🎁GiftHub🎁

Group: E3

1. Introduction

This document outlines the system requirements for a Peer-to-Peer Gifting Platform designed to streamline the gifting process for special occasions. The platform aims to address the logistical challenges associated with group gifting, prevent duplicate gifts, efficiently manage monetary contributions, and provide a seamless and enjoyable gifting experience for both Event Planners and guests.

2. Problem Description

Gifting for events like weddings and birthdays often involves significant coordination. Event Planners face difficulties in communicating their preferences to guests, managing contributions from multiple individuals, and dealing with the possibility of receiving unwanted duplicate gifts. Guests, on the other hand, may struggle to find suitable gifts, coordinate with others, and contribute conveniently. This platform provides a centralized digital solution to these problems by enabling Event Planners to create and manage wishlists, allowing guests to easily contribute financially or purchase gifts directly, and ensuring secure and transparent transaction processing.

3. Main Actors

3.1. Event Planner (EP)

- Creates and manages a personal account.

- Views event details, including the wishlist and shared media gallery.

- Creates an event (specifying details like date, time, location, and description).

- Sends invitations to guests via the platform or through shareable links.

- Creates wishlist.

- Adds items from a wishlist sourced from affiliate retail partners.

- Deletes items from wishlist.

- Receives gifts or cash contributions.

- Views real-time analytics on guest engagement (e.g., invitation responses, wishlist views, contributions).

- Manages a shared photo and video gallery by approving or removing media uploaded by guests.

3.2. Guest

- Creates and manages a personal account.

- Views event details, including the wishlist and shared media gallery.

- Receives and responds to event invitations (accept or decline).

- Can mark an item on the wishlist as "reserved" or "contributing to" to avoid duplicates (depending on the contribution type).

- Contributes financially towards group-funded items on the wishlist.

- Can purchase items directly from the wishlist, which are then marked as fulfilled.

- Uploads event-related photos and/or videos to the shared gallery.

3.3.   Affiliate Retail Partner

- Provides a comprehensive and up-to-date catalog of items through a well-defined API.

- Ensures the accuracy of item details, including price, availability, and descriptions.

- Handles the fulfillment and shipping of purchased gifts.

3.4.   Payment Processor (Stripe Connect)

- Securely processes all financial transactions, including contributions and direct cash gifts.

- Provides robust APIs for payment processing, refunds, and transaction history.

- Offers platform administrators and Event Planners easy access to manage refunds according to platform policies.

3.5.   System Administrator

- Establishes and manages relationships with affiliate retail partners, including negotiating commission structures and managing integration processes.

- Manages and solves user-related issues

- Monitors platform performance and ensures system stability.

- Manages payments

4. Usage Scenarios

The following scenarios describe how different users will interact with the application

4.1. User Creates an Account

4.1.1. Objective

The user gains access to the platform by creating a personal account using their email address and password.

4.1.2. Steps

1. The user navigates to the platform's registration page.

2. The user is presented with a registration form, which requires:

   a. Username;

   b. Email address;

   c. Password;

   d. **(User Optional)** a profile picture.

3. The user fills out the registration form with the required information.

4. The user submits the registration form.

5. The platform sends a confirmation email to the provided email address.

6. The user clicks on the confirmation link in the email to verify their account.

7. The user's account is created and added to the platform's database.

4.1.3. Extensions

- **Invalid Email:** If the entered email address has an invalid format, the user receives an immediate error message and is prompted to enter a valid email address.

- **Email Already Registered:** If the provided email address already exists in the platform's database, the user is informed and redirected to the login page.

- **Password Requirements Not Met:** If the chosen password does not meet the platform's complexity requirements (e.g., minimum length, inclusion of special characters), the user is notified and prompted to create a stronger password

- **The User Doesn't Upload a Profile Picture:** The account has a generic, default profile picture (ex: Facebook).

4.2. User Logs In

4.2.1. Objective

The user logs in to access their account and the platform's features.

4.2.2. Steps

1. The user navigates to the platform's login page.

2. The user is presented with a login form with fields for email address and password.

3. The user enters their registered email address and password.

4. **(User Optional)** The user (un)selects the *"Remember me"* check-box.

5. The user submits the login form.

6. The platform authenticates the user's credentials.

7. The user is successfully logged in and redirected to their dashboard or the previously accessed page.

4.2.3. Extensions

- **Email Not Found:** If the entered email address does not exist in the platform's database, the user is notified and prompted to sign up or recover their account.

- **Incorrect Password:** If the email address is correct but the entered password is incorrect, the user receives an error message and is given a limited number of attempts before being locked out for security reasons. A *"Forgot Password"* option should be available.

- **Account Not Verified:** If the user's account has not been verified via email confirmation, they are prompted to verify their email address.

- **Forgot Password:**
    - The user clicks on the *"Forgot Password"* button.
    - The user is redirected to a *"Password Reset"* page.
    - The user enters their registered email address.
    - The platform sends a password reset link to the provided email address.
    - The user clicks on the reset link in the email.
    - The user is directed to a page where they can enter a new password and confirm it.
    - The user submits the new password.
    - The platform updates the user's password in the database.
    - The user is notified that their password has been successfully reset and is prompted to log in.

4.3.   User Manages Account

4.3.1.   Objective

The user can view their account details, edit their profile information and **(Development Optional)** deactivate the account.

4.3.2.   Steps

1. The user navigates to their profile page.

2. The user is presented with the account details, including username, email address and profile picture.

3. On this page, the user can:

    a. Edit profile information:

        ■ The user selects the *"Edit Profile"* option.

        ■ The user can now edit the following fields:

            ● Username;

            ● Email address;

            ● Password;

            ● Profile picture.

        ■ The user modifies the fields as they wish.

        ■ The user saves the changes.

        ■ A confirmation message is displayed.

    b. **(Development Optional)** Deactivate account:

        ■ The user selects the *"Deactivate Account"* option;

        ■ The user is presented with a confirmation prompt that warns them about the consequences of deactivation.

        ■ The user confirms or cancels the deactivation.

        ■ If the user confirms:

            ● The account and all associated data are deleted from the application's database.

            ● A confirmation message is displayed.

            ● The user is logged out and redirected to the Sign Up/Log In page.

        ■ If the user cancels, they are redirected to their profile page.

4.3.3. Extensions

1. **Invalid Email:** If the entered email address has an invalid format, the user receives an immediate error message and is prompted to enter a valid email address.
2. **Email Already Registered:** If the provided email address already exists in the platform's database, the user is informed and redirected to the login page.
3. **Password Requirements Not Met:** If the chosen password does not meet the platform's complexity requirements (e.g., minimum length, inclusion of special characters), the user is notified and prompted to create a stronger password

4.4. An User Reports an Event

4.4.1. Objective

An User reports an event due to differing reasons, such as inappropriate content, fraudulent activity, etc.

4.4.2. Steps

1. The user accesses the Event Page.

2. The user selects the *"Report Event"* option.

3. The user is prompted with a report form which requires them to specify the reason for reporting.

4. The user selects a report reason from a list of predefined categories such as:

   ○ Fraud or Scam;

   ○ Spam or Duplicate Event;

   ○ Inappropriate Content;

   ○ Other: (With a Text Box for Input).

5. The user confirms submission.

6. A confirmation message appears: "Thank you for your report! Our team will review it shortly.";

7. The review is logged and the report notifies the platform's administrators for review;

8. The *"Report Event"* button from before changes to *"Event Reported"*, preventing the user from submitting multiple reports.

4.4.3. Extensions

- **User Submits a Report Without Selecting a Reason:** The system prompts them to select at least one reason before doing so.

4.5. An User Reports another User

4.5.1. Objective

An User reports another user for violating platform policies or community guidelines.

4.5.2. Steps

1. The user navigates to the profile page of the person they want to report;
2. The user clicks the *"Report User"* button in the options menu;
3. User selects a report reason from a list of predefined categories such as:
    - Harassment;
    - Impersonation;
    - Spam;
    - Other: (With a Text Box for Input).
4. The user confirms submission.
5. A confirmation message appears: "Thank you for your report! Our team will review it shortly.";

6. The review is logged and the report notifies the platform's administrators for review;

7. The *"Report User"* button from before changes to *"User Reported"*, preventing the user from submitting multiple reports.

4.5.3. Extensions

- **User Submits a Report Without Selecting a Reason:** The system prompts them to select at least one reason before doing so.

4.6. An Event Planner Creates an Event

4.6.1. Objective

The Event Planner (EP) creates an event on the platform and specifies relevant details.

4.6.2. Steps

1. The EP navigates to the *"Create Event"* section.

2. The EP is presented with a form containing fields for:

   ○ Event Title

   ○ Event Date and Time

   ○ Event Location (with options for physical address or online link)

   ○ **(User Optional)** Event Description

3. The EP is presented with toggles or checkboxes to enable or disable:

   ○ Wishlist Feature

   ○ Shared Media Gallery Feature

4. The EP reviews the entered information.

5. The EP clicks the *"Create Event"* button to finalize.

6. The event is created and saved in the platform's database. The EP is redirected to the event management page.

4.6.3. Extensions

- **Missing Required Fields:** If the EP attempts to publish the event without filling in all required fields, an error message is displayed, highlighting the missing fields.

- **Invalid Date/Time Format:** If the entered date or time is in an incorrect format, the EP is prompted to correct it.

4.7. An Event Planner Edits an Event

4.7.1. Objective

The EP can modify the details of an event they have created.

4.7.2. Steps

1. The EP navigates to the page for the desired event.

2. The EP selects the option to *"Edit Event Details"*.

3. The EP is presented with a form, pre-filled with the existing event data, allowing them to modify:

   - The event title;

   - The event date and time;

   - The event location;

   - The event description.

4. The EP confirms the changes.

5. The event details are updated in the platform's database.

6. A notification is sent to guests who have accepted the invitation, informing them of the changes.

4.7.3. Extensions

- **Missing Required Fields:** If the EP attempts to publish the event without filling in all required fields (e.g., Event Title, Date, Location), an error message is displayed, highlighting the missing fields.

- **Invalid Date/Time Format:** If the entered date or time is in an incorrect format, the EP is prompted to correct it.

4.8. The Event Planner Deletes an Event

4.8.1. Objective

The EP deletes an event they previously created, removing it from the platform and notifying confirmed guests.

4.8.2. Steps

1. The EP selects an event they want to delete;

2. The EP clicks the *"Delete Event"* button;

3. A confirmation appears, asking the EP to confirm the deletion;

4. The EP confirms the deletion;

5. The event is removed from the platform;

6. All guests who had accepted the event invitation receive a notification informing them that the event is no longer taking place.

7. Guests who contributed financially to the event receive an additional notification confirming their refund is being processed.

4.9. The Event Planner Creates a Wishlist

4.9.1. Objective

The EP creates a wishlist for an upcoming event to collect contributions for desired gifts.

4.9.2.   Steps

1. The EP navigates to the event management page for the desired event.

2. The EP selects the *"Wishlist"* section.

3. The EP clicks a button such as *"Add Item to Wishlist"*.

4. The platform presents the EP with options to:

   a. Browse items from integrated affiliate retail partners (potentially through categories or search).

   b. Add a custom gift manually.

5. The platform presents the EP with options to browse items from integrated affiliate retail partners (potentially through categories or search).

6. The EP selects desired items from the catalog.

7. **(Development Optional)** For each item, the EP may be able to specify:

   a. Quantity desired

   b. Priority

   c. custom notes for the item

8. The EP saves the added items to the wishlist.

9. The EP selects their preferred notification settings for wishlist contributions:
   - Receive a notification for every contribution made to any gift;
   - Receive a notification only when a gift is fully funded;
   - No notifications.

10. The wishlist is now visible to invited guests.

4.9.3.   Extensions

- **Invalid Quantity:** If the EP enters an invalid quantity (e.g., negative number), an error message is shown.

4.10. The Event Planner Sends Invitations Through the Platform

4.10.1. Objective

The EP invites existing platform users to their event.

4.10.2. Steps

1. The EP navigates to the event management page for the desired event.

2. The EP selects the *"Invite Guests"* option.

3. The EP is presented with a search bar or a list of their contacts (if integrated).

4. The EP enters the username or email address of the guest they wish to invite.

5. The platform searches for matching users in the app's database.

6. If the guest is already invited the EP will see a *"Pending Invite"* message, and won't be able to invite them until the current invite expires.

7. The EP selects the desired user from the search results.

8. The EP confirms the invitation.

9. The invited guest receives an in-app notification and potentially an email notification about the invitation.

4.10.3. Extensions

- **User Not Found:** If the entered username or email address does not match any existing user, the EP is notified that no such user exists.

- **Guest Already Invited:** If the EP tries to invite An User who has already been invited to the event, a notification informs them of this.

- **Predefined Invitation Limit Reached:** the EP is notified if they exceed it not being able to send any more invitations.

4.11. The Event Planner Sends Invitations Through a Link

4.11.1. Objective

The EP invites guests by sharing a unique event invitation link.

4.11.2. Steps

1. The EP navigates to the event management page for the desired event.

2. The EP selects the *"Invite Guests"* option.

3. The EP chooses the option to *"Generate Invitation Link."*

4. The platform generates a unique URL for the event invitation.

5. The EP is presented with the generated link and options to copy or share it directly through other channels (e.g., social media, messaging apps).

6. The EP copies the link and shares it with the desired guests.

7. When a guest clicks on the link, they are directed to the platform.

8. If the guest is not logged in, they are prompted to log in or create an account.

9. If the guest is already invited to the event a proper message is displayed.

10. Upon successful login or registration, the guest is presented with the event details and asked to accept or decline the invitation.

4.11.3. Extensions

- **(User Optional) Link Expiration:** The platform allows the EP to set an expiration date or limit the number of uses for the invitation link.

4.12. Event Planner Manages Invitation List

4.12.1. Objective

The EP can view and manage the list of invited guests for the event.

4.12.2. Steps

1. The EP navigates to the page for the desired event.
2. The EP selects the *"Invitation List"* section.
3. The platform displays a list of invited guests, showing details such as the guest's username and the invitation status: Accepted, Declined or Pending.
4. If the EP wants to remove a guest:
   a. The EP selects a guest from the list.
   b. The EP chooses the option to remove the guest.
   c. The platform displays a confirmation prompt, asking the EP to confirm the removal.
   d. The EP confirms the removal.
   e. The guest is removed from the event's invitation list.
   f. **(User Optional)** A notification is sent to the removed guest, informing them they've been removed from the event.

4.12.3. Extensions

- **(Development Optional) Bulk Removal:** The platform may allow the EP to optionally specify a reason for removing a guest.

(Development Optional)

4.13. The Event Planner Views Event Analytics

4.13.1. Objective

The EP can view analytics related to their event.

4.13.2. Steps

1. The EP navigates to the page for the desired events.

2. The EP selects an option to *"View Analytics".*

3. The EP is presented with a report displaying:

    a. Invitation statistics, including:

        ■ Number of invitations sent;

        ■ Number of accepted invitations;

        ■ Number of declined invitations;

        ■ Number of pending invitations.

    b. Engagement with wishlist:

        ■ Contributions received;

        ■ Total amount contributed.

    c. Contribution breakdown (amount contributed with direct cash gifts vs. wishlist contributions.)

4.14. The Event Planner Manages the Gallery

4.14.1. Objective

The EP can manage the media uploaded by guests to the event gallery.

4.14.2. Steps

1. The EP navigates to the event management page.

2. The EP selects the *"Media Gallery"* section.

3. The EP can view all uploaded photos and videos.

4. The EP has options to:

   ○ Approve or reject uploaded media (if moderation is enabled).

   ○ Delete inappropriate or unwanted media.

4.14.3. Extensions

● **No Media Uploaded**: If no guests have uploaded media, the gallery section might display a message indicating this.

● (Development Optional) **Bulk Actions**: The EP might have the option to perform bulk actions like selecting multiple media files for approval or deletion.

4.15. A Guest Responds to an Invite via the Platform

4.15.1. Objective

A guest responds to an event invitation received within the platform.

4.15.2. Steps

1. The guest receives an in-app notification indicating a new event invitation.

2. The guest clicks on the notification to view the event details.

3. The guest is presented with options to *"Accept"* or *"Decline"* the invitation.

4. If the guest accepts:

   ○ A confirmation message is displayed to the guest.

   ○ The event is added to the guest's list of upcoming events.

- The EP receives a notification about the guest's acceptance.

5. If the guest declines:

   - A confirmation message is displayed to the guest.

   - The event is marked as declined in the guest's event list.

   - The EP receives a notification about the guest's decline.

4.15.3.   Extensions

- **Invitation Expired:** If the invitation has an expiration date and the guest tries to respond after it has passed, they are informed that the invitation is no longer valid.

4.16.   A Guest Responds to an Invite via Link

4.16.1.   Objective

A guest responds to an event invitation received through a shareable link (e.g., sent via email, messaging app).

4.16.2.   Steps

1. The guest receives an invitation link through an external communication channel (e.g., email, social media, messaging app) shared by the Event Planner.

2. The guest clicks on the invitation link.

3. The guest is redirected to the platform's event invitation landing page.

4. If the guest is not logged in:

   a. The guest is prompted to either log in to an existing account or create a new account.

   b. If the guest chooses to log in: They follow the steps outlined in *"User Logs In"*. Upon successful login, they proceed to step 5.

c. If the guest chooses to create an account: They follow the steps outlined in User Creates an Account. Upon successful account creation and verification, they proceed to step 5.

5. If the guest is already logged in (or has just logged in/created an account):

a. The guest is presented with the details of the event (title, date, time, location, description).

b. The guest is prompted to either *"Accept"* or *"Decline"* the invitation.

c. If the guest accepts:

d. A confirmation message is displayed to the guest.

e. The event is added to the guest's list of upcoming events.

f. The EP receives a notification about the guest's acceptance.

g. If the guest declines:

i. A confirmation message is displayed to the guest.

ii. The event is marked as declined in the guest's event list.

iii. The EP receives a notification about the guest's decline.

4.16.3. Extensions

● **Invalid or Expired Link:** If the invitation link is invalid or has expired, the guest is informed that the link is no longer valid and may be provided with instructions on how to contact the Event Planner.

● **Already Responded:** If the guest has already responded to the invitation (either accepted or declined) through the link or otherwise, they might be shown their previous response and not be prompted to respond again.

4.17. A Guest Leaves an Event

4.17.1. Objective

A guest can leave an event anytime, removing himself from the guest list.

4.17.2. Steps

1. The guest accesses the Event Page.

2. The guest selects the *"Leave event"* option.

3. The guest is prompted with a text box which requires them to specify the reason for leaving.

4. The guest confirms submission.

5. A confirmation message appears: *"You left the <Event name> event."*.

4.18. A Guest Views an Event's Wishlist

4.18.1. Objective

An invited guest views the event's wishlist.

4.18.2. Steps

1. The guest logs into the platform.

2. The guest navigates to their list of events and selects the event they are invited to.

3. The guest clicks on the *"Wishlist"* tab or section.

4. The wishlist is displayed, showing a list of items with details such as:

    ○ Item name and image

    ○ Description (if available)

    ○ Price (if applicable)

- ○ Contribution status (e.g., fully funded, partially funded with remaining amount, purchased)

- ○ Number of contributors (for group-funded items)

5. (Development Optional) The guest can filter the wishlist by category or price range using provided controls.

6. The guest can click on an individual item to view more detailed information, including a link to purchase it from the affiliate retailer (if applicable).

4.19. A Guest Contributes to a Gift on the Wishlist

4.19.1. Objective

A guest contributes financially towards a gift on the wishlist.

4.19.2. Steps

1. The guest navigates to the event's wishlist and selects a gift they want to contribute to.

2. The guest clicks a button such as *"Contribute"*.

3. The guest is presented with a field to enter the desired contribution amount.

4. The guest selects their preferred payment method from the available options (e.g., credit card, bank transfer).

5. The guest enters their payment details.

6. The guest confirms the contribution.

7. The payment is securely processed via Stripe Connect.

8. Upon successful payment, the guest receives a confirmation message and a receipt.

9. The wishlist is updated to reflect the contribution, showing the updated remaining balance for the gift.

4.19.3. Extensions

- **Contribution Limit Reached:** If the gift has already been fully funded, the guest may be informed that no further contributions are needed.

- **Invalid Contribution Amount:** If the guest enters an invalid contribution amount (e.g., negative, zero, exceeding the remaining balance), an error message is displayed.

- **Payment Failure:** If the payment fails for any reason (e.g., insufficient funds, incorrect details), the guest is informed and prompted to try again with a different payment method or check their details.

4.20. A Guest Sends Cash Directly

4.20.1. Objective

A guest sends a direct cash gift to the event planner.

4.20.2. Steps

1. The guest navigates to the event page for the specific event.

2. The guest selects an option like *"Send a Cash Gift"* or *"Contribute Cash"*.

3. The guest is prompted to enter the amount they wish to send.

4. The guest selects their preferred payment method.

5. The guest enters their payment details.

6. The guest confirms the transaction.

7. The payment is securely processed via Stripe Connect.

8. Upon successful payment, the guest receives a confirmation message.

4.20.3. Extensions

- **Transaction Declined:** If the transaction is declined by the payment processor, the guest is informed and given the option to try again or use a different payment method.

- **Invalid Amount:** If the guest enters an invalid cash gift amount (e.g., negative, zero), an error message is displayed.

4.21. A Guest Uploads Event Photos and Videos

4.21.1. Objective

Guests share media from the event.

4.21.2. Steps

1. The guest logs into the platform and navigates to the event page.

2. The guest selects the *"Media Gallery"* or *"Upload Photos/Videos"* option.

3. The guest is presented with an interface to select files from their device.

4. The guest selects the desired image and video files.

5. The guest clicks an *"Upload"* or *"Submit"* button.

6. The uploaded media is temporarily stored and may require approval from the EP before being displayed in the shared gallery.

7. Once approved (if moderation is enabled), the media is visible to other invited guests.

4.21.3. Extensions

- **Unsupported File Type:** If the user tries to upload a file type that is not supported (e.g., a document instead of an image or video), an error message is displayed indicating the allowed file types.

- **File Size Limit Exceeded:** If the uploaded file exceeds the maximum allowed size, the user is notified.

- **Upload Error:** If there's an issue during the upload process, the user receives an error message and is prompted to try again.

5. Non-Functional Requirements

5.1. Performance

- The platform should be responsive and load pages within an acceptable time frame (e.g., under 3 seconds for most pages).

- The payment processing should be efficient and secure.

- The platform should be able to handle a reasonable number of concurrent users without performance degradation.

5.2. Security

- All user data, especially sensitive information like payment details, must be securely encrypted using industry-standard protocols.

- The platform should be protected against common web vulnerabilities (e.g., SQL injection, cross-site scripting).

- User authentication and authorization mechanisms should be robust.

- Regular security audits should be conducted.

5.3. Scalability

- The platform architecture should be scalable to accommodate a growing number of users, events, and data.

- The system should be able to handle peak loads during popular gifting seasons.

5.4. Usability

- The platform should have an intuitive and user-friendly interface that is easy to navigate for users of all technical abilities.

- The registration and login processes should be straightforward.

- Error messages should be clear and informative.

- The platform should be accessible on various devices (desktops, tablets, and mobile phones).