# **Organ Donation Application**

Organ Donation Application provides the platform for who is willing to donate the organ and who are looking for the organ. The main agenda of the application to provide the one place for Donors and Recipients. The application provides two options to choose for applicant either Donor or Recipient. Once user select the option from the two options, based on selection applicant need to provide basic information like first name, last name, mail id, phone number, organ type and address.

Once user enters the information it will display the entered information on screen as output. If user wants to fill one more application, user can choose yes or no option for respective question on screen.

The following screens are example outputs:

Graphical user interface, text, application, email

Description automatically generated

Graphical user interface, text, email

Description automatically generated

Graphical user interface, text, application, email

Description automatically generated

**How to run Organ Donation Application:**

Select the OrganDonationApplication.java (main class) and select Run as Java Application.

**Implemented Design Patterns :**

Builder Design Pattern:

* OrganDonationApplication.java
* Applicant.java
* ApplicantBuilder.java
* DonorBuilder
* RecipientBuilder.java

Singleton:

* Applicant.java

Composite:

* OrganDonationApplication.java
* Applicants.java (Component)
* TotalApplicants.java(Composite) leaf's (DonorBuilder and RecipientBuilder.java)

Bridge:

* OrganDonationApplication.java
* WHO (abstraction class)
* DonorOrganBank & Recipient OrganBank (Refined abstraction)
* OrganBank (Interface as IMPLEMENTOR)
* DonorBuilder and RecipientBuilder.java (as Concrete Implementations)

**Status:**

I am able to develop the application as I expected and if I get a chance to work on it, I want to work on couple of enhancements like add UI features, Database for storing the applicant information and providing notifications for applicants.