

Project Name: NGO Platform Management

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Admin Class

- ❑ **Purpose** : Authentication for Admins Login.

- ❑ **Variables** : username, password. //Private variable
TotalRequiredMoney , TotalCollectedMoney // Public variable

- ❑ **Constructor** : Admin()

- ❑ **Methods** : get set Method,
Login() , AdminMenu () // Void Method

- ❑ **Control Flow** : By using Conditional Statements inside while Loop.

Interface

- ❑ display--
 - Virtual Method : Display()
- ❑ donate --
 - Virtual Method : Donate()

Abstract Class

- ❑ **Class Name:** BaseCategory
- ❑ **Inheritance:** Inherit from multiple class of interface
- ❑ **Features** : String type field as Name,
 Constructor // BaseCategory(),
 Abstract method // SpecialFeature().
- ❑ **Operation** : Interface methods.

FundCategory Class

❑ **Objective** : To get Donating option.

❑ **Inheritance** : Inherit from BaseCategory class.

❑ **Features** : Constructor // by Passing new Name as parameter
Sum operators (+) // for adding two categories at the same time.
override Method //SpecialFeatures
CategoryMenu() Method. // to use Loop

❑ **Control Flow** : Conditional statements inside while Loop.

Example- if (Choice=="1")
 { 1. Donate }
 else if (Choice=="0")
 { 2. Back }

Static Class

- ❑ **Class Name** : Donation class.
- ❑ **Objective** : To use Donating information in every categories.
- ❑ **Methods** : Static Method // MakeDonation()
- ❑ **Features** : User inputs for Donating information
 - Name,
 - Email Id,
 - Country,
 - ID Type : 1. Passport
 2. NID // Using Conditional Statements
 - Payment Method
 - Donation Amount

FundGroup Class

❑ **Properties** : String type Group Name, 5 Referenced Topic from FundCategory.

❑ **Purpose** : To Use as Base Class for Subcategories class.

❑ **Constructor** : public FundGroup()

❑ **Methods** : LoadDefaultCategories() // Virtual Method
Void Menu()

❑ **Objects** : Topic1 – Topic5 // inside Virtual Method

❑ **Control Flow** : Inside Loop by using Conditional Statements

Example- if (Choice=="1")

{ Topic1.CategoryMenu(); }

else if

{ }

Natural Disaster Relief Fund Class

❑ **Objective** : To Make a sub categories class.

❑ **Inheritance** : Inherit from FundGroup class.

❑ **Constructor** : DisasterReliefFund() : base ("Natural Disaster Relief Fund")

❑ **Methods** : LoadDefaultCategories() // Override Method

❑ **Objects** : Topic1 -- Topic5

❑ **Subcategories** : 1."Emergency Help"
2."Medical Help"
3."Shelter Help"
4."Homeless Families Support"
5." Safety Support".

WarzoneReliefFund

- ☐ Similar to Disaster Relief Fund Class.
- ☐ **Sub Categories:**
 - 1."Emergency Help"
 - 2."Medical Help"
 - 3."Shelter Help"
 - 4."Refugee Families Support"
 - 5." Safety Support".

AnimalShelterFund

- ☐ Similar to Disaster Relief Fund class.
- ☐ **Sub Categories:**
 - 1. "Food & Items"
 - 2. "Animal Treatment"
 - 3. "Shelter Support"
 - 4. "Adoption Help"
 - 5. "Rescue Work"

Health Care support Fund Class

- ❑ **Objective** : To Make a sub categories class.
- ❑ **Inheritance** : Inherit from FundGroup class.
- ❑ **Constructor** : HealthCareSupportFund() : base ("HealthCare Support Fund")
- ❑ **Methods** : LoadDefaultCategories() // Override Method
- ❑ **Objects** : Topic1 -- Topic5
- ❑ **Subcategories** :
 - 1." Vaccines"
 - 2."Hospital Tools"
 - 3."Free Checkup Camps"
 - 4."Health Awareness"
 - 5." Patient Help".

EducationSupport Fund

- ❑ **Objective** : To Make a sub categories class.
- ❑ **Inheritance** : Inherit from FundGroup class.
- ❑ **Constructor** : EducationSupportFund() : base ("Education Support Fund")
- ❑ **Methods** : LoadDefaultCategories() // Override Method
- ❑ **Objects** : Topic1 -- Topic5
- ❑ **Subcategories** :
 1. " School Items"
 2. "Study Scholarships"
 3. "Teacher Trainings"
 4. "Library Support"
 5. "Student Help".

Main Class

- ❑ **Purpose** : To Control the entire Code flows.
- ❑ **Objects** : Admin, Disaster, Warzone, Animal, Health, Edu.
- ❑ **Fund Options** : Showing Output of Fund options(1 -5).
- ❑ **User Input** : Choice (String Type)
- ❑ **Control Flow** : Inside While Loop using Conditional statements.

Example: if (choice==1)

{ Disaster.Menu(); }

else if

else if (Choice == 6)

{ inside nested conditions (admin.AdminMenu()) will be called)

else

{ " Invalid Choice. " }

Output Demo

```
NGO FUND PLATFORM
1. Disaster Relief Fund
2. Warzone Relief Fund
3. Animal Shelter Fund
4. Healthcare Support Fund
5. Education Support Fund
6. Admin Login
0. Exit
Choose: 4
```

- ☐ Choosing 4h option as Fund Option

```
Healthcare Support Fund
1. Vaccines
2. Hospital Tools
3. Free Checkup Camps
4. Health Awareness
5. Patient Help
0. Back
Choose: 3
```

- ☐ Choosing 3rd option as Sub Category

Free Checkup Camps

1. Donate

0. Back

Choose: 1

☐ Choosing 1 to Donate

Donation for Free Checkup Camps

Your Name: Taspriya Sultana

Email ID: taspriya11@gmail.com

Country: Bangladesh

Choose ID Type:

1. Passport

2. NID

Select (1/2): 2

Enter Payment Method: Mobile Banking

NGO's Payment Number: 01293734445

Donation Amount: 2000

Thank you for Donating.

Donate again? (y/n): n

☐ Giving Donating Information by giving n leaving donate option.

Healthcare Support Fund

1. Vaccines

2. Hospital Tools

3. Free Checkup Camps

4. Health Awareness

5. Patient Help

0. Back

Choose: 0

☐ By choosing Back coming back to Main Home Page.

Admin's Option

```
NGO FUND PLATFORM
1. Disaster Relief Fund
2. Warzone Relief Fund
3. Animal Shelter Fund
4. Healthcare Support Fund
5. Education Support Fund
6. Admin Login
0. Exit
Choose: 6
```

- ☐ Choosing 6th For admins Options.

```
Admin Username: admin
Admin Password: 1234
Admin Login Successful!
```

- ☐ Giving Admins Informations and login in for any updates or changes.

```
0
Select Fund (1-5): 4
```

```
--- ADMIN PANEL (Healthcare Support Fund) ---
```

- 1. Change Fund Name
 - 2. Change Category Name
 - 3. Change Required Money
 - 4. View Fund Money Status
 - 0. Logout
- Choose: 4

```
--- FUND MONEY STATUS ---
```

```
Required Money : 9000000
```

```
Collected Money: 2000
```

- ☐ Choosing 4 to see fund money status and can watch funds money status.

```
--- ADMIN PANEL (Healthcare Support Fund) ---
```

- 1. Change Fund Name
 - 2. Change Category Name
 - 3. Change Required Money
 - 4. View Fund Money Status
 - 0. Logout
- Choose: 0

- ☐ Can choose any other options too for more updates in site. By choosing Logout option can comeback to home page .

Conclusion

- ❑ The project demonstrates the application of Object-Oriented Programming principles through interfaces, abstraction, inheritance, and polymorphism
- ❑ The system organizes various donation types using a hierarchical class structure, ensuring clean separation of responsibilities.

THANK YOU