Project Charter - CommuneKit
Team 35 - Edward Bi, Rohan Gaddam, Nikhil Pisolkar, Ash Wang, Mingfan Xie

Problem Statement
"Over the course of a month, I might expect to need a large fold-out table once, maybe twice. My neighbors probably do the same, which begs the question: do both of us need our own folding tables? There are a variety of goods whose patterns of use make individual ownership unnecessarily expensive, redundant, and inefficient. Lawnmowers, steam cleaners, party supplies, tools, and a variety of other items. CommuneKit provides a platform for members of the same community to list items that would otherwise be collecting dust. Users can create an account and list items, and register prices of things, borrow from friends, and search within a radius to find items near them. Unlike Craigslist/Facebook Marketplace, CommuneKit is tailored towards use within smaller communities, so there is not a focus on shipping/long range borrowing, and works on reviews and community consensus to work as a primarily a free to use site."

Objectives
- item sharing desktop app
- users should be able to create accounts
- Messaging each other to discuss items
- locate items within a certain radius while maintaining security
    - Should be able to filter by distance, both driving distance and map distance
    - Filter by current availability status
- Intuitive interface, easy to list, lend, find, and borrow items
- Review/report system for items, borrowers and lenders
- Users can see what items are in demand in their area (send community requests for an item)

Stakeholders
- Users: anybody looking to share items with people in their community
- Developers: Nikhil Pisolkar, Ash Wang, Rohan Gaddam, Edward Bi, Mingfan Xie
- Dev manager: Hao Wang
- Product Owners: Nikhil Pisolkar, Ash Wang, Rohan Gaddam, Edward Bi, Mingfan Xie

Deliverables
Services
- Web client will
    - Support user login and profile management
    - Allow users to post items for lending including descriptions and images
    - Search for items based on keywords

- filtering by map distance and driving distance
- Sort by: rating, distance, best match
- Have a rating system for lenders, borrowers, and items
- Support messaging between users
- Allows saved/starred item folder
- Predefined labeling of items based on general categories
- Backend will
  - Handle authentication
  - Store user information, ie login info, ratings, item ownership, lending/borrowing record
  - Store information related to items, ie location, ownership, status, condition, rating
  - Payment
  - Handle concurrent usage, live borrow/availability status
  - Determines locations/distances and handles filtering when searching

Platforms and Frameworks
- Python
- React - learning
- Flask
- HTML/CSS
- MySQL
- Github