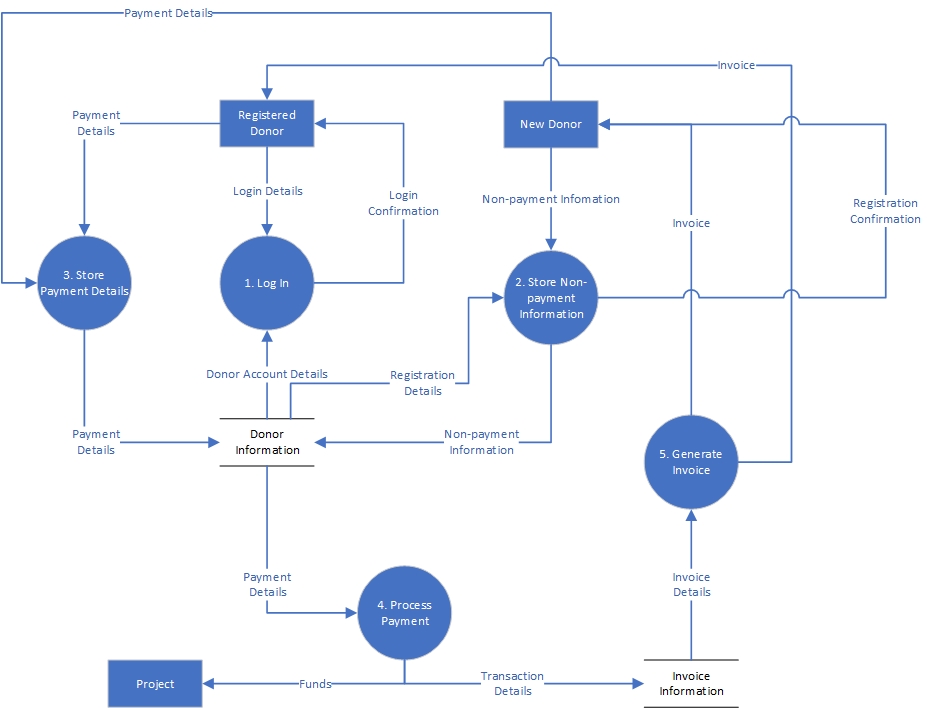
Group Assignment Report – GlobalAid

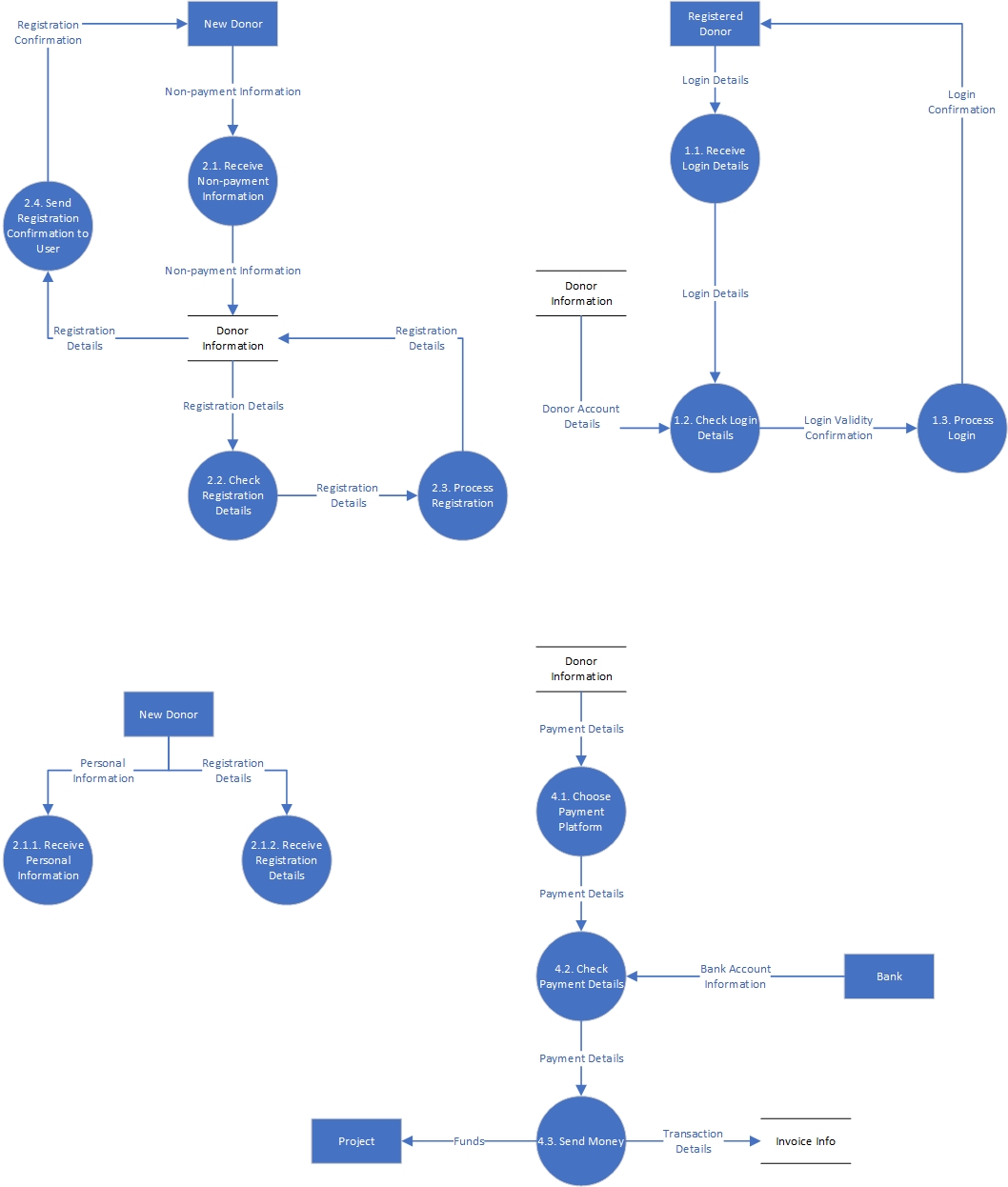
Rafi Rahman, Ashwin Mayilvahanan, Matej Mitrev, Abuzar Lone

# Dataflow Diagram

## Top Level DFD



## Bottom Level DFD



# Data Dictionary

**Address** = Address Number + (Sub-Premise) + Street Name + Suburb + City/Town + (Sub Administrative Area) + Administrative Area + Post Code + Country

**Personal Information** = Donor Title + First Name + Last Name + Email + Phone Number + **Address**

**Registration Information** = Register + Username + Password

**Login Details** = Username + Password

**Donor Account Details** = **Personal Information** + **Login Details**

**Non-payment Information** = **Personal Information** + **Registration Information**

**Card Payment** = Card Holder Name + Card Number + Date of Expiration + CVV

**Direct Debit** = BSB + Account Number + Account Name

**Donation** = Donation Amount + Merchant Fee + Administrative Fee + Pay Optional Fees + Program Choice + Region Choice + One-off + Monthly + Yearly

**Payment Information** = [**Card Payment** | **Direct Debit**] + **Donation**

**Invoice Details = Personal Information + Donation**

Address Data Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data Element | Description | Data Type | Length/Format | Example Data |
| Sub-Premise | Specific identifier for townhouses and apartments | String | 20 characters | B (23-B), 2 (102-2), Building 1 |
| Address Number | Numeric identifier of donor’s residence | Short | 5 characters | 23 102 |
| Street Name | Donor’s street name and street type | String | 50 characters | Kirinari St. Fifth Avenue (Manhattan, US) |
| Suburb | City district | String | 50 characters | Bruce |
| City/Town | City or town donor is from | String | 50 characters | Canberra London |
| Sub Administrative Area | Donor’s county, or district | String | 50 characters | Cheshire (England) San Diego County (US) |
| Administrative Area | Donor’s state, province, or region | String | 50 characters | NSW Australian Capital Territory |
| Postal Code | Donor’s postal code or ZIP code | String | 10 characters | 2601 (Australia) M3B 3S2 (Canada) |
| Country | Nation where donor resides | String | 50 characters | Australia  England |

Personal Information Data Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data Element | Description | Data Type | Length/Format | Example Data |
| Title | Form of addressing donor | String | 10 Characters | Mr. Mrs. |
| First Name | Person’s given name | String | 50 Characters | Bob Shalissa |
| Last Name | Person’s surname | String | 50 Characters | Jones Smith |
| Email | Unique identifier for an email account | String | 320 Characters | johnsmith@gmail.com |
| Phone Number | Phone number including country and area code | String | +###-###-###-#### | +498-963-648-0181 |
| Address | Where donor is currently living | Address Data Table | Address Number + (Sub-Premise) + Street Name + Suburb + City/Town + (Sub Administrative Area) + Administrative Area + Post Code + Country | 74 + Chandler St + Belconnen + Canberra + ACT + 2617 + Australia |

Registration Information Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data Element | Description | Data Type | Length/Format | Example Data |
| Register | The user can choose to register or not | Boolean | Boolean values | TRUE  FALSE |
| Username | Identification used for donors | String | 20 characters | JohnSmith13 |
| Password | String of characters required to access system | String | 50 characters | Password123 |

Login Details

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data Element | Description | Data Type | Length/Format | Example Data |
| Username | Identification used for donors | String | 20 characters | JohnSmith13 |
| Password | String of characters required to access system | String | 50 characters | Password123 |

Card Payment Data Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data Element | Description | Data Type | Length/Format | Example Data |
| Card Holder Name | Who owns the card | String | 110 digits | Mr John Smith |
| Card Number | Number that identified card owners account | Long | 12-19 digits | 5555123456789000 |
| Date of Expiration | When card expires | Date | MM/YY | 12/20 |
| CVV | Card’s security code | Short | 3 digits | 123 |

Direct Debit Data Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data Element | Description | Data Type | Length/Format | Example Data |
| BSB | Is a six-digit number that is used to identify bank and branch | Integer | 6 digits | 033088 |
| Account Number | Code which identifies the bank account | Integer | 8 digits | 12345678 |
| Account Name | Name of the person who owns the bank account | String | 110 characters | Mr John Smith |

Donation Data Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data Element | Description | Data Type | Length/Format | Example Data |
| Donation Amount | Donor can choose from pre-set amounts or a custom amount | Currency | $10#.## | $100.00  $75.25 |
| Merchant Fee | A required processing fee from the card company | Currency | $10#.## | $5.00  $0.50 |
| Administrative Fee | A fee that covers admin costs | Currency | $10#.## | $5.00  $0.50 |
| Pay Optional Fees | User can choose to pay optional fees | Boolean | Boolean values | TRUE  FALSE |
| Program Choice | The donor can choose from a list of programs to pledge | String | 30 characters | Emergency Relief  Orphan Aid |
| Region Choice | The donor can choose from a list of regions to where the program donation will go to | String | 30 characters | Syria  Ethiopia  Fiji |
| One-off | The donor can choose if their donation is one-off | Boolean | Boolean values | TRUE  FALSE |
| Monthly | The donor can choose if their donation will recur monthly | Boolean | Boolean values | TRUE  FALSE |
| Yearly | The donor can choose if their donation will recur yearly | Boolean | Boolean values | TRUE  FALSE |

# Process Specification