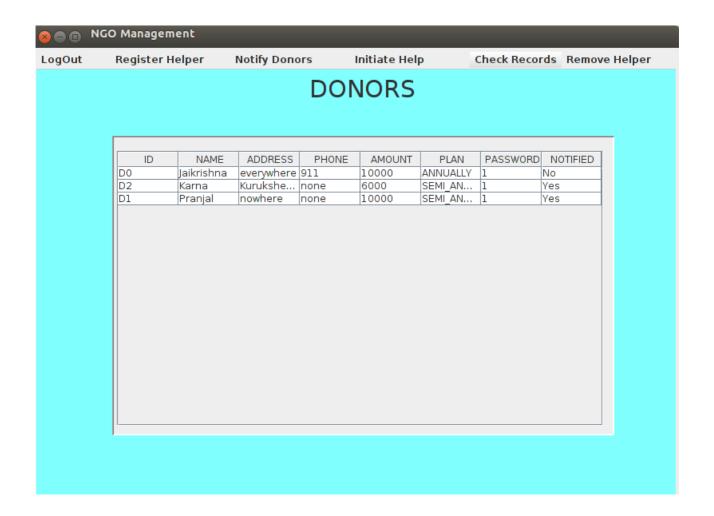
Increase funds needed:





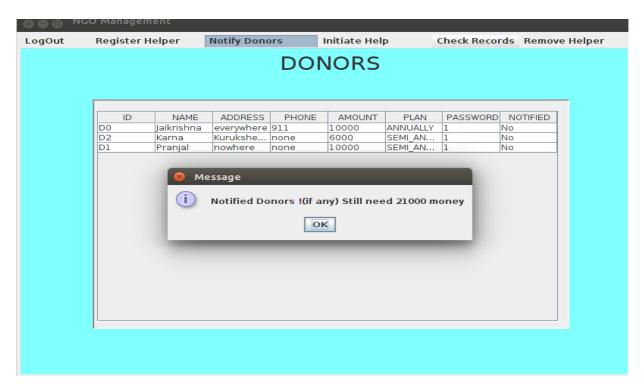
## Notify Donors:

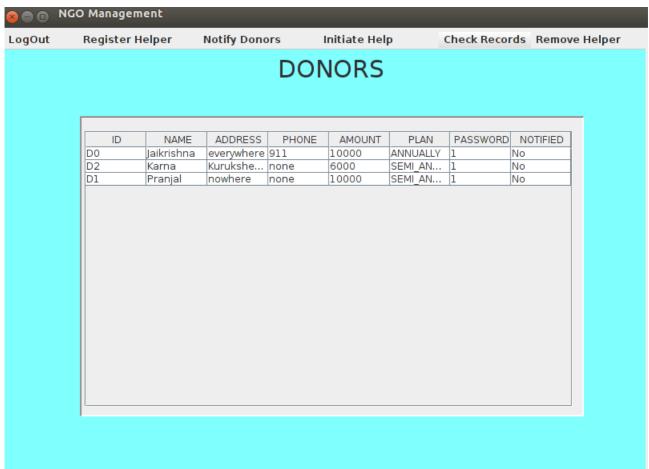




"D0" not notified because of ANNUAL donation plan.

Next both donors donated money. And when again trying to notify donors again when money finished when all have donated max. no. of times :

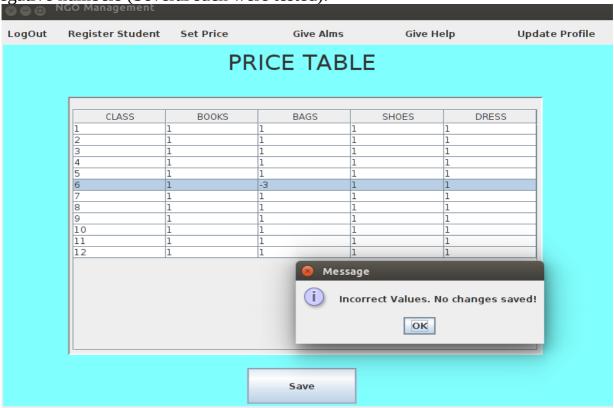




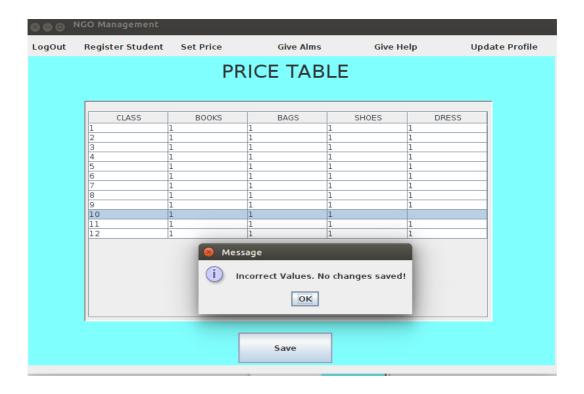
# **TESTING SET PRICE:**

Incorrect data:

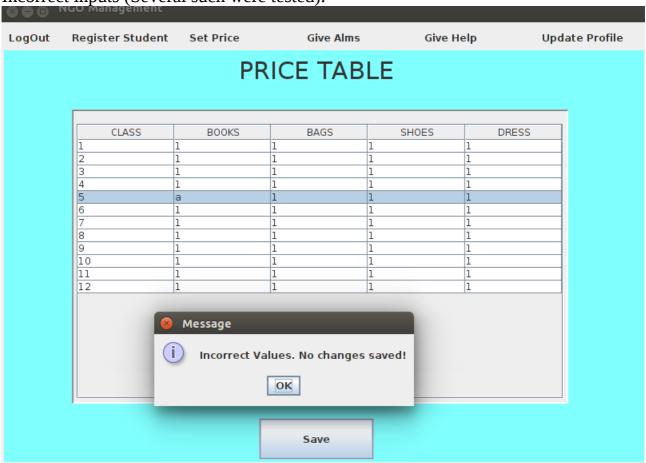
Negative numbers (Several such were tested):



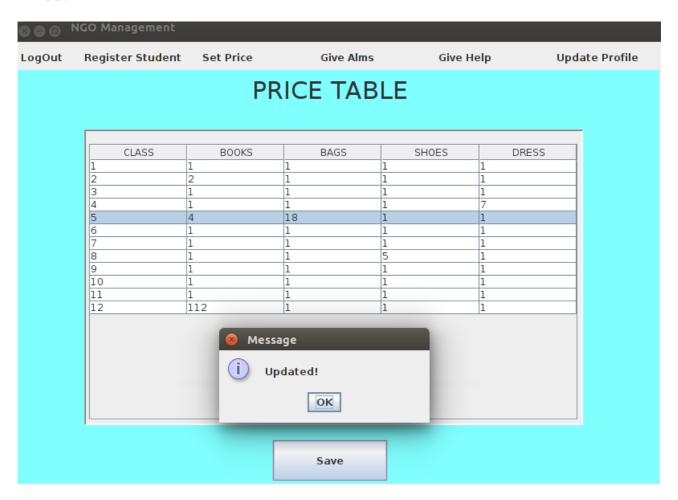
Blank inputs (Several such were tested):



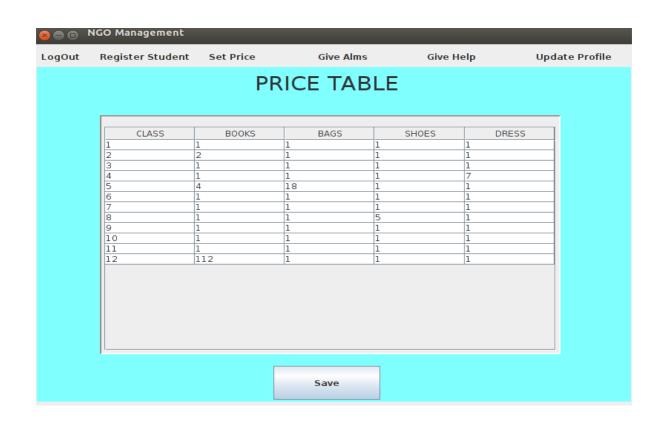
Incorrect inputs (Several such were tested):



# (Happy) Correct format :



# Application restarted:



## SQL: