

Final Report

Crowdfunding Platform

Group Number: 04

Group Members:

Student Name	Student ID
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Introduction

Crowdfunding is a way of raising funds for a person or group by soliciting donations from family, friends, friends of friends, strangers, corporations, and others. People can contact more prospective contributors through social media than through traditional fundraising techniques. Many people require financial assistance when they become ill, undergo a medical procedure, or are caring for a sick loved one. Online fundraising sites may be a big assistance in providing people and families with much-needed funds during such trying times. However, there should be a well-designed platform to arrange money for various purposes and assist them. An online forum where like-minded individuals may interact and contribute to helping the impoverished section of society is desperately required to support this great cause. This will not only assist NGO(s) and NPO(s) in raising funds for their programs but will also motivate a large number of individuals to volunteer. As a result, the Online Platform for Crowdfunding will assist in the fulfillment of any type of event, such as education or student scholarships, assisting COVID-19-affected impoverished people, various types of disaster-affected people, and supporting individuals for their livelihood, and so on.

Motivation

Because of the present epidemic, the poor's needs have increased significantly, while the means of aiding them have diminished drastically. From business to education, most things have gone online; nonprofit organizations may fall behind if they do not adjust to the times. For many small charities with limited resources, fundraising may be unpleasant and time-consuming. A flexible fundraising approach is a key priority for the majority of NGOs. Most of them still use spreadsheets or a paper file system to keep track of donations, and they don't receive enough opportunities to publicize their campaigns for assistance, which is why their activities don't reach a significant number of people. This

is the source of our passion to work on this project. Our key target with this website was to ensure that organizations could attract more people to donate and participate in social activities, as well as to ensure that they could simplify their fundraising to alleviate the burden on their personnel. This website will make it easier for non-governmental organizations (NGOs) to accept a wider range of donations and organize their fundraising initiatives. This will also make managing campaigns and donations easier for them. Donor participation is increased by making the contribution procedure as simple as possible for them. More people will be aware of social activities going on in their town, which will inspire them to support nonprofit groups and volunteer.

System request

Project Sponsor:

Shafakat Sowroar Arnob, CEO of MAGNITO DIGITAL. Hamim Ibne Nasim, CFO of DATASOFT SYSTEMS BD Limited. Fateha Jannat Printia, President of SOUTHTECH.

Business Need:

The platform's initial goal is to make the world a better place by bringing fundraisers and donors together. The initiative will collect donations for various fundraisers by creating campaigns or events, such as disaster relief, supporting the underprivileged, and so on. Fundraisers will be able to create campaigns for various purposes to collect funds, and donors will be able to give donations to any campaign they like. One of the system's primary goals is to assist the impoverished. The fundraising will be divided into different categories to help every individual from different sectors, such as education or student scholarships, supporting COVID-19-affected poor people, different kinds of disaster-faced people, supporting individuals for their livelihood, and so on.

Business Requirements:

When individuals wish to donate, all they have to do is to make use of this system and choose any campaign to which they want to send money.

- Those involved in fundraising might organize a campaign to collect money.
- Donors are free to contribute to any campaign of their choosing.
- Donors may file complaints about any campaign if they think that the campaign is fake/unnecessary.
- Anyone with internet access may read the whole list of donations to any campaign.
- Donors have the ability to comment and evaluate any campaign.
- The system provides paid promotions for any campaign, and then, that campaign will be featured on the platform.
- payment systems (all payment gateways).
- Notable or well-known campaigns will be included that run all year round (such as Food for Poor People).
- You are able to see the portfolio for the fundraising because before donating somewhere we all have to make sure about the authenticity of the event.

Business Value:

We anticipate that the method will minimize the amount of money spent or, in other words, save the money spent by the majority of fundraising organizations on their physical campaigns. Fundraising mailings, events, personnel costs, staging events, performance fees (concerts), contract agents, and office administration costs are all areas where we may save money. The main focus is on saving costs of fundraisers, with a secondary focus on profiting from donors who give donations, from advertising, and from paid promotions of campaigns. We also hope to get funds from international NGOs and donors, which will boost remittances.

Tangible Values:

1. The system will save 80-90% on office administration expenditures, equivalent to over 400,000 taka per year.
2. The system will save 100% of employee costs, amounting to about 800,000 Taka per year.
3. For advertising from 8-10 corporations, the system will make almost 1080000–1100000 taka per year.
4. The system will take 5-10% of every single donation, which will generate 300,000–500,000 lakhs of taka annually.
5. The system will gain 300,000–400,000 taka annually for paid promotions of campaigns.

Intangible Values:

1. It will spread worldwide very easily.
2. It creates a safe space for our community.
3. Donor satisfaction will be ensured through the system, which will improve communication between donors and fundraisers.
4. The system allows the donor to see other donors as well as the fundraiser's bio data, ensuring a completely safe transaction.

Special Issues or Constraints:

- Online impersonation, a standard method of system abuse, puts the system at risk. For example, posting defamatory remarks, hate speech, or threats of violence. As a result, there will be a decrease in user cohesion. Administrators must maintain a tight monitor on such interruptions in order to prevent them immediately.
- Fake reviews or feedback given by people without having any proof.
- There will be some events where maybe no one will fund them.

- In the crucial scenario, the percentage we are talking about will be reduced. For instance, if a critical event occurs, we will reduce the percentage we are taking.

Requirement Analysis:

Functional Requirements:

1. Admin Account:

- 1.1. An admin may approve or deny requests depending on the persuasiveness and validity of events created by fundraisers.
- 1.2. If an administrator discovers anything that should be added or removed from the event, they can make the necessary changes.
- 1.3. An admin can make announcements or post notices about events that are yet to take place.
- 1.4. Admin can refund if someone mistakenly gives a donation.

2. Fundraiser Account:

- 2.1. In order to start an event, the fundraiser can give information and other data in a description box.
- 2.2. A fundraiser may request a sponsored campaign in order to have their event shown on the homepage (featured section) as a paid promotion.
- 2.3. After a successful event, a fundraiser can upload photos and news of that event.

3. Donors Account:

- 3.1. Donors may give to any event of their choice by simply clicking "Donate" and providing the requested information.

- 3.2. A donor who believes that an event is fraudulent can report it immediately and without reluctance.
- 3.3. Donors have the opportunity to provide feedback through comments at any time.
- 3.4. Donors can use the search bar or see from the categorized events to find campaigns they are concerned about.
- 3.5. Donors may choose from various payment options when utilizing an online payment system (Bkash, Bank).

4. User Account:

- 4.1. The user may view the details/description, events; who has given; how much money has been collected, the comments/feedback or we can say a convenient site map.
- 4.2. Users who want to join our team may sign up and volunteer.
- 4.3. Users can blog about any circumstance pertaining to incidents.
- 4.4. Users can contact us easily by mail, social media or by dialing our helpline by just simply clicking the icons.
- 4.5. Users may sign up for the newsletter by entering their email and clicking on the subscribe button.
- 4.6. Users should be able to turn on and off notifications.
- 4.7. Users are able to generate digital payslips and receipts that can be printed out for the users.

5. Other functionalities:

- 5.1. The website should come equipped with all of the required login and authentication functions.
- 5.2. The user account will be permanently deleted after 2 years of inactivity.

Non-Functional Requirements:

1. Operational:

- 1.1. An intuitive user interface and a cross-platform foundation will make it easy for users to operate the system, and the system must be responsible.
- 1.2. Admin will continually check site statistics to ensure that users get the best experience possible.

2. Performance:

- 2.1. Users must be able to see real-time updates to all of their data.
- 2.2. The system must have a very good server that can operate with a wide range of user traffic.
- 2.3. Every user-to-system interaction(pages) should be done within seconds.
- 2.4. Providing rapid computing, as well as data input and export, will assure user pleasure.
- 2.5. All of the website's photos must be optimized so that it loads quickly. Moreover, there should not be an excess of animation. It disrupts the website's official look and slows it down.

3. Security:

- 3.1. Public information about a fundraiser or administrator may only be accessible by the fundraiser or administrator themselves.
- 3.2. When a login attempt is made from an unfamiliar device, the system will warn the user.
- 3.3. The system will be well protected, and users' accounts will have two-factor authentication for further protection.
- 3.4. A user is permitted to change his password and is alerted when he tries to do so.

- 3.5. The system will pay great attention to safeguarding each user's login information.
- 3.6. One e-mail can only log into one account. Only admins may see users' names, emails, and phone numbers.
- 3.7. The payment gateways must be verified and secured.

4. Cultural and political:

- 4.1. The software will support two languages: Bengali and English.
- 4.2. The system is able to distinguish between Bangladeshi Taka and the United States currency only.
- 4.3. The system will not use icons that could be considered offensive in any of our market countries.

5. Maintainability:

- 5.1. When a new version is launched, automation disseminates it to users.
- 5.2. When an update fails, the data must be rolled back to its pre-session state.
- 5.3. Rebooting the machine won't take more than one minute after the installation of any new updates.

6. Usability:

- 6.1. Maintaining the same font size across all devices when viewing links is important. Designing a flexible layout is essential.
- 6.2. It is important to adhere to the principles of simplicity, consistency, and sound information architecture.
- 6.3. When the screen is shrunk, the layout should immediately resize to fit the new dimensions.

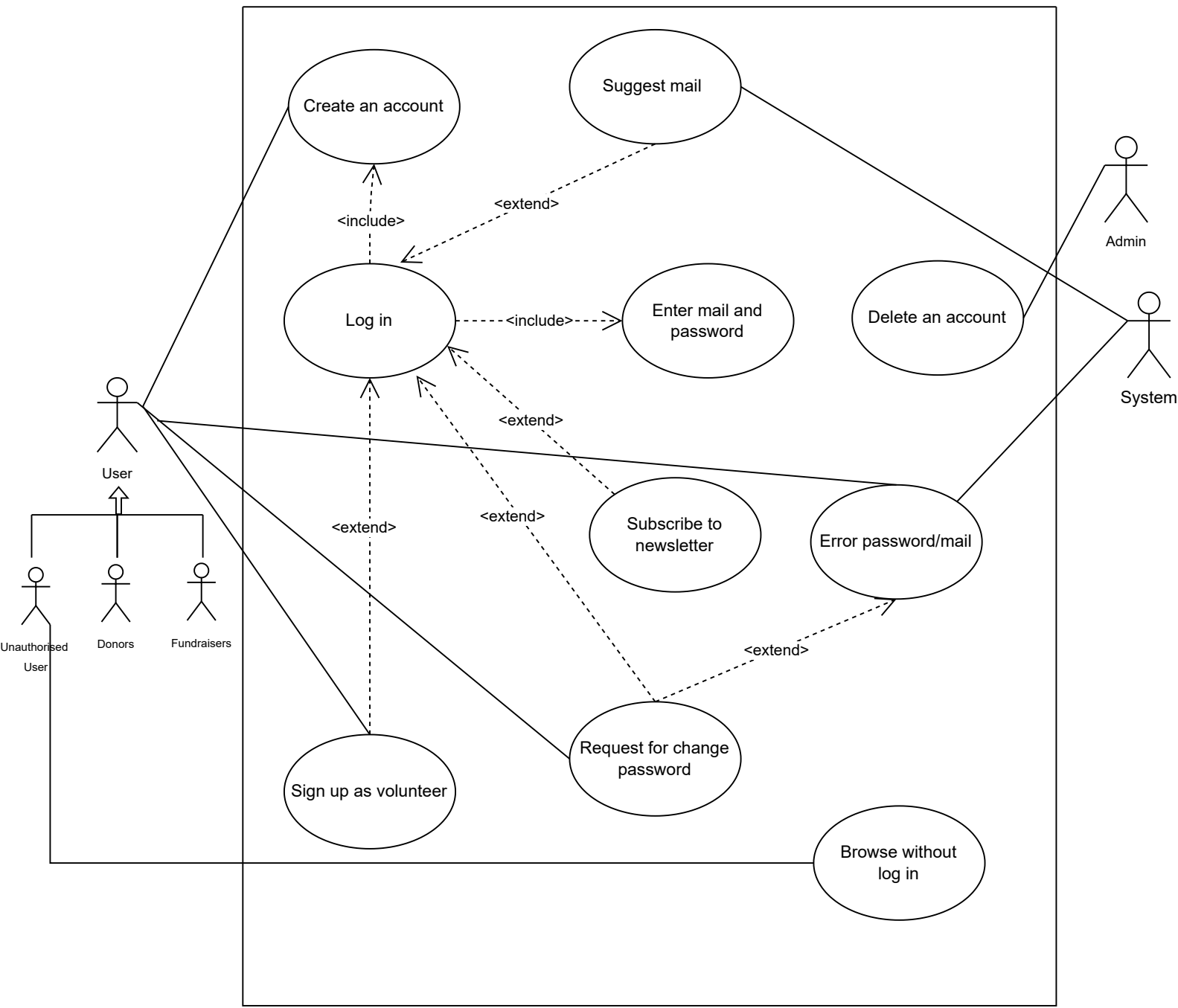
Project Scenario

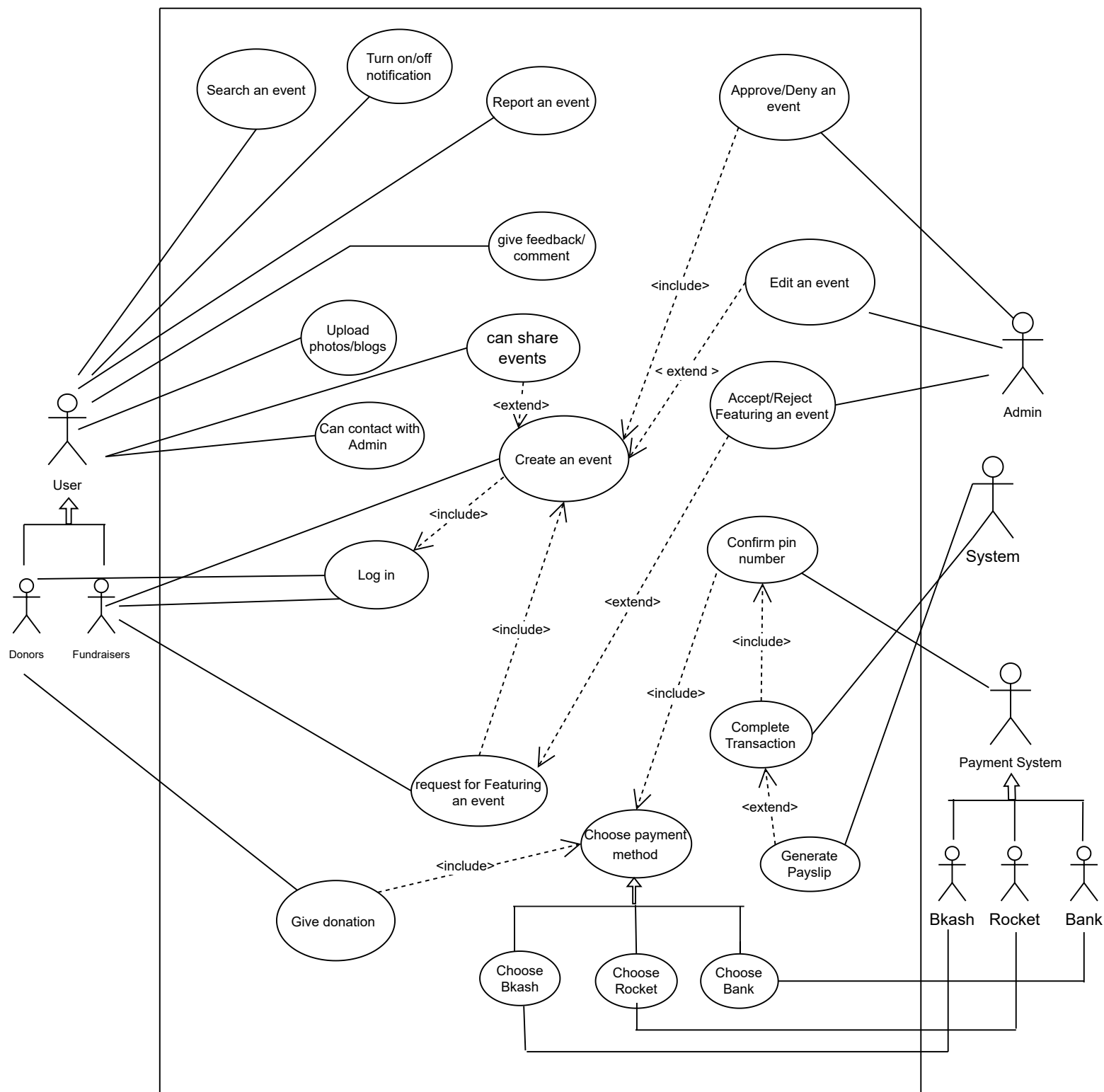
The web-based platform will mostly be used by people, NGOs, and social workers who are willing to contribute money to the underprivileged. Consequently, they are the principal actors, while the system and payment system are secondary actors.

In our system, anybody can quickly check which events are currently occurring or which events are featured. However, to donate or fundraise for an event, the account type must be selected. However, in order for an event to be approved by the admin panel, a fundraiser must provide a thorough description and supporting proof. On the other hand, donors are not required to do anything; they may just provide the amount and pick the transition method. A donor may inquire about any event, comment on posts, and provide feedback. Administrators must also log in for any reason. He is able to check posted events by fundraisers, and if he finds any errors, he may delete the event. A fundraiser may request a highlighted event in exchange for which the project owner would deduct a proportion of donations. But before that, the administrator will determine if the event is trustworthy.

Use Case Diagram:

The use case diagram depicts the system's activities from a user's perspective without detailing the system's structure. The next two diagrams depict the key acts of each primary and secondary actor, as well as their interplay with the system.

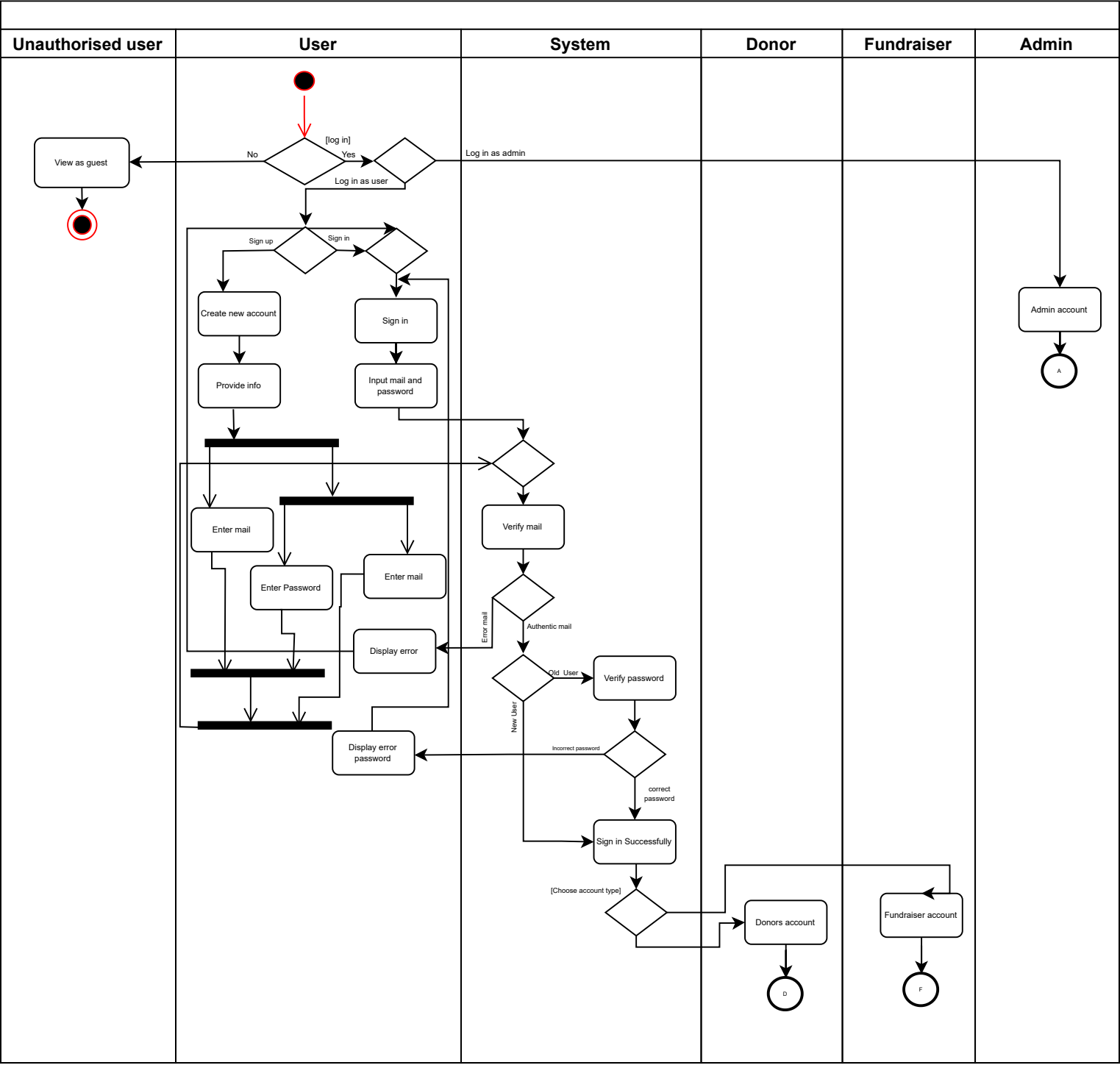




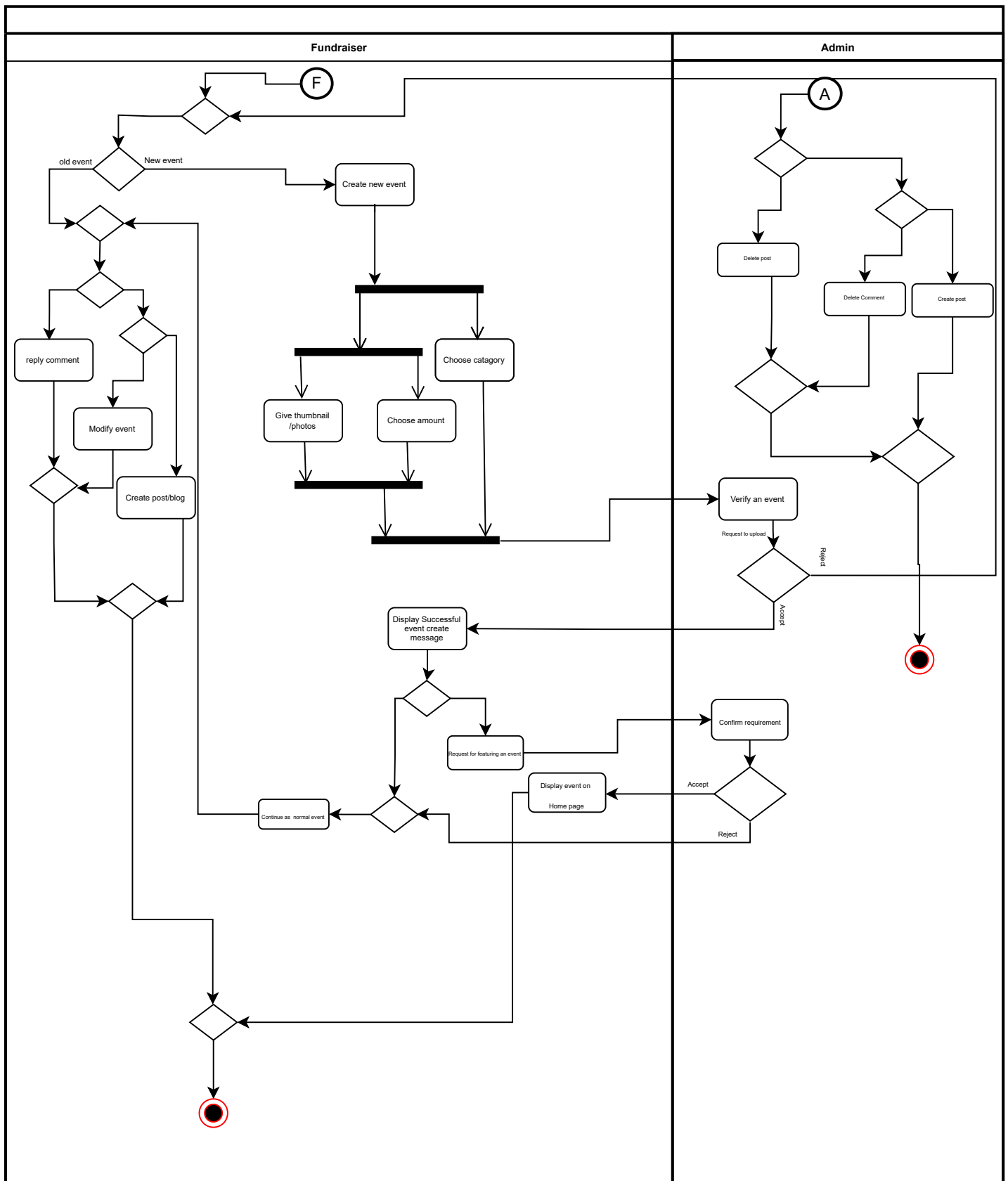
Activity Diagram:

An activity diagram is a flowchart used to depict the flow of activities inside a system. Diagrams illustrating the system's most essential functions are shown below. In the first image, you can see how logins are managed. The second one depicts the activities of a fundraiser, and the last figure depicts the actions of donors to demonstrate how the system's features would operate when the right choices are made.

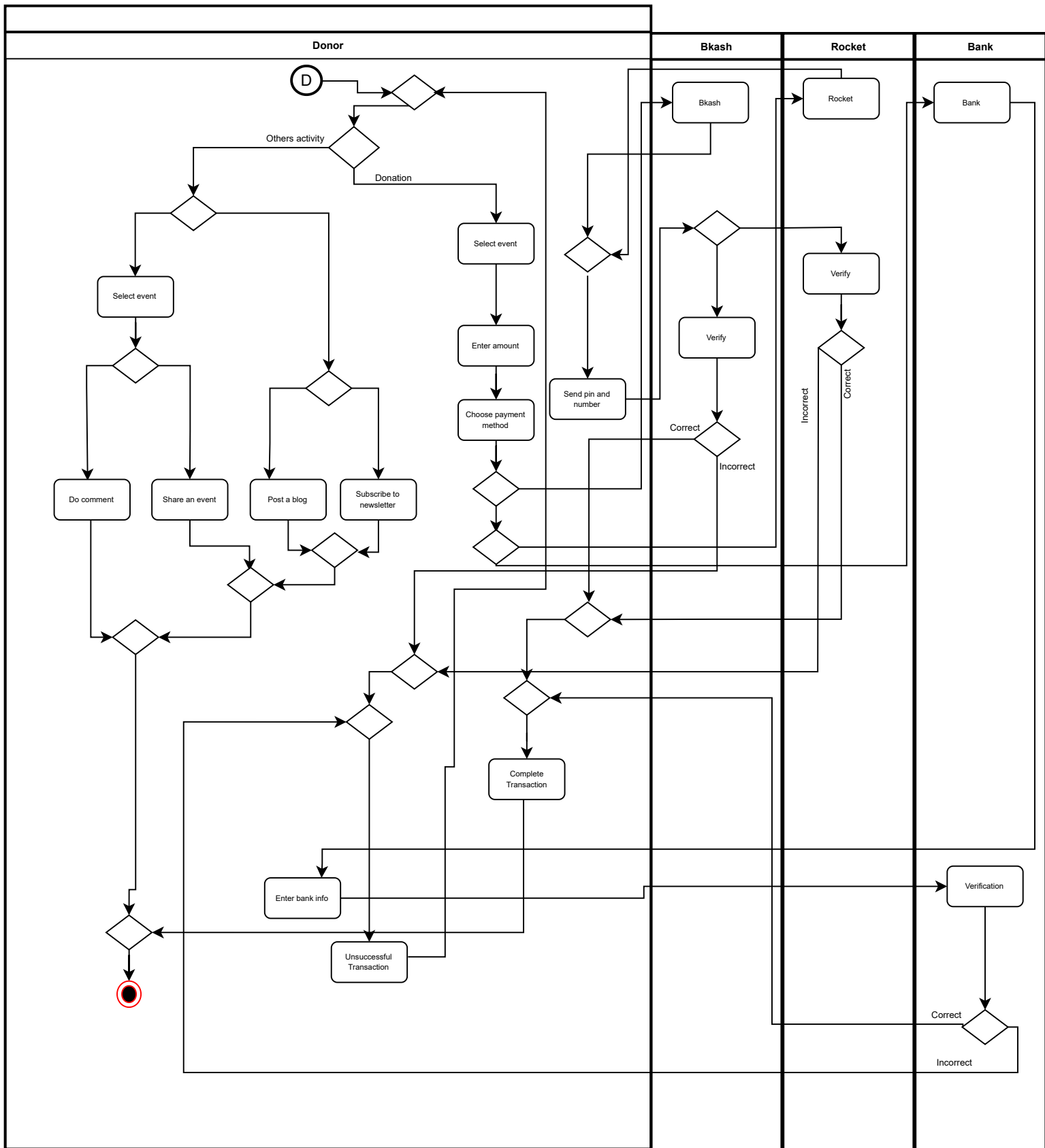
Activity Diagram for log in



Activity Diagram for Fundraiser



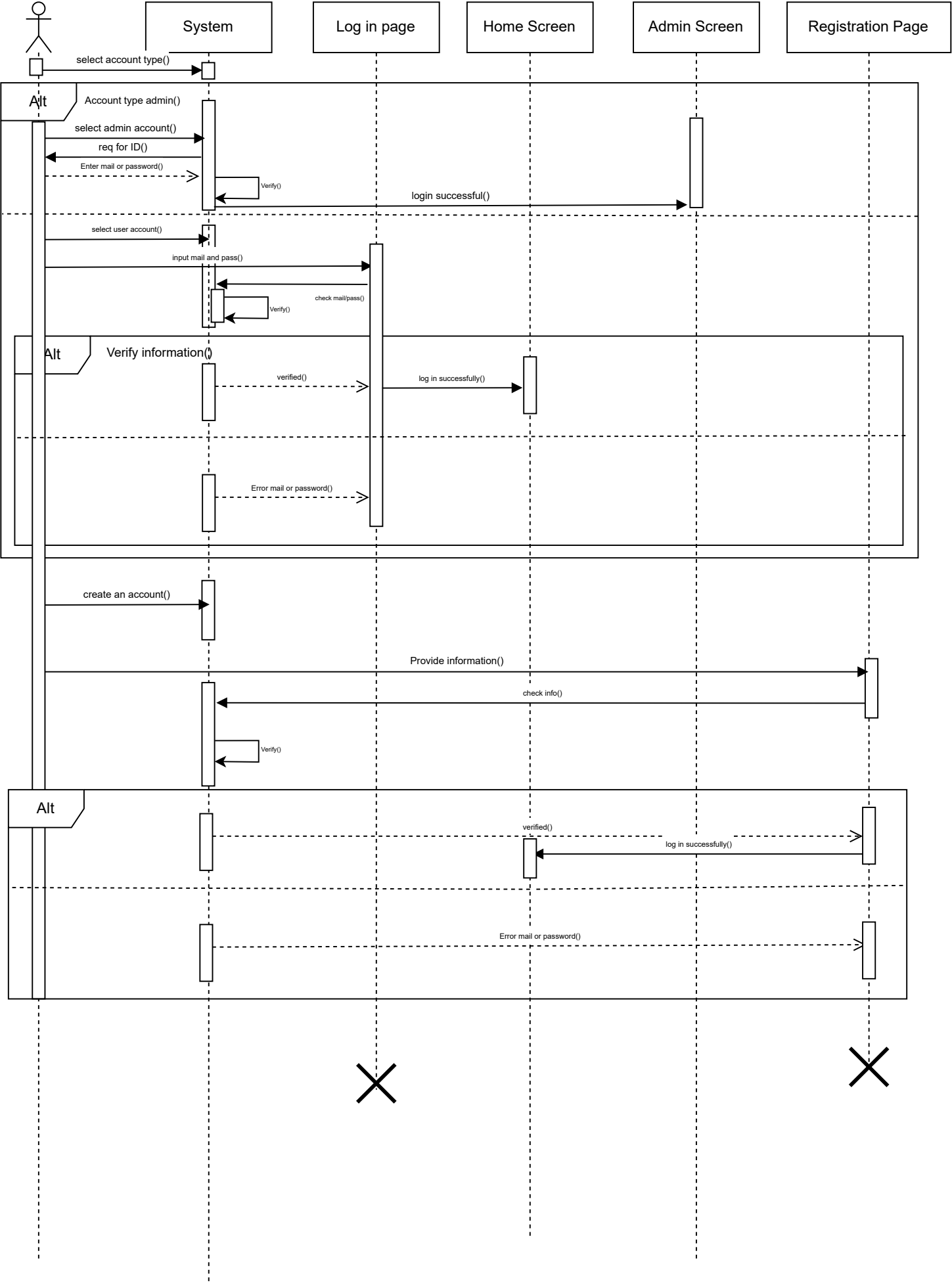
Activity Diagram for Donors



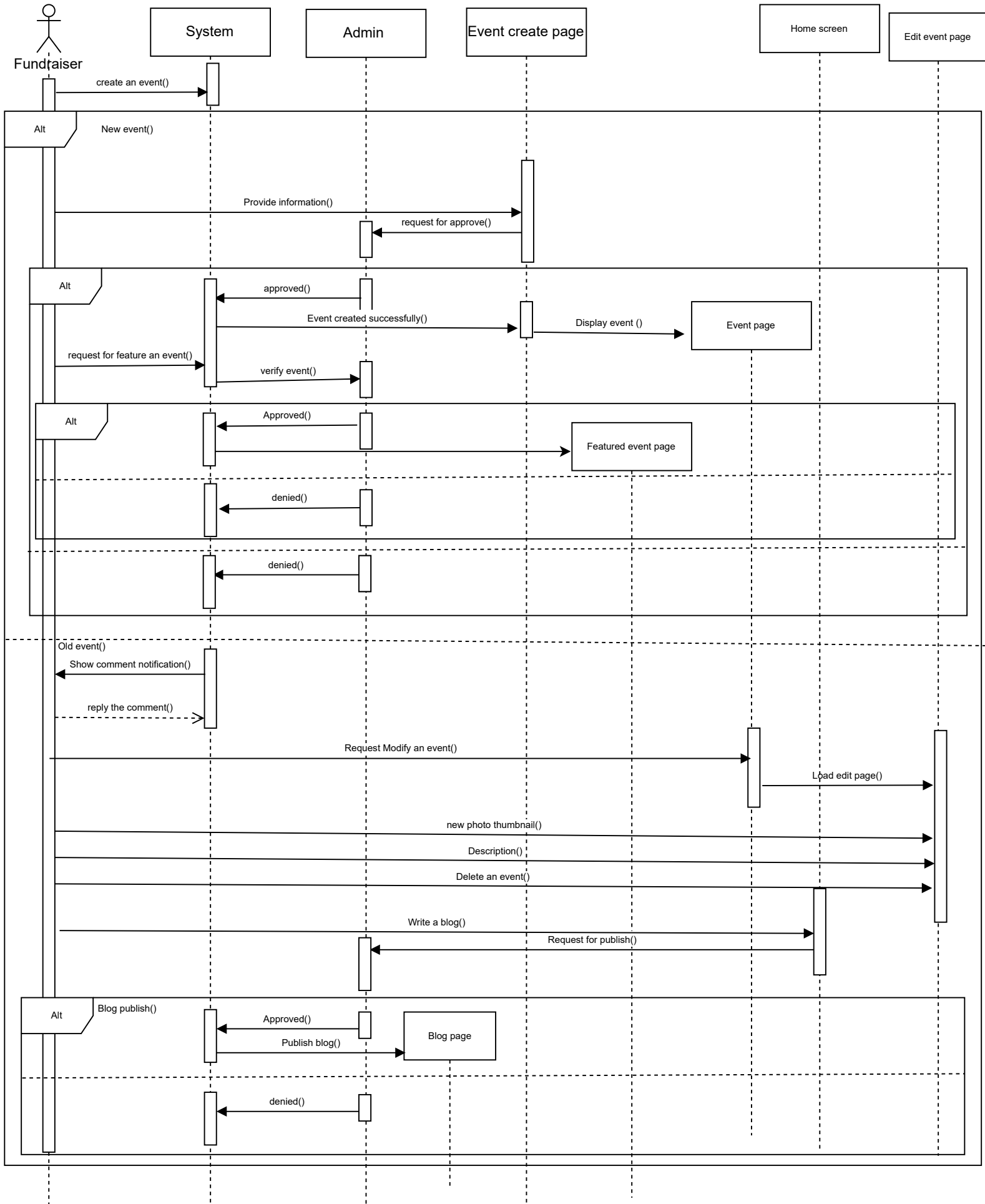
Sequence Diagram:

Sequence diagrams show the sequence of messages that pass between objects for a particular use-case over time. The diagrams below display how the objects send messages to each other and respond to them. The following diagrams are for Account handling, Fundraiser activity, User activity.

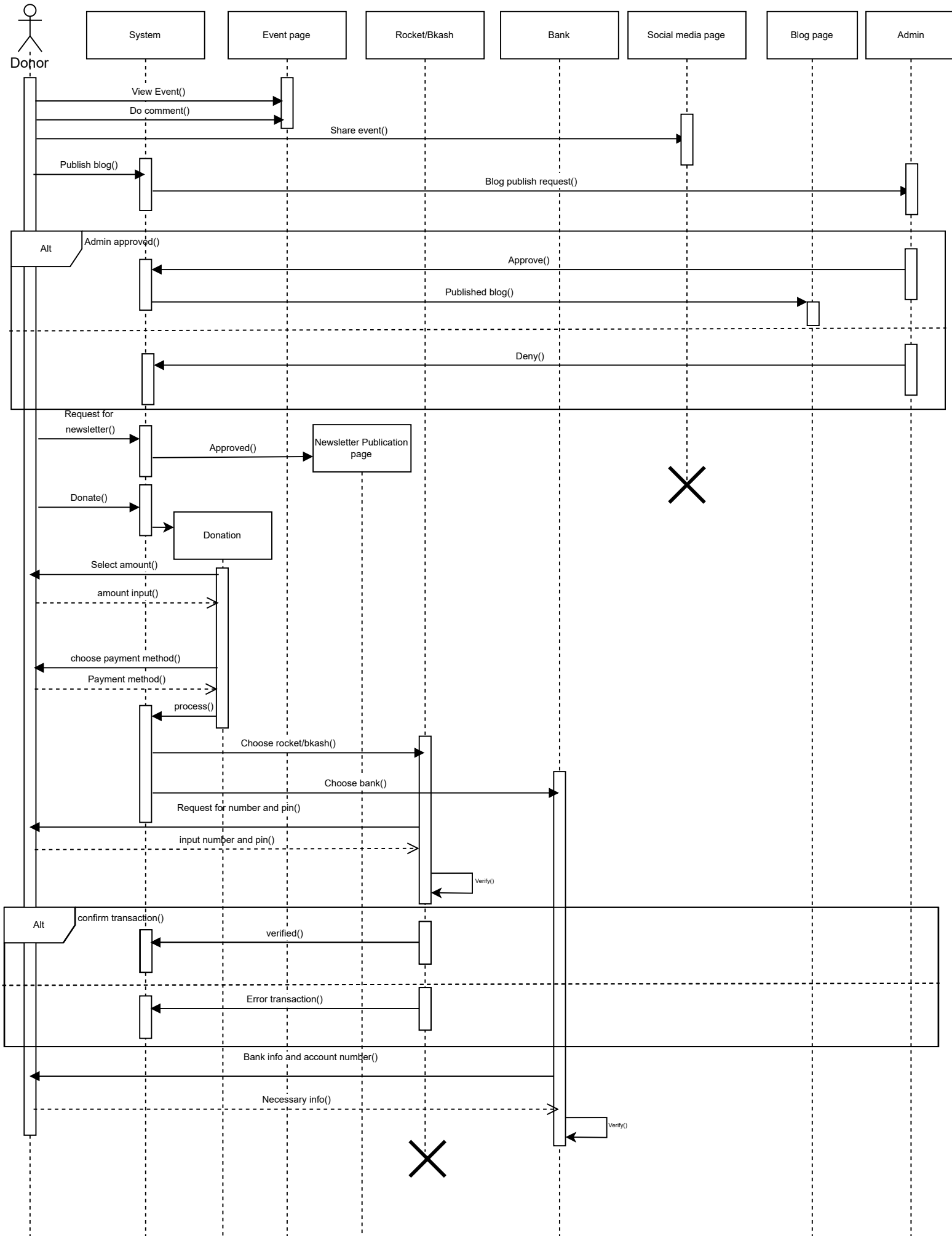
Sequence Diagram of Login system

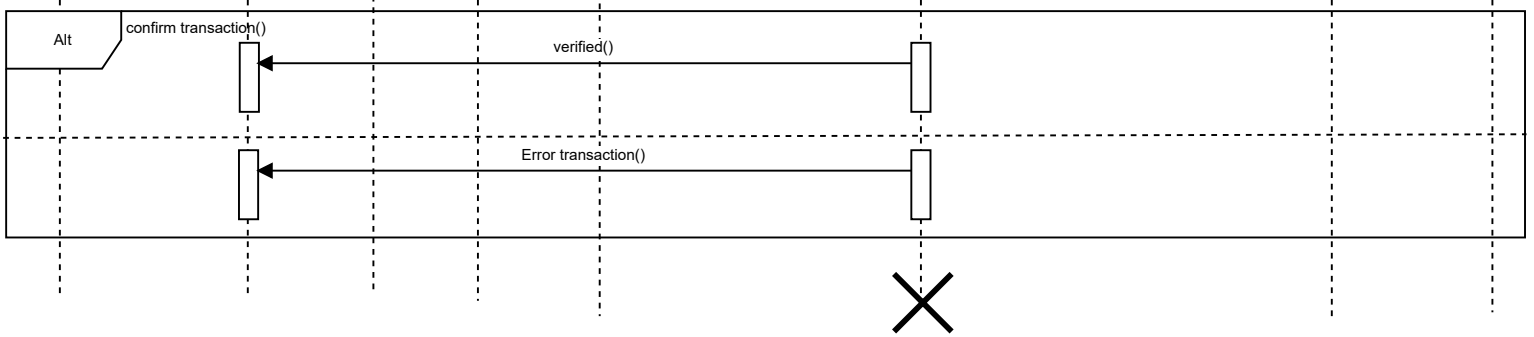


Sequence Diagram of Fundraiser's activity

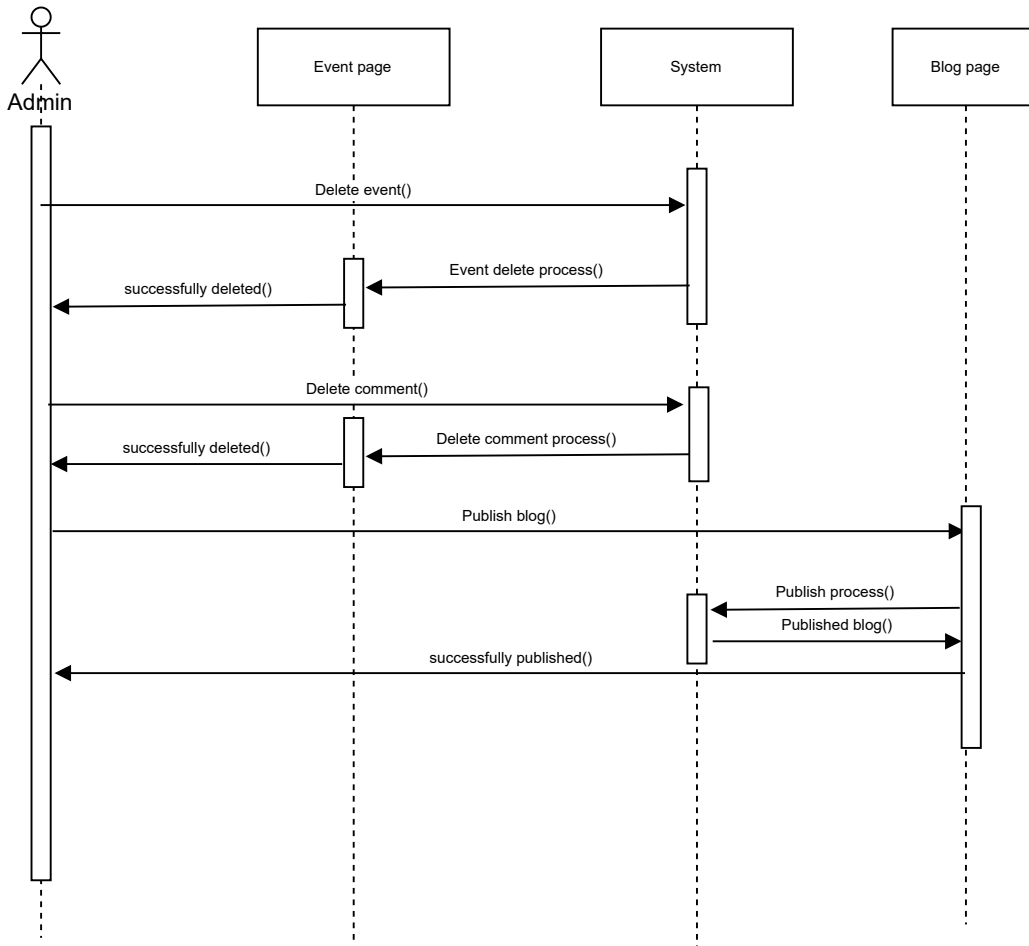


Sequence Diagram of Donor's activity





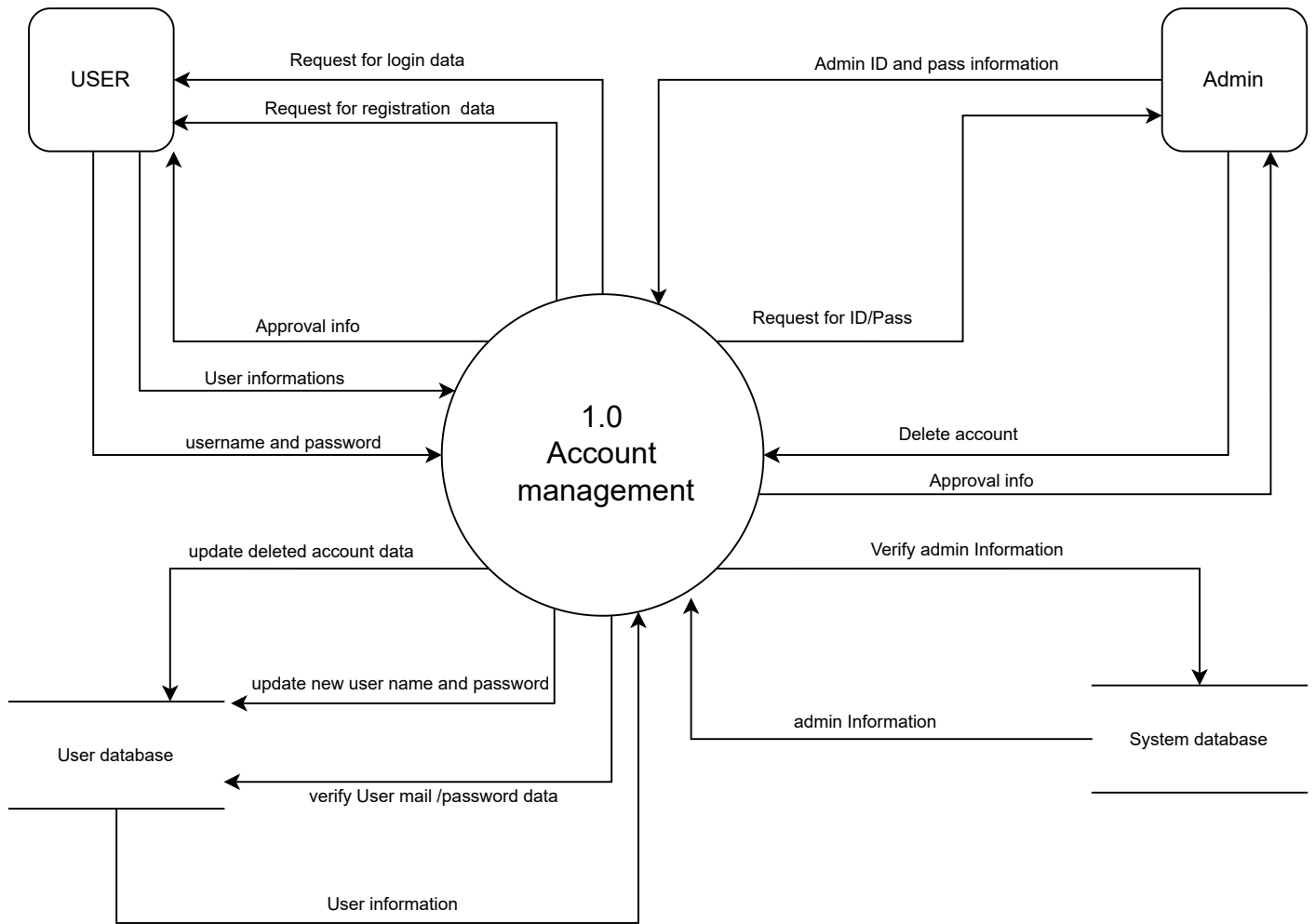
Sequence Diagram of Admin's activity



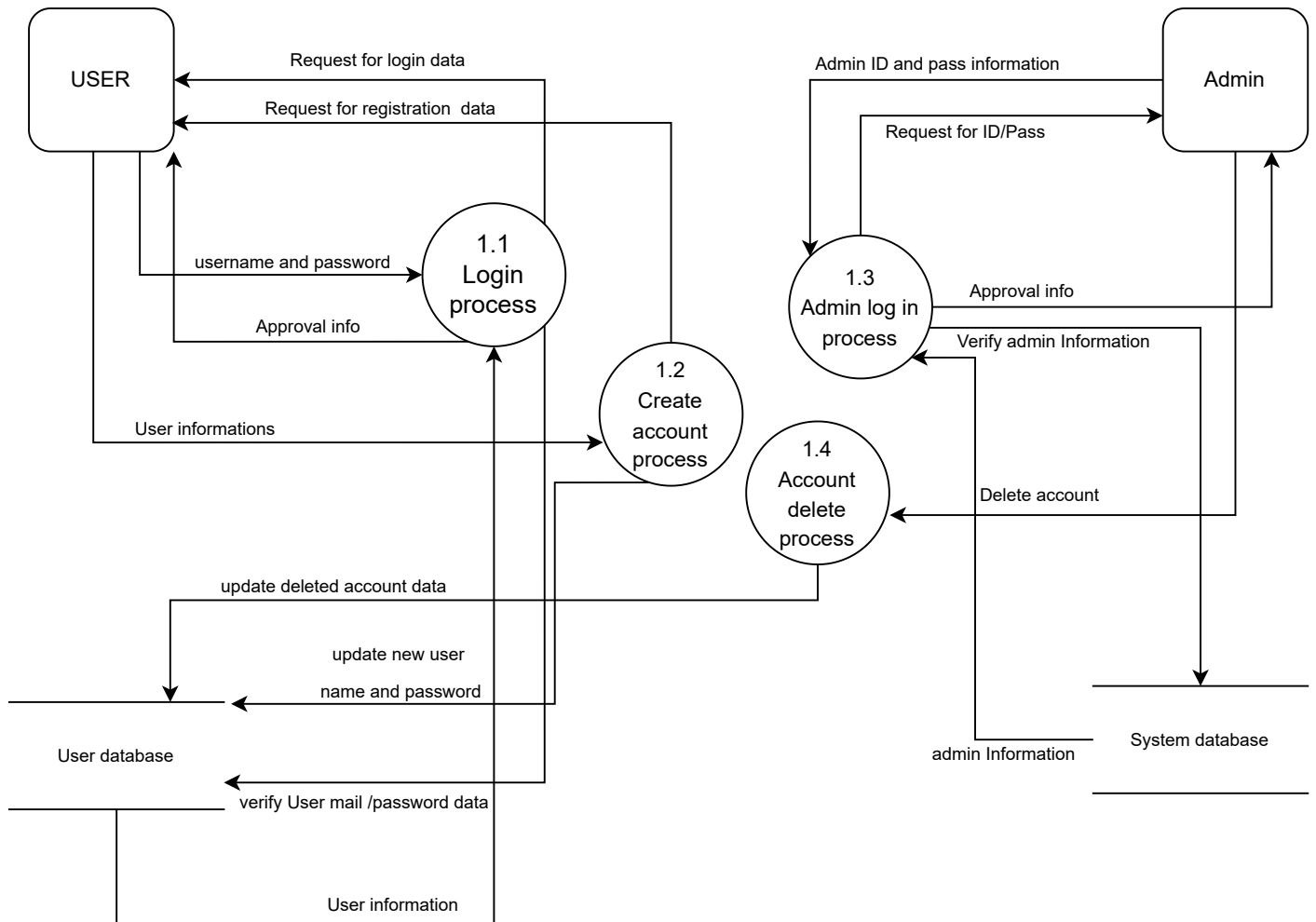
Data flow Diagram:

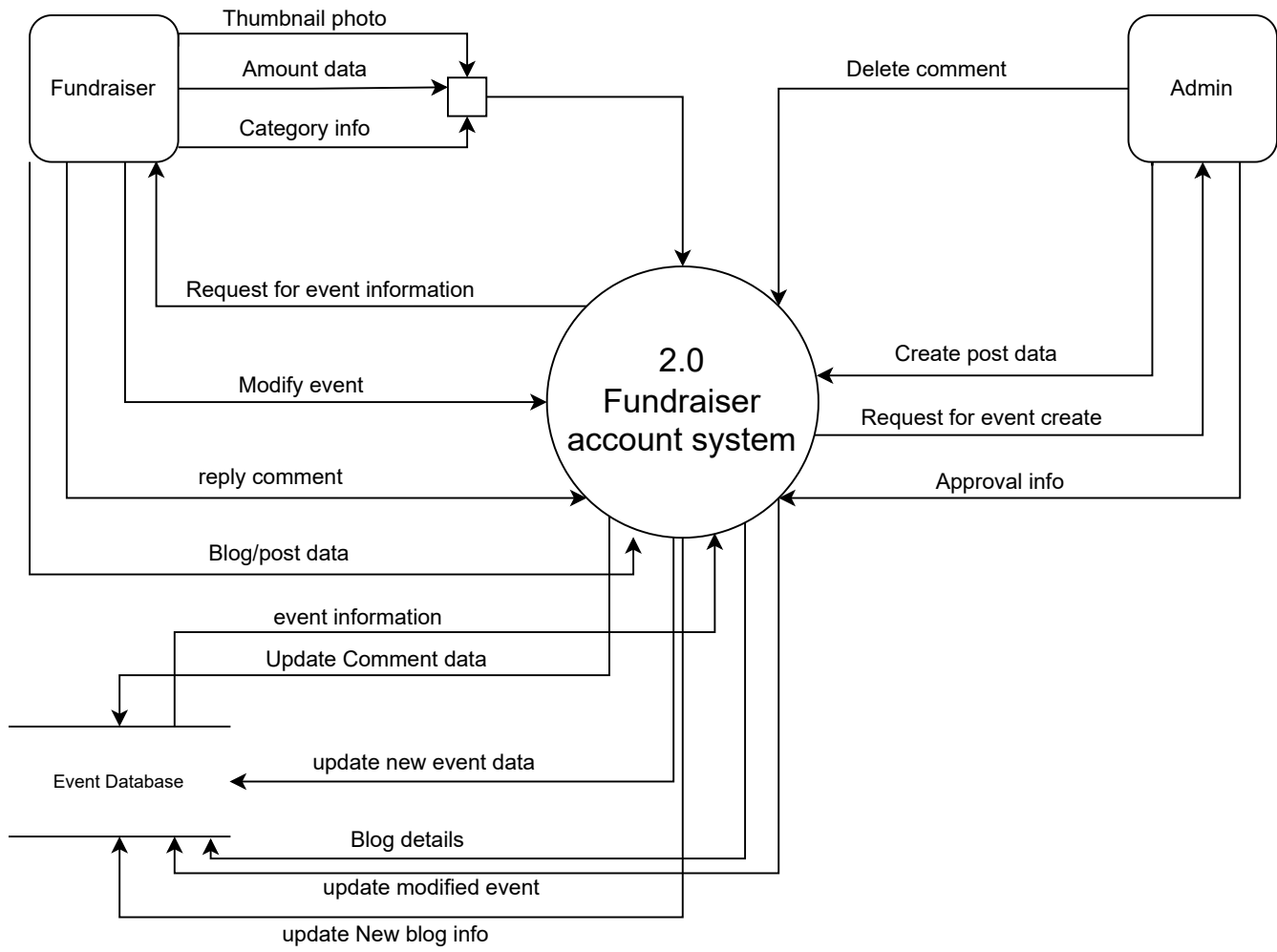
Data Flow Diagram is a graphical representation of data flow through a computer system and depicts how information flows through a system. Three diagrams below show a context diagram and level-1 diagram of important features of our system: how information of accounts is managed, how the donation process works, and how fundraising is processed.

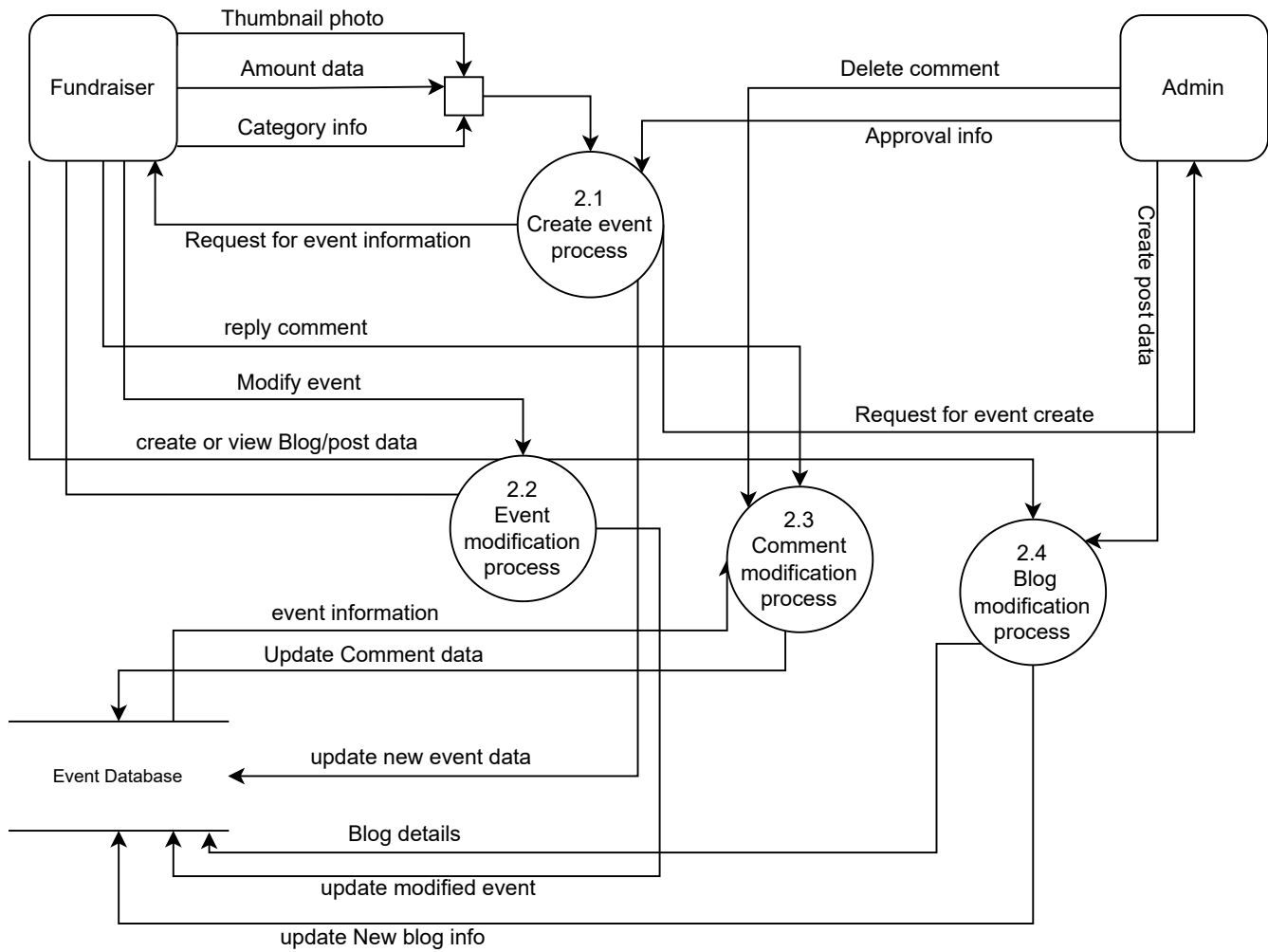
Account Management Data flow diagram

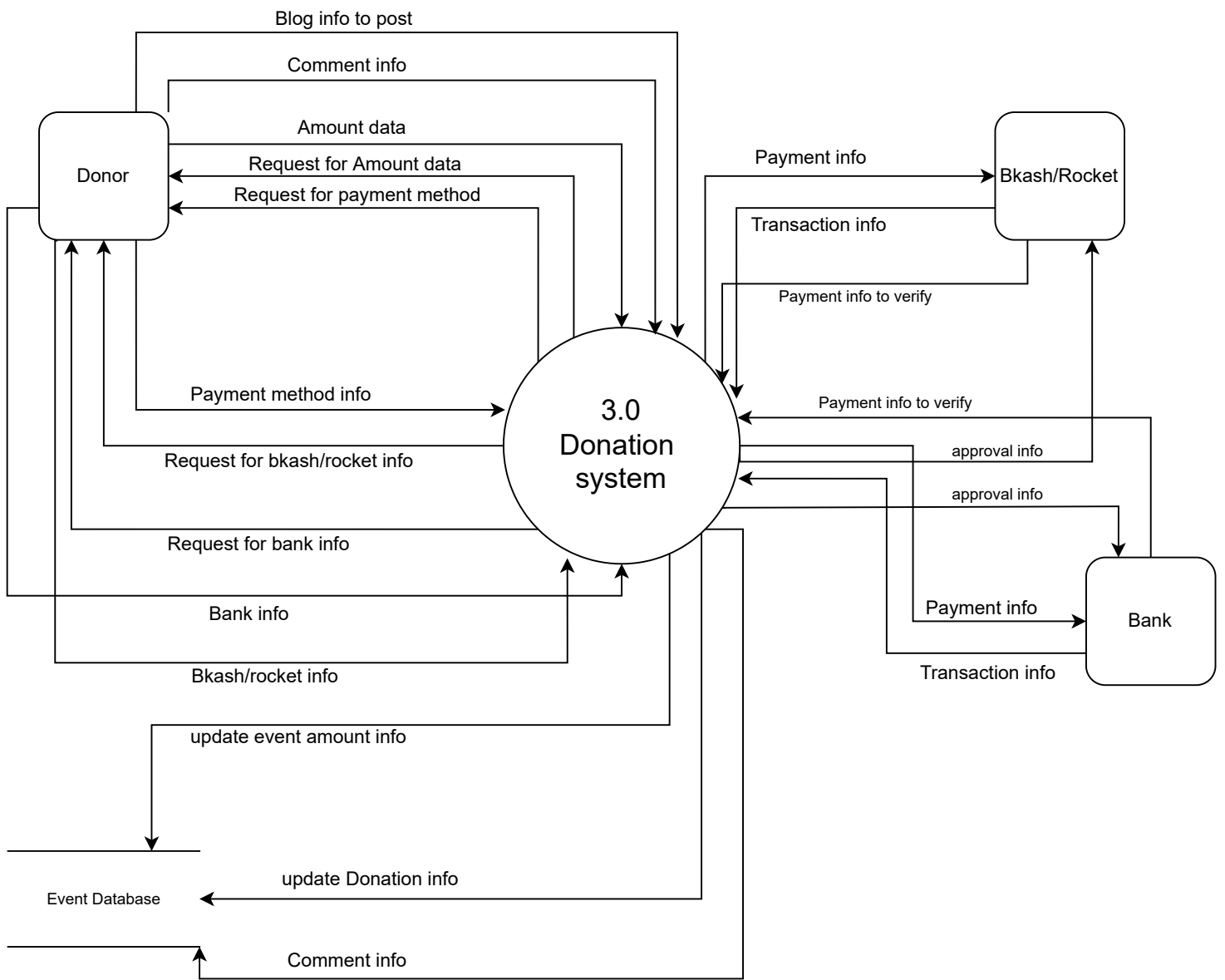


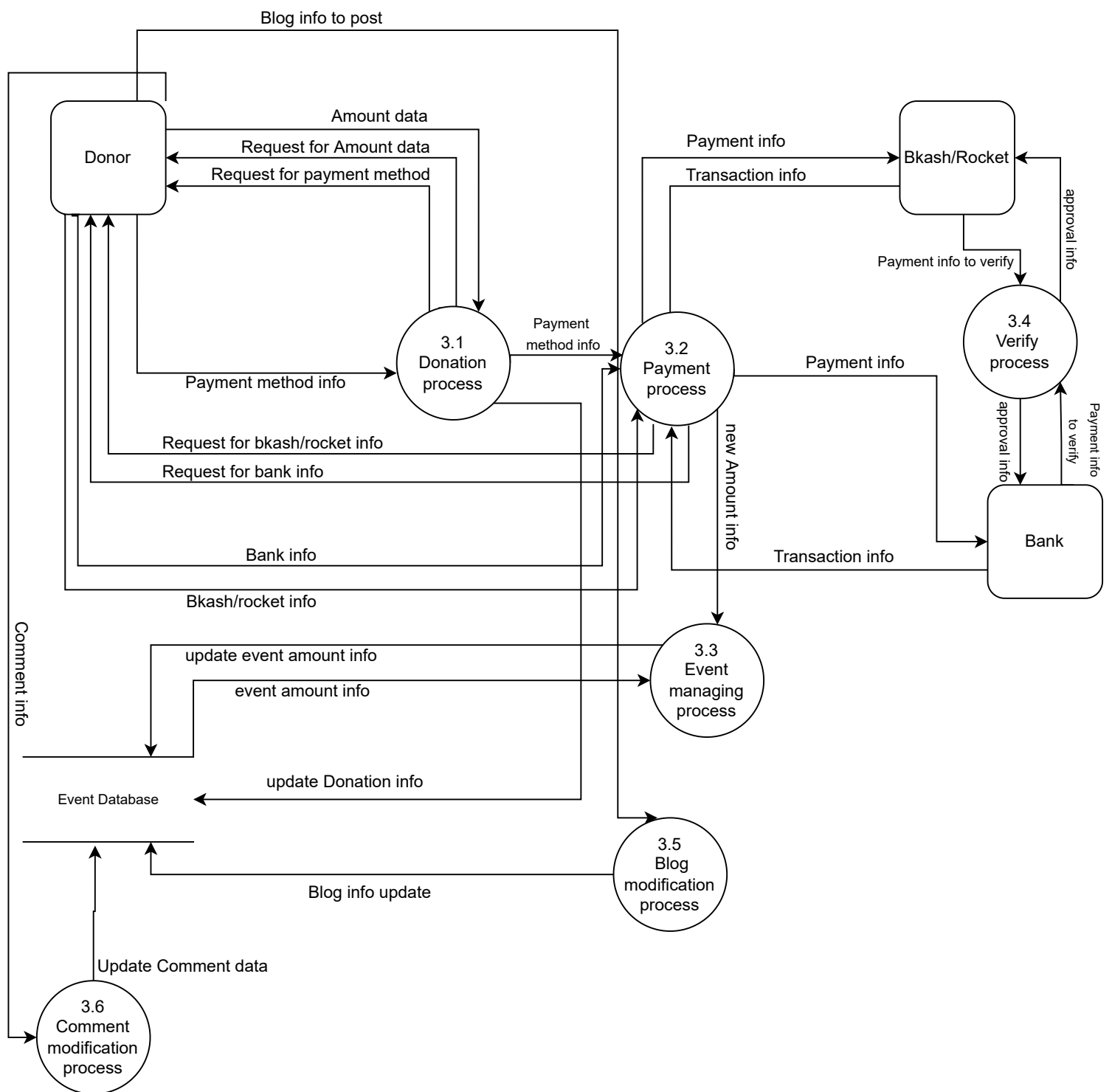
Account Management Data flow diagram







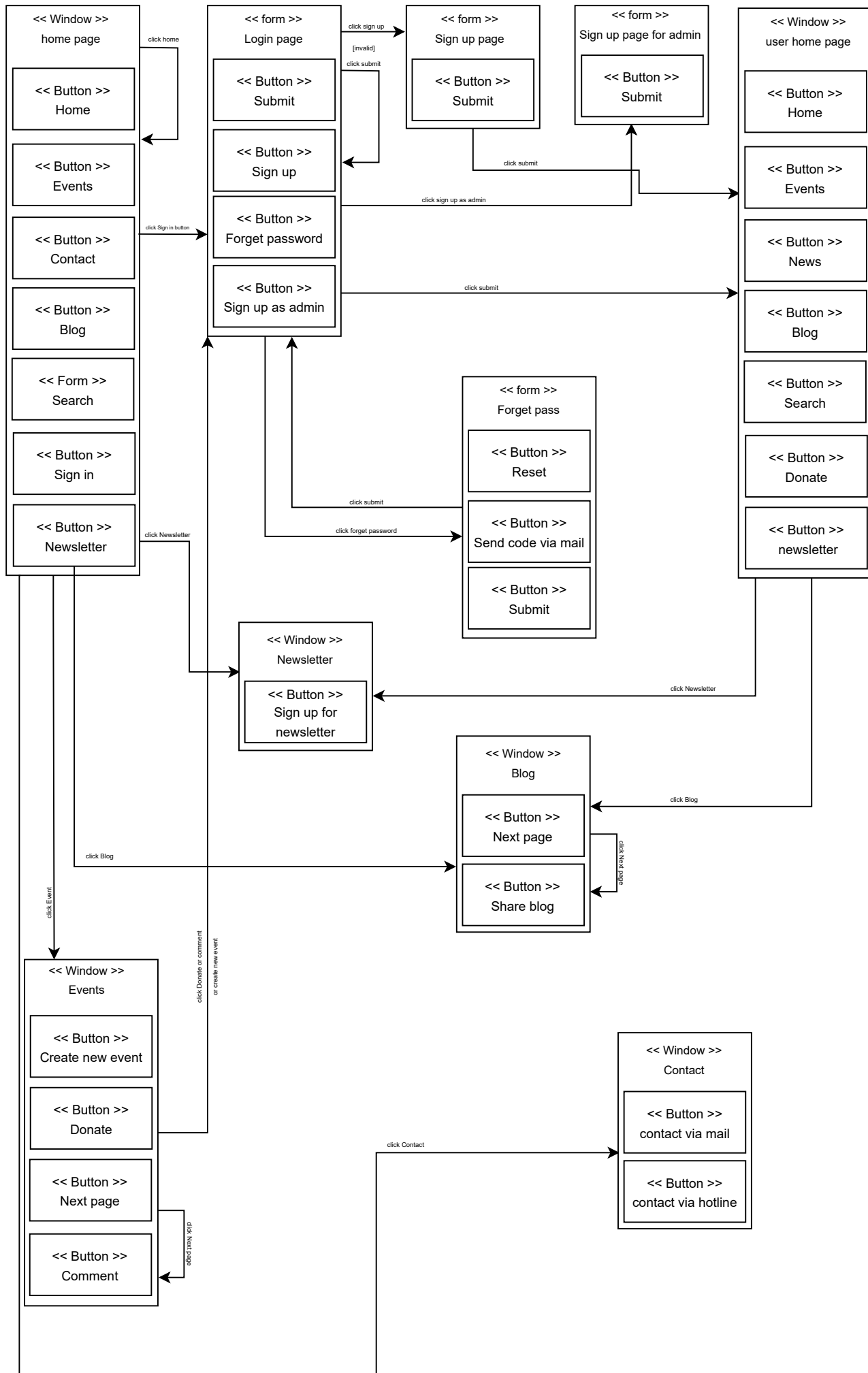




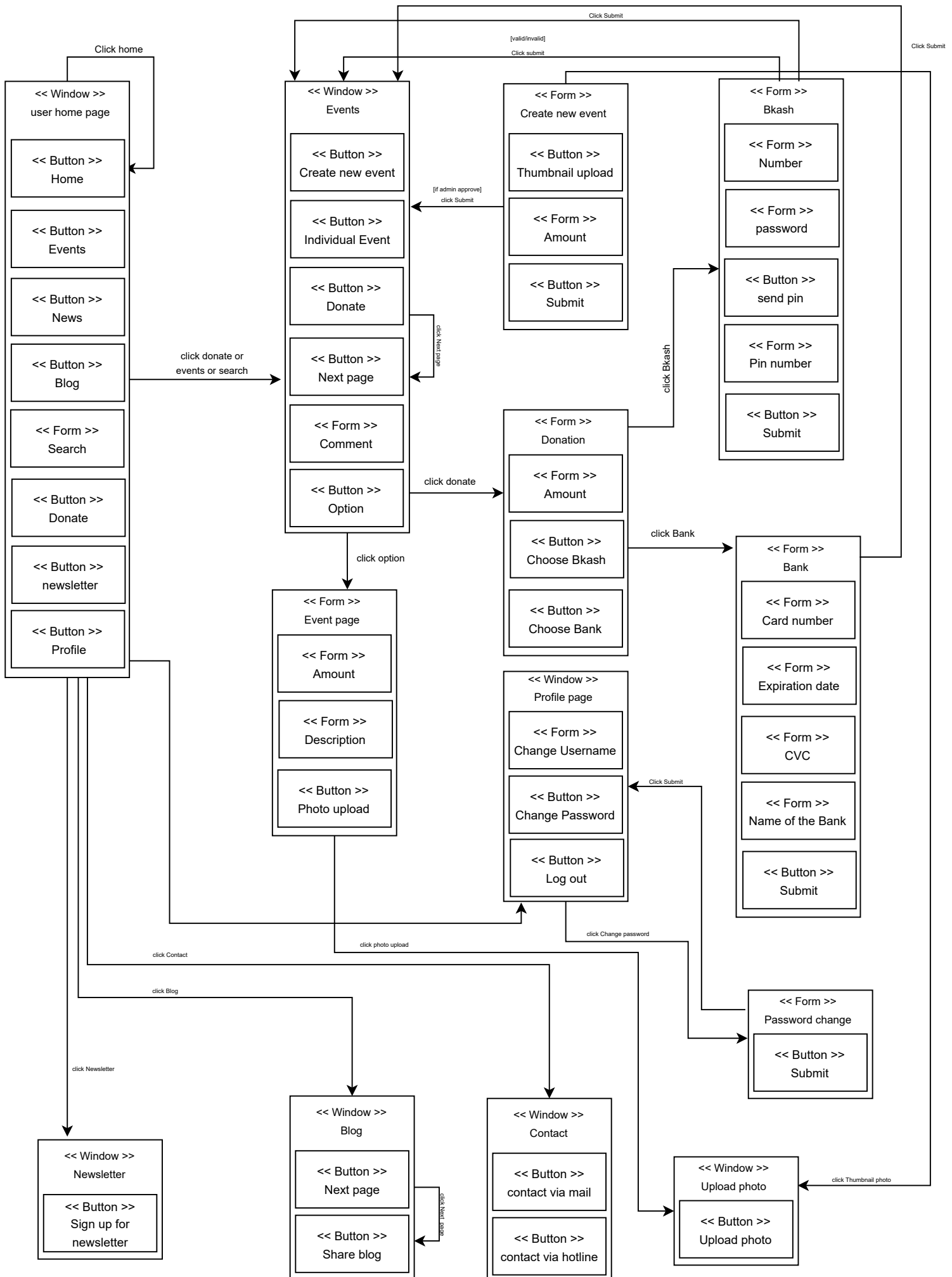
Windows Navigation Diagram:

A window navigation diagram describes the interface's overall layout and how the user should move across the interface. In the following illustrations, we see the user interface from many perspectives. All of the screens, forms, and reports that will be used by the system are seen here.

Windows Navigation Diagram for Login and Account manage



Windows Navigation Diagram for Fundraiser and Donors account



Windows Navigation Diagram for Admin Account

