TripSplit Features:
- Customizable Group Type (trip, gas, groceries, etc.)
  - User Interface that makes an easier and more interactive display for the most common group split types.
- Purchase Subgroups
  - The ability to split different costs among subgroups of the larger group
- Identification login
  - Users will be able to make accounts and log in through the mobile application or through a website to see all their groups and access their information.
- Easy Payment button
  - Be able to access a payment method at the end of the trip. Link accounts to venmo, paypal, etc.
- Group Tracking
  - This feature tracks members of a group, keeping track of how much each member has payed
- Split Percentage
  - Takes the cost of a payment and splits it among the group members according to the desired percentages
- In app group messaging
  - An easy way to communicate with others in the group. Also useful for reminding members of a group who have not paid off their debts.
- Save the Data
  - Users are able to save their trips for further use. This includes saving members of a group while removing the payment logs so that the group can be quickly created for future activities.
- Split Gas
  - Payment based on gas used on the trip to the current relevant price of gas
- One-to-one Payment
  - Transfer funds to a single user. Useful for when one person has to borrow from another in cash. This can be done outside of groups, just find the person through your contacts and pay or request payment.
- Group Leader
  - Has the ability to add/remove members. By default is the creator of the group.
- History Database
  - The user will be able to review multiple facets of payment history and past groups
- Graph/Display
  - A simplistic view of members and amounts paid or owed. This would let members of the group see how much they owe vs how much they will need to pay.

Requirements (System Requirements Specification Format):

Group Messaging Document: A user wishing to send a message to a particular group will be able to select that option from that group's menu before writing the message. Once the user sends their message, the user's message will be posted to the group thread while notifying all other members that someone posted a new message. The group thread will hold all messages indefinitely, as well as notable transactions logged within the group. Everybody will receive the message in a satisfactory amount of time, and be able to respond to the message themselves. The message will be sent to the group database, which will in turn update on each group member's device.

Group Leader: For each group a group leader may be designated. The group leader will be able to add and remove group members. The group will have an easily visible designation that the other group members can see. The group leader will have the ability to edit payment distribution for each group member. User's will be notified in the group message board of any changes made by the group leader, whether it be adding or removing group members, or changing payment distributions, whether it be overall distribution or specific subgroup distribution.

Identification Login: A user will enter their created username and password into the login page. The login page will read the input from the user and verify the information is correct. If the information is incorrect, the user will have the opportunity to re-enter their information, or to select a "Forgot Password" option that will take in the user's email address, so that they may update their password. In the case that a user does choose to update their information, those changes must be carried into the application's verification database by the next time a user attempts to login. If the verification for the username and password is successful, the user will be redirected to the homepage, which will list the user's current groups, as well as give them the option to add more groups.

Payment Subgroups: When logging a shared payment, a user will be able to select the members of the group that the payment applies to. For example, if only a couple members of a group eat a certain meal, a user logging that transaction would be able to select the members that ate the meal. The split cost of the meal for each sub-group member ("Taco Dinner", for example) would then be only applied to those specific members when evaluating the total cost of the trip for each member. These transactions will also be visible in the group message board, but members of the sub-group will be alerted to transactions specifically involving them.

Split Percentage: When the user submits a payment and selects their subgroup another selection window will appear. Here the user will see all parties included in the payment with a payment percentage of the bill under their names, as well as a total in dollars. The app will automatically

split the payment proportionally (including sub-groups) among the participants. The user will be able to slide or type in a value to change the percentage so that the price may be adjusted. Then lastly the application will have the option to adjust the percentages of the other participants to keep the total at 100 percent.

History Database: A user will be able to access the history of all their groups, including the group message board and transaction history. The application should distinguish between active groups and finished groups, although the information contained in said groups (payment history, message logs, sub-group interactions) should be equally accessible between the two. A user will also be able to see the payment totals for each member of the group.

Project Plan:
        We will be using a Kanban board to manage our project. It will have columns for Future tasks, To Do tasks, currently in progress, testing, and Completed tasks. To represent our kanban board we will be using a Trello.

Our Trello board: https://trello.com/b/LieW1Jnx/tripsplit-development