Butterfly

Group 19: Alec DeFano, Muhammad Farrukh, Travis Kent, Nicholas Ramser, Khanh Tran

**Problem Statement:**

Many social applications are bloated and distract users from the main reason they installed it in the first place, to allow communication and to bring them together. Our goal is to build a service that will make it easier for users to find or establish groups based on similar interests. Butterfly will also provide users with customization options and the tools necessary to organize and promote events within those groups efficiently.

**Background Information:**

Our target demographic are users of all ages who currently are a part of a regular group, looking for one in the area to join, or wish to start a new one. We want our app to synchronize groups in a simple yet effective way. Butterfly will provide users with the ability to create and customize these groups for free. Anyone who is part of a group that does activities together can benefit from the Butterfly app, especially with the notification features.

**Similar Applications and their Limitations:**

There are a variety of similar group applications including GroupMe, Facebook, and Meetup. GroupMe allows communication between groups, but is not a good service for finding or building groups. Facebook groups provide a place to establish groups, however it is not easy to find local groups based on interests. Meetup is closer to Butterfly in design, but Meetup is a paid service. Restricting essential features to people who pay a premium really limits the users compared to Butterfly which will have no such restrictions. We address these limitations by introducing features that we believe are key to group communication, management, and discovery, all the while keeping the service free.

**Functional Requirements:**

**General User Functions:**

As a user, I would like to:

1. login using an existing account (Facebook, Google+).
2. create my own communities and be the community founder.
3. create a crew outside of a community.
4. see a brief tutorial about the app.
5. see who in my contacts list is already using the app.
6. control the frequency and manner of receiving notifications.
7. search communities based on event activity levels.
8. search communities based on tags or keywords.
9. search communities based on my stated interests.
10. view automatically generated suggestions based on my interests.

**User Profile Functions:**

As a user, I would like to:

1. edit my profile page to display interests and personal information.
2. upload or import from the web a profile picture for my profile..
3. see my participation rating.
4. see the profile of other users of the app.
5. see whether the user is a moderator of any community.

**Calendar Events:**

As a community member, I would like to:

1. have the group’s calendar synced to my own calendar.
2. view listed events.
3. see information about the event.
4. be able to RSVP an event.

As a community moderator, I would like to:

1. add events on to the community calendar.
2. view events on the community calendar.
3. edit events on the community calendar.
4. delete events on the community calendar.

**Attending Event Functions:**

As a user attending community events, I would like to:

1. earn points based on my friendliest or fun.
2. share pictures and videos of events I have attended.
3. view how many members are attending events.
4. be able to check in when I arrive for an event.

**Neighborhood Functions:**

As a user in the neighborhood, I would like to:

1. view a list of all communities in the neighborhood.
2. view a calendar with all planned events of communities in the neighborhood.
3. browse suggested communities based on what groups my friends are in.
4. browse communities based on my listed interests.

**Community Functions:**

As a community member, I would like to:

1. invite anyone to my communities.
2. leave the communities that I am a part of.
3. message other people in my communities.
4. see a community board of messages.
5. see a list of members in the community.
6. create a hangout to meet other members.
7. be notified about community events.

As a closed community member, I would like to:

1. send a notification to all members of the community.

**Community Board Functions:**

As a community member, I would like to:

1. see a feed which shows recent activity in the community.
2. see a feed of user messages.
3. be able to comment on user messages.

**Hangout Functions:**

As a community member, I would like to:

1. create a hangout.
2. leave a hangout.
3. edit my posted hangouts.
4. view hangouts posted by other community members.

**Crew Functions:**

As a member of a crew, I would like to:

1. have a chat with other members in my crew.
2. invite users to my crew.
3. see a list of members in my crew.
4. see the profile page of the members in my crew.
5. send a notification to members of my crew.

**Community Leader Functions:**

As a community moderator, I can:

1. kick users from the community.
2. post large planned events for the community.
3. use tags and keywords to describe the community.
4. edit the profile page for the community.
5. upload or import from the web a community profile picture.
6. appoint other users to position of moderator.
7. moderate the community board.
8. post special messages on the community board.

**Nonfunctional:**

1. The user interface will be an Android interface.
2. The user interface should be clean and simple.
3. The app will pull its content from a backend server.
4. The app will display very little to no embedded advertisements.
5. The backend end server will maintain a database of communities and users.
6. The server must be able to handle a large amount of traffic.
7. A donations option to be available if more budget is required for maintenance.
8. Integrate the use of Google Maps and geolocation (if time available).