MVP Design Document

Addressing review / suggested changes from pitch feedback and mentor (author: Ajay)

After presenting our pitch to our classmates and mentor, the main pieces of feedback we received surrounded preventing spam and fake services being provided on the platform - at the time of pitch, we had no proposed mechanism to prevent random users from creating unlimited deeds to gift free Kudos to other users. We also had no way of verifying multiple accounts being created by the same person or users from outside the local area being on the platform. We addressed these with the following changes:

1. To prevent a user from creating an unlimited amount of deeds, we made the completion of every deed result in a transfer of Kudos from the requester to the helpers. Therefore, we would avoid inflation problems of new Kudos constantly being introduced into the system while also ensuring that there is no benefit from a user using a deed as a mechanism to transfer kudos.
2. To address requesters having unlimited control over the value of a deed, we made sure that we utilized our own custom formula to calculate the Kudos value for a deed - we limited possible deed difficulties and limited the possible number of hours that a Deed can take to provide an upper bound on Kudos value of one deed.
3. We began addressing the problem of having random, unverified users on our platform by requiring more information of users at sign-in. Specifically, we required that users provide phone numbers in addition to email, username, and password. Extending beyond the MVP, we plan on using texts to verify accounts and also require home addresses as an identifying field of an account that will be used to deliver governmental benefits.

Usability Heuristics (author: Raxel)

1. **Visibility of System Status**
   Our web application includes details for each deed that change based on user actions. Each deed will update its "Helpers" list and number of "Helpers Remaining" when a user offers help and will appear as "Accepted" for the new helper. Also, on the requester perspective, when they mark deeds as complete, the deed will have a "Completed" status as a result. Additionally, users can visit their Profile with a "Kudos" count as they offer help through their deeds and create deeds which have a cost.
2. **Match between system and the real world**
   The fundamental concepts of "deeds" and "kudos" are words and terminology that gives a sense of doing a task for someone else and then being given appreciation for that help. We hope that these fundamental topics give a positive sense of the purpose of GoodDeeds. Additionally, we follow real-world conventions by having a map that users can use to easily navigate through different deeds to see those in locations they are interested in offering help in.

3. **User and control freedom**
   When users try to create or edit a deed, a cancel button is presented so they can choose to undo the actions they may have started by mistake. The "Cancel" buttons are adjacent to the buttons that initiated the creation and update actions so that they are easily discoverable to the user and add efficiency and fault-tolerance for users that make these mistakes.
4. **Consistency and standards**
   We use icons consistent with those that users will encounter in other applications and products. For example, we use the trash bin icon for deleting and a pen icon for editing deeds which are very common in other applications. Also, we have a map with markers of deeds as a standard that makes it easier for users to locate deeds that are close to them as the project scope is for local citizen engagement.
5. **Error prevention**
   Our web application has a lot of error prevention by not allowing users with specific roles to complete actions they are unauthorized to do. For example, only the requester of a deed can make changes (i.e. delete and update) to a deed. Also, requesters can offer help on a deed they created, only other users that are not already helpers of that deed can click on the "Offer Help" button.
6. **Recognition rather than recall**
   We ensure that users are able to easily distinguish the deeds they have accepted or requested from others. Firstly, our profile page isolates all deeds associated with a given user such that a user can quickly recognize the deeds they have requested that have been filled with helpers indicated by a bright ‘Mark Complete’ button. Furthermore, in our feed, we clearly distinguish between Deeds that a user is associated with versus those they are not by a bright “Offer Help” button.
7. **Flexibility and efficiency of use**
   Users can click on markers on the map to only show that deed in the list of deeds. This action helps with filtering out all other ideas that near the user which might not be accessible to them based on the location. The user can effectively eliminate time wasted on looking through deeds that they won't be able to help because of distance barriers. As such, users can focus on the deeds that they are better suited to help in.
8. **Aesthetic and minimalist design**
   The markers on our map do not contain any symbols (e.g. other map applications have a police and crash symbols on their markers) because we feel that every deed should be equally represented as an act of kindness that is uniquely tailored to the requester. We could try to categorize deeds into something related to volunteering or car breakdowns with symbols on the markers but that could limit the help someone is willing to provide to others. A future idea we want to implement, however, is changing the color of the marker on the map to match the difficulty of the deed so that users can decide what kind of commitment they want to be involved in for deeds they offer help in.
9. **Help users recognize, diagnose, and recover from errors**
   Our application populates update and error messages on the top of the page when users perform actions such as creating, editing, and deleting a deed. For example, whenever a

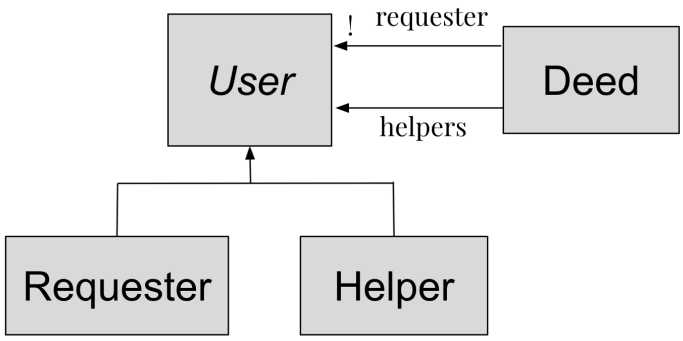
user tries to create a deed but doesn't have enough kudos to create it, we populate a red error message saying: "You don't have enough kudos to create this deed!".

10. **Help and documentation**
    This heuristic applies the least to GoodDeeds as we want to make it as intuitive as possible where extra documentation and help isn't necessary. However, one scenario that can happen is the user signs out of their account while in their profile. To give users some help, we change the profile to say: "Sign in to your account to view your profile." This way users know what their next steps should be.

Conceptual Design (Ajay)

Concept: Deed

- **Purpose**: promote civic engagement in local communities through requests for help
- **State**:



    - All deed d | d.requester = one User
- **Actions**:
    - requestDeed(u: User, d: Deed)
        - d.requester = u
        - u.deeds += d
    - acceptDeed(u: User, d: Deed)
        - If (u != d.requester & #d.helpers < d.helpersNeeded) d.helpers += u
        - u.deedsAccepted += d
    - markCompleteDeed(u: User, d: Deed)
        - If (u == d.requester) d.completed = True
        - U.deeds -= d; u.completedDeedRequests += d
        - For (h in d.helpers): h.acceptCompleteDeed(d)
- **Operational Principle**:
    - u1.requestDeed(d); u2.acceptDeed(d); u.markCompleteDeed(u1)
        - After a requester creates a deed, then another user will be able to view the deed on the map and offer their help with the deed. Once the helper fulfills the deed, the requester can set the deed as completed.

Concept: Kudos

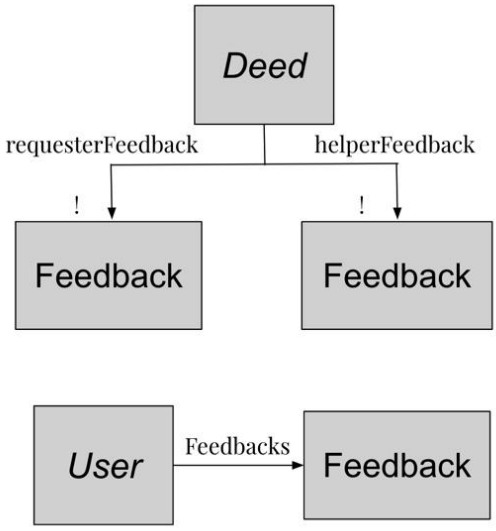
- **Purpose**: credit given to a user for completing their deed

- **State**:

    - Kudos: one User -> *int*
    - Kudos: one Deed -> *int*
- **Actions**:
    - acceptCompleteDeed(u: User, d: Deed)
        - u.kudos += d.kudos
        - Add kudos to a user's current kudos after each completed job
- **Operational Principle**:
    - u1.markCompleteDeed(d); u2.acceptCompleteDeed(d)

Concept: Feedback

- **Purpose**: Provide positive or negative feedback to a requester or helper after deed completion
- **State**:

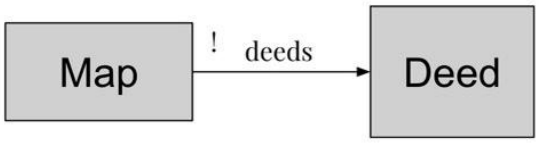


    - All Deed d | d.requesterFeedback = one Feedback, d.helperFeedback = one Feedback
    - All User u | u.Feedbacks = some Feedback
        - Each user accumulates a list of Feedback as their requested deeds and accepted deeds are completed
- **Actions**:
    - giveHelperFeedback(d: Deed, u1: User, u2: User, f: Feedback)
        - If (u1 == d.requester and u2 in d.helpers) d.helperFeedback = f; u2.Feedbacks += f
    - giveRequesterFeedback(d: Deed, u: User, f2: Feedback)

        - If (u2 in d.helpers) d.requesterFeedback = f; u.Feedbacks += f
- **Operational Principle**:
    - u1.giveHelperFeedback(d, u2, f1); u2.giveRequesterFeedback(d, f2)

Concept: Map

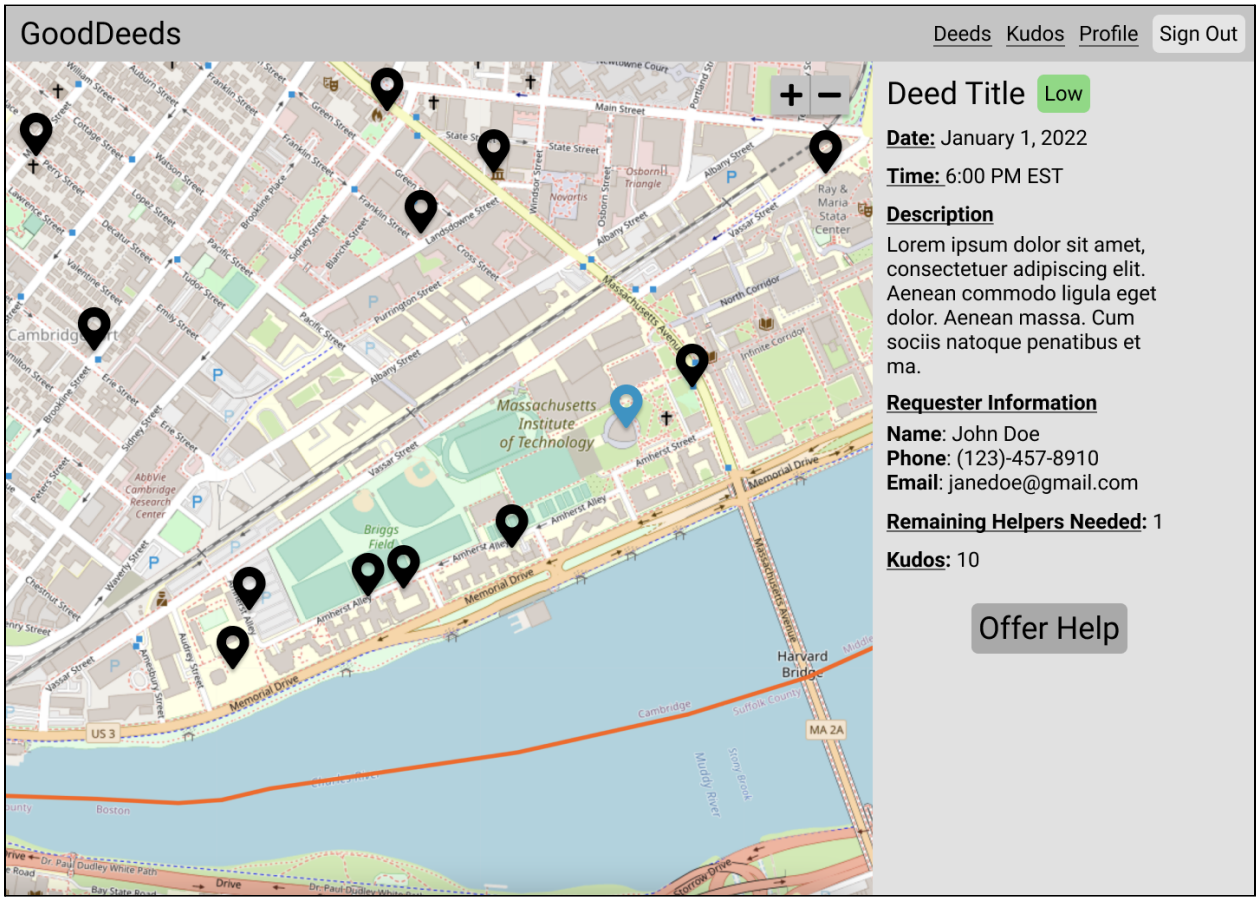
- **Purpose**: Display a feed of deeds across a geographic map
- **State**:



    - All deed d | one Map m | d in m.deeds
- **Actions**:
    - addDeed(m: Map, d: Deed)
        - m.deeds += d
- **Operational Principle**:
    - u1.requestDeed(d); m.addDeed(d)

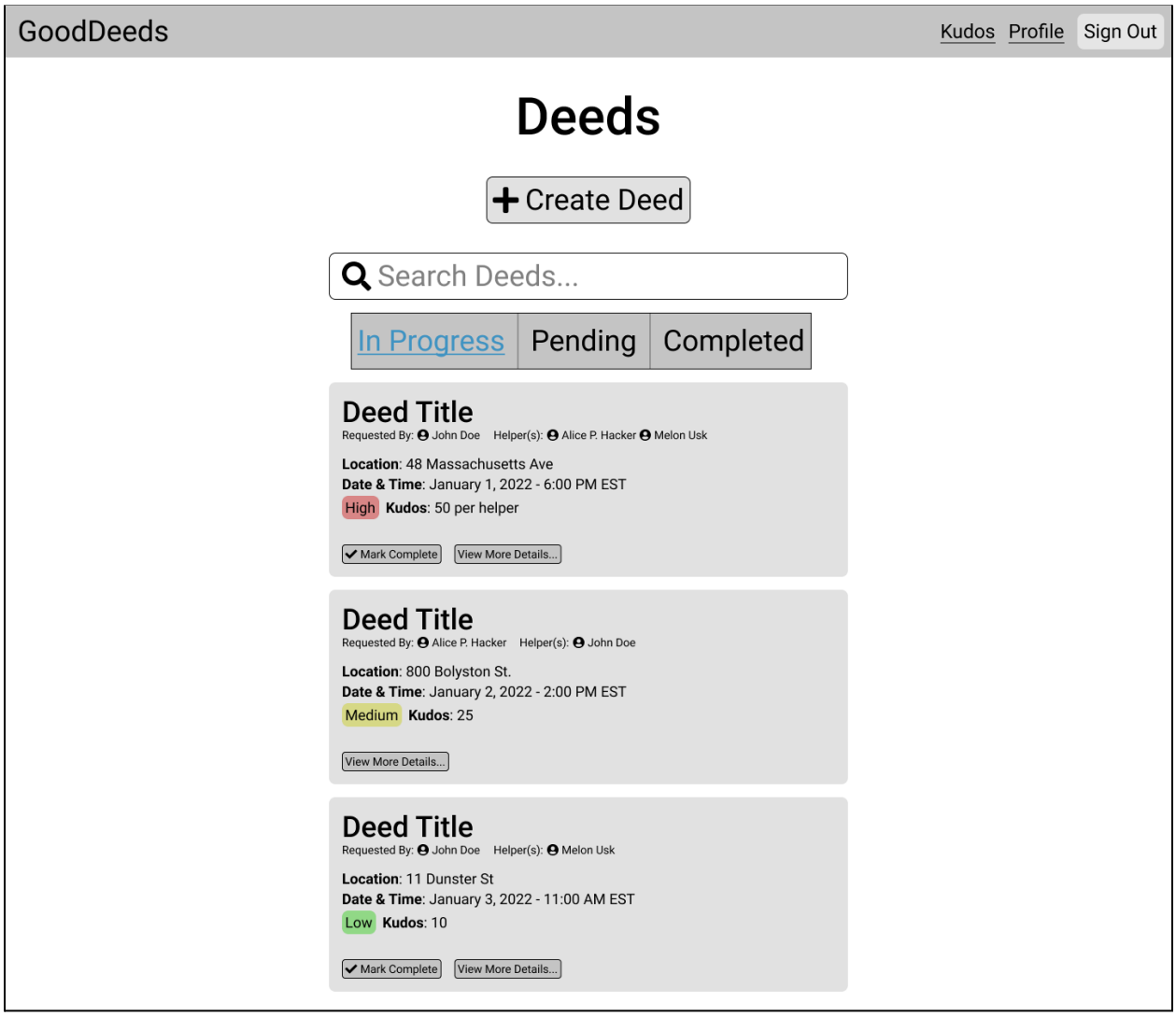
Sketches (author: Raxel)

Map

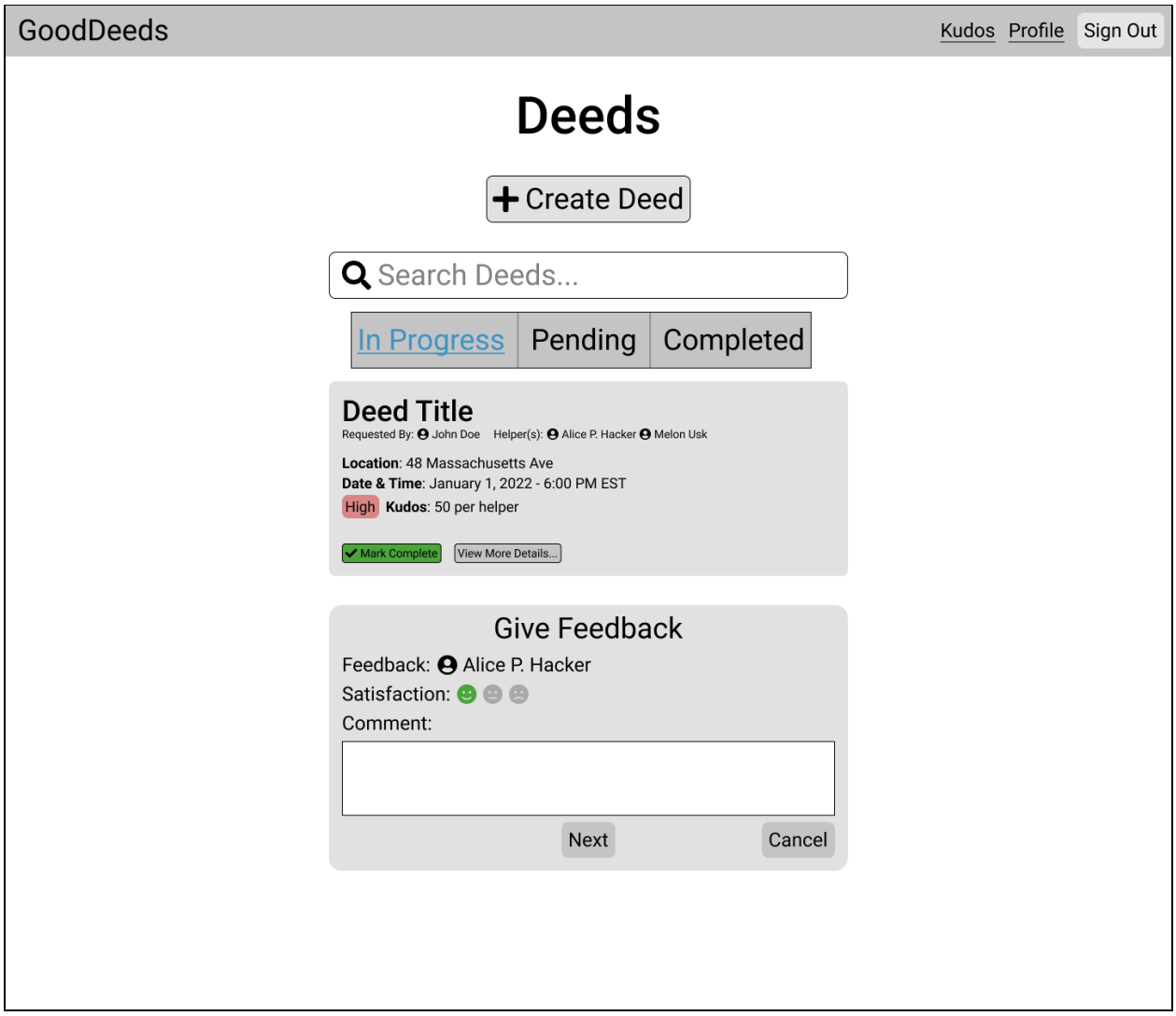


Sketch 1: Users select a Deed marker (highlighted in blue for now) to be able to view the details of a Deed on a panel element to the right of the Map. Also, users are able to make a request to help with the Deed with the "Offer Help" button.

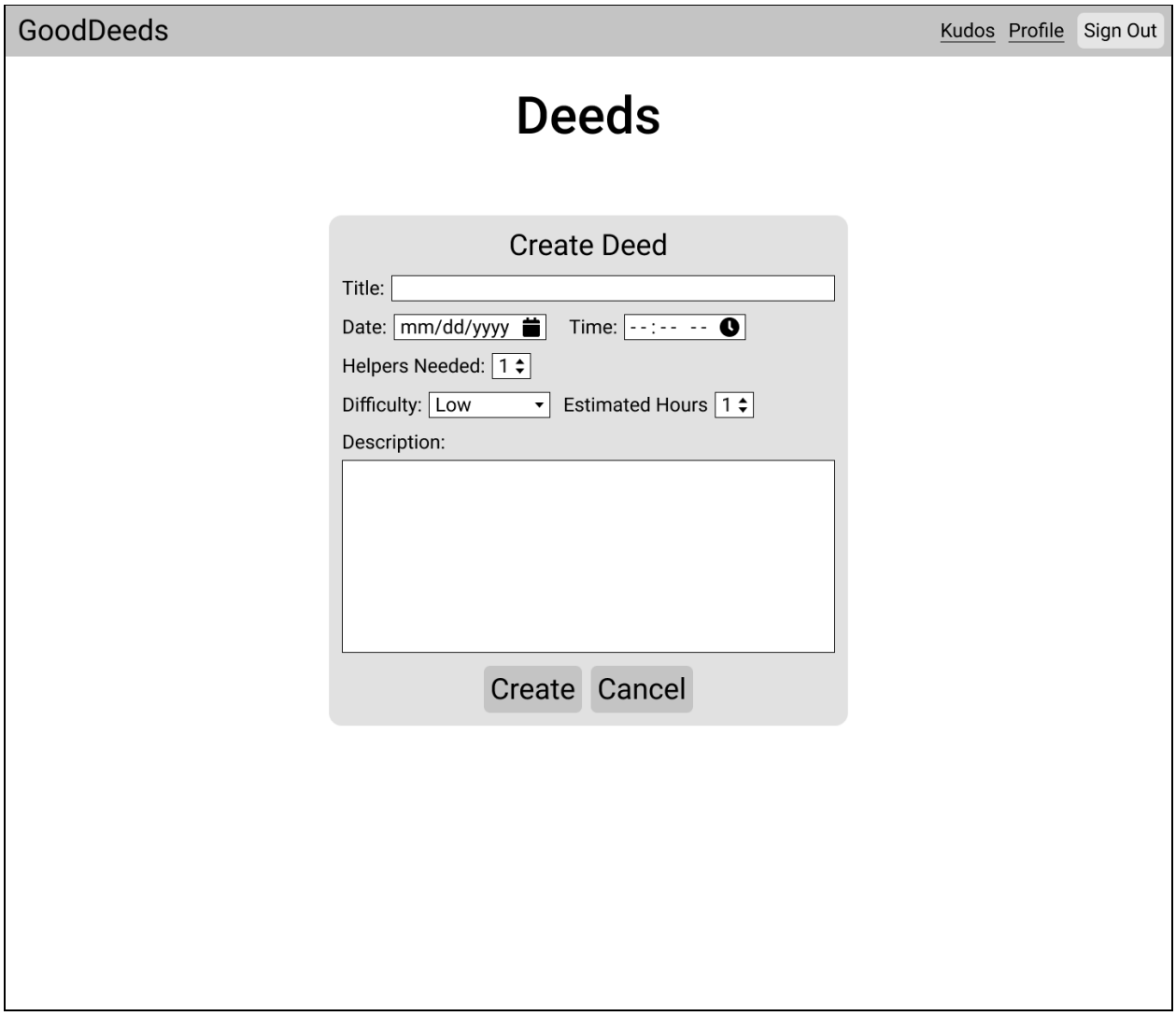
Deeds



Sketch 2: **Deeds Page** - Users can view both the Deeds they requested and those they are helpers in. The requesters of a Deed can mark the Deeds completed which will transition them to **Sketch 3** where they can provide feedback for every helper in the given Deed. Also, the users can select the "Create Deed" button to transition to **Sketch 4** where they will be able to input the necessary information for a Deed.

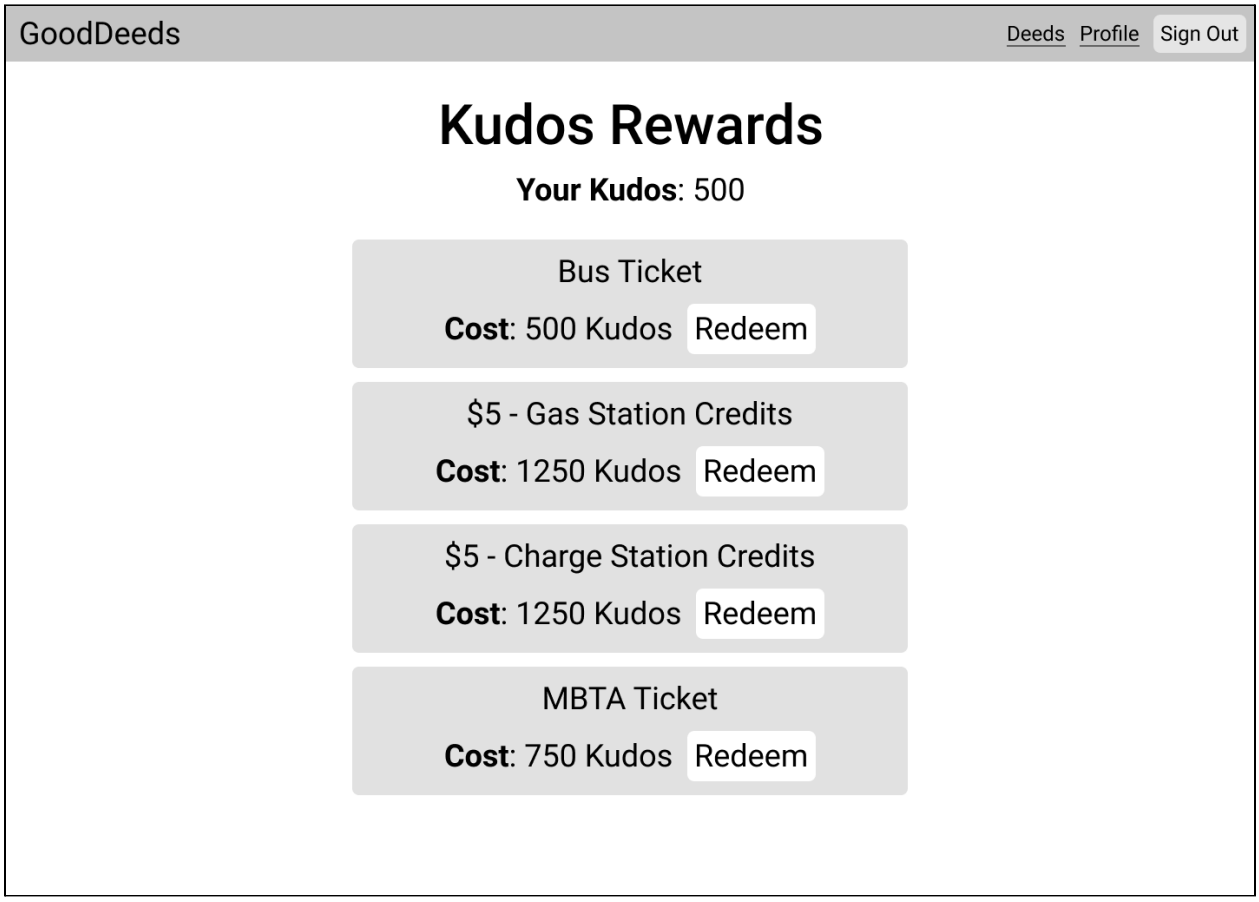


Sketch 3: **Providing Feedback** - After the requester of a Deed marks a Deed as complete, they will present with a Feedback dialog box to be able to provide feedback to each helper in the Deed. They provide satisfaction feedback through three smiley icons representing Good, Neutral, and Bad. Additionally, they will be asked to add comments about the experience with each helper. Users can press "Cancel" to go back to the view in **Sketch 2**.



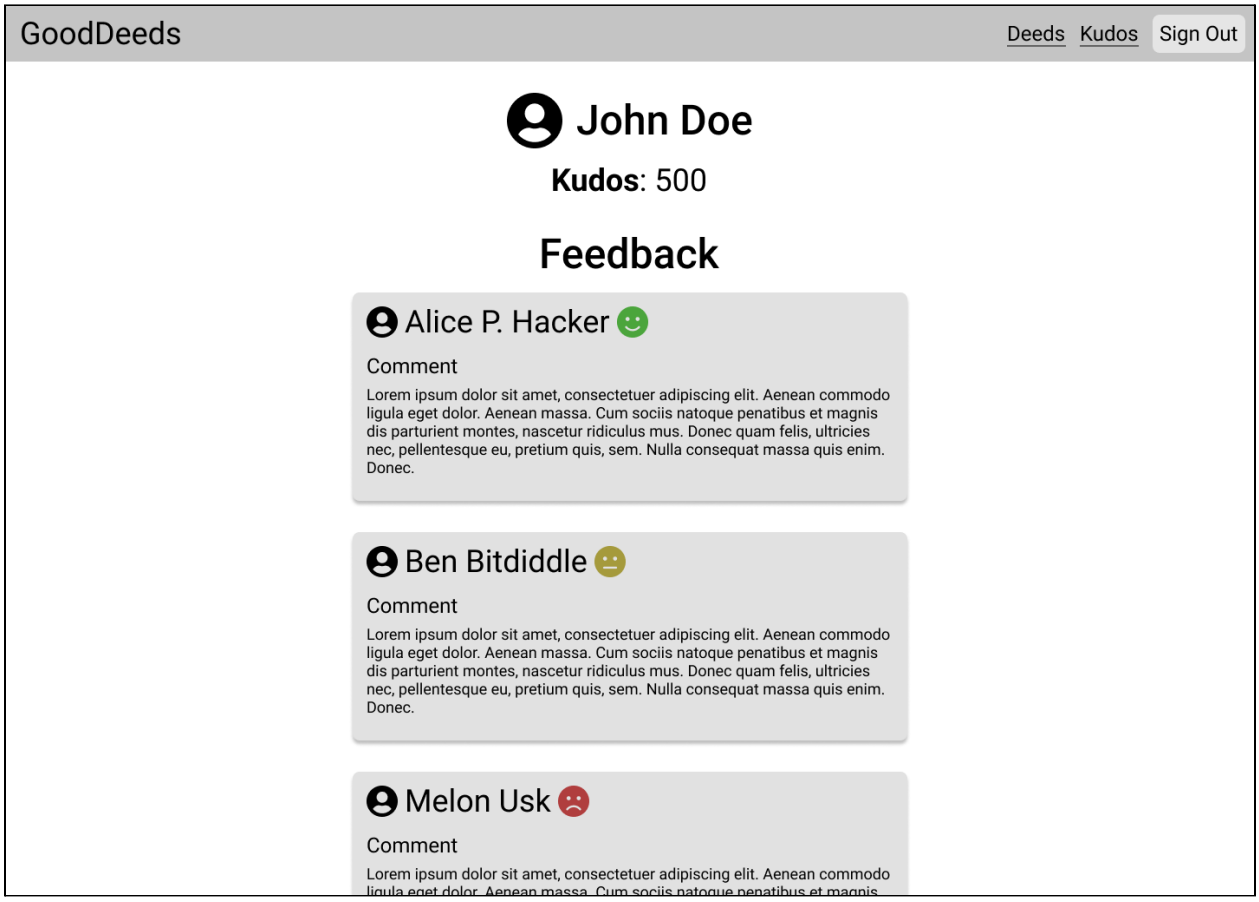
Sketch 4: **Creating Deeds** - Users can add the relevant information to create Deeds. This information includes: Title, Date/Time, Helpers Needed, Difficulty/Estimated Hours, and Description. Also, users can press "Cancel" to go back to the view on **Sketch 2**.

Kudos



Sketch 5: Reward Redemption - Users can go through a list of available rewards by navigating to the "Kudos" link on the navigation bar. The page will include the cost of each reward based on the Kudos currency. There are "Redeem" buttons that will use up the Kudos cost displayed.

Feedback



Sketch 6: **Kudos in Profile Page** - Users can view the feedback other users received as well as the feedback they were given on the profile pages of each respective user. Also, the Kudos of a user is shown since we intend to use it as a reputational currency that will also guide users in their decision on whether to accept or request help on a Deed from users.

Design Commentary (author : Angelica)

1. Deed Creation With A Cost

One design decision that was made is to use kudos as a form of currency. When creating a deed, a user must give away a certain amount of kudos to create it. Initially, the user will receive X amount of kudos and is able to receive more if they complete deeds. We made this design decision to tackle the issue of a user creating a bunch of fake deeds to spam GoodDeeds or to mark them as complete and receive the benefits without any work. By giving a stake every time one posts a deed, it will discourage users from doing this as they will not gain much from this malicious act. It also encourages more collaboration within the community because users will now need to complete deeds in order for them to

post any of the ones they want to create. One limitation this design decision has is that it can create a barrier for our users to create deeds on the platform as some cannot easily complete the amount of deeds that would be required to meet the kudos cost in creation of the deeds they want. This holds true for users who are extremely active in their community, independent from any organization, and took the initiative to create many volunteer opportunities. Another limitation this design decision has is that it decreases accessibility. For example, a disabled person might need a lot of help and want to create deeds for this purpose. But, due to their disability, they cannot physically be able to participate in deeds. Deed creation at a cost would hinder them from getting the help that they need and hurt the goal of GoodDeeds.

Alternatives Considered:

1. **Honor System:** One alternative design choice is to only give away kudos and have an honor system. In other words, a user can only get kudos upon completion of a deed and do not need to spend any of it upon creation. While this eliminates any barriers in deed creation and could encourage even more engagement, it easily allows malicious actors to abuse and exploit the system as it is based on honor. A user can simply spam the platform with fake deeds which would make it hard for other users to know which deeds are legitimate and in the long run could decrease a user's trust in our platform. If we lose our user's trust, then no one would use GoodDeeds and could discourage the civic engagement that was supposed to result from using our website. Two users could also work together to create deeds and complete them in order to obtain more kudos. We envision the government to partner with GoodDeeds so that users are able to reimburse their kudos for rewards provided by them (such as a bus ticket). So, if a user is able to cheat the system to get kudos, this would discourage the government from taking part in this initiative as taxpayers would not be happy about this. By implementing kudos as a currency, GoodDeeds can have a layer of security in deed creation as malicious actors will receive minimal benefits from doing this.
2. **Having verifiers**: Another alternative is having verifiers in the platform that check for the validity of the deed. These verifiers will be chosen based on the amount of kudos they have. Instead of reimbursing kudos for rewards, a user will instead hit certain levels of kudos and receive certain perks in this model. For example, "after X kudos, a user can become a verifier". While this encourages users to create as many deeds as they want, it could open the door for other malicious acts such as one abusing their power as a verifier. Two people could still work together to make a bunch of fake deeds, gain kudos, and gain power. If these malicious actors gain

enough power, then they can even verify the fake deeds of the people they are working with to gain more kudos. It also makes it hard to choose who exactly is a verifier. If we set too high of a kudos amount, then the same people could be verifying each deed. However, we would want a diverse set of people looking at each deed as people could miss things easily. Furthermore, verifying a deed without participating in it could be hard. On one hand, deeds could look fake when they are actually real. In the other, deeds could look real when they are actually not.

2. Amount of Kudos Depends on Deed

One design decision that we made is that the kudos amount a user receives for a deed is not the same for all deeds. We made this design decision because we recognize that not all deeds created by the requestor are the same. We wanted to make sure that a user receives the kudos equivalent amount for what they have done. So, how can we translate the differences of deeds into GoodDeeds? The way we decided to do it is that the requestor has to determine the level of difficulty for a task out of three options: "low, medium, high". To determine the kudos amount for a task we take this into consideration, so that a task with low difficulty will receive less kudos than one that is medium or high. A task with medium difficulty will receive less kudos than one with high difficulty. We also took into consideration time when calculating the kudos amount as it would not be fair for a helper who participated in an easy difficulty deed that took 3 days to complete to receive less kudos than a high-difficulty deed that only lasted an hour. One limitation this design has is that it is very subjective. Not all our users have the same reference as to what "low", "medium", and "high" difficulty tasks are as all of them come from diverse backgrounds and lived through different experiences. While a requestor might think a deed is "low" difficulty, a helper might think otherwise and be surprised when participating in it. Another limitation this design has is that the boundaries between "low", "medium", and "high" are vague, and a certain deed might not fit any of these buckets. For example, there could exist a deed that is not super hard but above average, essentially a level between medium and high, but the requestor is restricted to only these three options. In these situations, they would be forced to choose between two options. In our example case, it would be "medium" or "high". Both of these options have their tradeoffs. On one hand, users in general might be apprehensive in completing high difficulty deeds, so the amount of helpers that complete medium difficulty deeds is larger. On the other side, there could be users looking for high difficulty deeds as these are the ones that give more kudos. To mitigate these limitations, we make the requestor write a description of what the deed is. This allows a user to evaluate the difficulty for themselves and choose whether or not to participate in it based on that.

Alternatives Considered:

1. **Fixed Amount Of Kudos**: One alternative we considered is that every kudos gives the same amount of kudos upon completion. While this removes any subjectiveness that exists in setting the low, medium, and high difficulty levels, it prohibits users from receiving what they deserve. In other words, a user who does less work will get the same kudos as one who does substantially more. As every deed contains a description, this could discourage our users from participating in deeds that they perceive to be more difficult.
2. **Kudos Per Hour** : We were worried that the subjectiveness that exists when setting difficulty levels could make the feature useless. In other words, if none of the deeds' difficulties are accurate then it would destroy the whole purpose of it. Therefore, another alternative we considered is to just consider the amount of hours a user takes to complete the deed. We decided not to go this route as we still saw the benefits of setting a difficulty as it has the intention of giving kudos more fair. Moreover, we assumed that most people will complete deeds near their community, so people will have similar frames of references of what it means to be "low", "medium", and "high" difficulty. If they don't, users will still have the option and freedom to read the deed description and decide for themselves.

3. Giving Back To The User Via Our Reward System

One design decision that we made is that users will be able to reimburse their kudos for rewards. Some of the rewards they can select from are internal to GoodDeeds. For example, a user can get a "create one, get one free", "create one, get one half kudos", and a free deed reward. Moreover, our design was created with the goal that entities can get involved in this initiative by providing rewards. One entity would be the government. Some of the rewards they could give are free bus passes, free taxis, and discounted tolls on highways. Another entity is organizations. Organizations could also encourage users to join this platform and could supply rewards themselves. Another entity is businesses. They could possibly want to be more active in the community or encourage it, so they can supply rewards as well. A limitation to this is that the rewards that exist on the platform could be very limited. If other entities do not want to partner with GoodDeeds, then the rewards would only be one's internal to GoodDeeds. There could possibly be users who only participate in deeds solely to get the rewards. Therefore, this could discourage those users as the incentive is gone.

Alternatives Considered:

1. **Gamifying GoodDeeds**: One alternative we considered is gamifying GoodDeeds. Rather than users being able to reimburse kudos, they could compete with each other in receiving the most kudos. Our website could include leaderboards and give users badges based on the amount of kudos they have. Doing this encourages users to participate in deeds while not having to rely on rewards or other entities. However, we decided not to go this route as this incentivizes only specific populations who are competitive and want to be in the leaderboards. We were also worried that the adrenaline rush that comes with competition does not last in the long run. People might feel very motivated at the beginning to complete many deeds but then realize that the leaderboards don't really matter. Furthermore, this could encourage a toxic environment and make users who are ultra competitive to not create deeds just so that they can hold their position and refrain other users from getting kudos. In our current design, people would be receiving rewards for what they deserve which constantly incentivizes people, eliminates any toxicity involved in competitiveness, and encourages collaboration.
2. **Member of the Week**: Another alternative we considered is having a "user of the week" system where users who obtain the most kudos in a week get spotlighted on the website. In this system, it still encourages users to participate in deeds while eliminating the limitations that arise in rewards. However, this could violate the privacy of users by revealing that they completed multiple deeds. There are many cases where people do anonymous acts of kindness where they prefer not to receive recognition for it.

4. Feedback Is Important

One design decision that we made is introducing a feedback system in GoodDeeds. In the feedback, a user can choose between a smiley/neutral/frowny face of their experience with the other person. Then, they can leave a comment/ review about the other user. This feedback can be given by a requestor to a helper and vise-versa. It is also publicly available and can be viewed by all other users. We made this design decision because it fosters a safer environment as users can be held accountable for their actions. For example, a requestor lying about a deed in the description or mistreating their helpers. Another example is a helper showing up and refusing to do anything. With this feedback, a requestor could decide to refuse the help of a certain helper. In the perspective of a helper, this could be the determining factor of whether or not to participate in a certain deed created by that user. Using this system, it makes any malicious acts one experienced during the process more visible and discourages users from doing them. Additionally, it encourages users to create a safe environment and do their role correctly. It also gives the

ability to the requestor to determine whether a helper is more qualified for a certain deed that requires a certain skillset. In terms of the helper, a helper could see if the requestor is legit and respectful of the time they set for the deed. One limitation this creates is that one bad review could drastically hurt a user's reputation on the platform making it difficult for them to receive helpers or participate in deeds. Another limitation is that reviews are very subjective and could possibly not accurately reflect a situation. A user could have cognitive bias towards another, and these could be translated in their review.

Alternatives Considered:

1. **Only the smiley/neutral/face system** : One alternative we considered is to only implement the smiley/ neutral/ frowny face system. This eliminates the subjectiveness that arises when writing a review or comments about a user while also giving feedback. However, the issue with this is that it does not give context as to what happened, and there is still subjectiveness. Since each of the faces encompasses many actions, it would be hard to use it as feedback. If a person received a frowny face, this could mean a range of different things. It would be better to clarify what happened so that other users have the full context.
2. **No Feedback system** : Another alternative we considered is to not have a feedback system. This removes the pressure a user might feel to get a good review. This pressure could be so immense that a user might feel discouraged to use that platform especially if these reviews are publicly available to others. However, we decided to make this tradeoff in order to create a safer and more healthy environment for others.
3. **Ratings through numbers:** Another alternative we thought about is giving a user rating like Uber and Lyft does. However, we did not choose this alternative because we thought that it failed to give the entire context of the situation. We also didn't choose this because it could create a toxic environment as people are binded to numbers. Ratings are very subjective, and it could be hard to translate emotions into numbers. Therefore, we felt the smiley/neutral/face system more accurately shows a user's feeling towards a situation.

5. Multiple Helpers In One Deed

One design decision that we made is to let users have the freedom to have multiple helpers for a deed. We made this design decision because we did not want to constrain the types of deeds that could exist in GoodDeeds. We also wanted to encourage collaboration and support between helpers, so people from the community can get to know each other. By creating this environment, our users will

be more encouraged to participate in other deeds. One limitation this has is that having multiple helpers will make it harder for a requestor to provide feedback. There could also be cases where the requestor gets confused as to who did what and write feedback to the wrong user. Another limitation is that this system could be abused. A requestor could set a high amount of helpers just in case helpers don't show up or to be extra sure that the deed could be completed. By having too many helpers, the requestor could just simply dismiss the helper the day of which would be very unfair to them. The requestor could also make some helpers sit out which would be unfair to those who don't as they are doing the work, and all the helpers would receive the same amount of kudos.

Alternatives Considered:

1. **One helper per deed** : One alternative we considered is just having one helper per deed. This would make sure that users do not create a deed with more helpers than is needed and that each helper actively participates in it. It would also be easier to implement. However, we decided not to go this route as many deeds do require many people in reality, and this would limit the deeds that could be created significantly. A user could technically create a deed for each helper they need one by one. However, this would be extremely tedious and takes a very long time. A user who needs a lot of volunteers for large scale events might turn to other platforms instead.

6. [New] Avoiding Overlapping Markers on Map

One design decision that we made is to have the map render the markers in a way that does not overlap with each other. We made this design decision because without this mechanism, it would be impossible for a user to select multiple deeds using the map from the same location as all the markers would be stacked on each other. We resolved this issue by checking whether a newly created deed has the same latitude and longitude as another one. If it does, we either add or subtract an offset to the latitude and/or longitude. One limitation this has is that the location of the marker won't be as accurate as it would have been if we used the exact latitude and longitude from the location.

Alternatives Considered:

1. **One marker to ensure location accuracy:** One alternative we considered is to allow for overlapping markers as this would ensure that every marker

placed in the map matches exactly the latitude and longitude associated to the location of the deed. However, we decided to not go this route as a location with many deeds and therefore many overlapping markers will appear on the map as one marker. This could be confusing to the user as it implies that there is only one deed in that location when in reality there are multiple and thus could inhibit users from participating in deeds. Therefore, we decided to make a tradeoff with location accuracy in the map. Our offset is small, but we do recognize that the more deeds there are present in a certain location the less accurate the deed locations get on the map. We still went forward with this choice as we thought that the probability of having large amounts of deeds in one location is low. We also wanted to prioritize allowing users to interact with each deed that exists. To assuage the location inaccuracy on the map, each deed displays the exact street address of it which many will use to get there. The longitude and latitude are not displayed textually to the user and are only used to render the deed on the map. Therefore, the user won't know the exact longitude and latitude we used, so they won't be misguided to a different location and will only be able to get this using the exact location (the street address displayed with the deed).

Updated Ethics Protocol Analysis (author: Raul)

Envision Possible Futures

Imagined Future #1:

The GoodDeeds app is released and after one month, there are hundreds of users that are creating and completing deeds in their local area. The popularity of the app rises and word spreads around about its usefulness, thereby increasing the number of users, kudos earned, and perks that are received. Local governments and organizations support the app and help with both funding and deeds. The overall happiness among citizens, land value, and environmental health of local areas improves as a result and people are much more interconnected than before.

Imagined Future #2:

The GoodDeeds app was released and after half a year, activity on the app has drastically decreased, to the point where virtually no one is creating deeds and no one is earning kudos for perks. Due to large privacy concerns and loss of trust among users, less and less users are requesting any help or even helping others. People lose confidence in the effectiveness of the app and completely stop usage. Eventually, local governments must take action due to potential

crimes (e.g. theft, stalking, etc.) as a result of malicious users who are taking advantage of the app.

Identify Stakeholders

- The local population who are actively using the app
- People working utilities and service jobs (e.g. plumber, mechanic, uber/taxi driver)
- Underserved/underrepresented communities
- Parents
- Children
- Non-smartphone users
- Smartphone users
- Google/Apple/tech companies
- Tech company employees designing these protocols
- Investors
- Businesses
- Emergency services
- The environment
- The government

Identify Values at Play

- Outcome Lens: In what ways does what you're making turn out better or worse for your stakeholders?
- Process Lens: How did the process treat stakeholders?
- Structure Lens: How are the outcomes distributed among different stakeholders? What are the differences in how different stakeholders were treated by the process?

Identify value-laden design choices

Decision #1: *How will new users be verified?*

Possible Choice	Values promoted?	Values demoted?
Instant and full access to app functionalities after sign up	Structure Lens: there is no barrier to access for users, which benefits everyone that has access to a computer or device for interacting with the app Process Lens: the sign up and account creation process is transparent and immediate	Outcome Lens: malicious users can take advantage of the system. This ranges from minor things such as creating multiple users for kudos manipulation to potential crimes
Require phone number verification during sign up	Outcome Lens: only unique user accounts are allowed, which resolved deeds/kudos manipulation	Structure Lens: limits access of app to those with phone numbers, which could harm and exclude economically disadvantaged Process Lens: compromises

	Process Lens: minimal private information required form users	user's privacy
Perform extensive background check, requiring user's information and govt ID, before allowing access to app	Outcome Lens: each user account can be verified as both unique and safe to interact with	Structure Lens: very high barrier to access due to time and information required from user, which affects everyone Process Lens: private information must be collected from the user, which is a large privacy concern

Decision #2: *How will kudos be earned and distributed?*

Possible Choice	Values promoted?	Values demoted?
Constant kudos amount for each deed	Structure Lens: all deeds will be essentially treated equally in terms of rewards, thus users of any skill set and level can get full advantage of the app's benefits Process Lens: the process of earning and receiving kudos is both simple and transparent	Outcome Lens: there is no incentive for users to complete more difficult and arduous deeds since the kudos amounts are all equal Process Lens: users, specifically requesters, have no control over the kudos that their deeds are worth
User that created deed determines worth of kudos	Process Lens: users have the most freedom and power with the amount of kudos they can apply on their deeds and foster more attention and help	Outcome Lens: users, requesters specifically, may unfairly determine the worth of their deed's kudos, which will lead to inconsistencies across the platform in cases where "easier" deeds reward more kudos than more difficult ones Structure Lens: since deeds that are more easy to complete will receive those most attention and help, users who have more technical knowledge or skill level that can complete harder tasks will mostly likely be neglected

Kudos amount is determined by hours worked and difficulty of task	Outcome Lens: kudos are earned and distributed in the most fair way possible, with no bias from users included and inconsistencies Structure Lens: users of any skill set and level can get full advantage of the app's benefits	Process Lens: users, specifically requesters, have no control over the kudos that their deeds are worth

Decision #3: *Who is involved in a deed?*

Possible Choice	Values promoted?	Values demoted?
Deeds involve two users; one requester and one helper	Process Lens: users will have better communication and personal relationship when deeds are limited	Outcome Lens: Many types of jobs and tasks can not be deeds if they require more manpower and/or collaboration in order to complete the work Structure Lens: Organizations and other institutions with large tasks will essentially be excluded since they can only receive help from a single user
Deeds can have multiple helpers	Outcome Lens: receiving help from multiple users will foster the most engagement and be effective at completing the deed Process Lens: With multiple helpers working on a deed, it will foster teamwork, collaboration, and way more engagement	Structure Lens: Certain jobs may still be excluded, specifically with tasks involving community service such as trash cleanup, tree planting, etc. that no single requester can effectively organize on their own
Deeds multiple requesters and helpers	Structure Lens: Essentially all types of work, whether it be from organizations, local governments, or community service, will be available for any user to complete, either by themselves or with other users	Outcome Lens: An important aspect and invariant of the app is that deeds are owned by users and can be deemed completed, thus, if no deed is owned by any one requester, they can never be closed Process Lens: Due to a

		potentially high number of requesters and helpers on a single deed, users will have much more limited communication with each other and are seen more as labor rather than humans engaging and helping one another out

Decision #4: *When can deeds be completed?*

Possible Choice	Values promoted?	Values demoted?
If there is a helper(s), requesters can deem a deed completed	Process Lens: the requesters will have the most freedom and right to determine the completion of their own deed Outcome Lens: Deeds completion will be at the discretion of requesters, who can review the work done for them	Structure Lens: When helpers determine their deed as completed, they must depend on the response of the requesters in order to move forward with the kudos and feedback system
Requesters and helpers must both deem a deed completed	Structure Lens: Both helpers and requesters essentially have equal input in determining completion Process Lens: there will be more engagement among requesters and helpers	Outcome Lens: Lack of compliance among helpers will result in deeds that never close if only the requester deems the deed completed
Deeds are deemed completed after the specified date has passed	Structure Lens: Once a deed is created, completion is solely determined by said deed's date, which promotes fairness and consistent deed completions	Outcome Lens: Deeds that may end up needing to take more time to complete may be prematurely closed Process Lens: Deed completion does not rely on either requester or helper, therefore, their experience isn't accounted for

Choose & Justify

Decision #1: How will new users be verified?

- Choice: *Require phone number verification during sign up*

- Justification: Phone numbers are both unique and serve as an identifier for users, which may be needed in cases of conflict during the deed process. This is the lowest barrier of access that still prevents the ability to manipulate the kudos system by creating two accounts that complete each other's deeds. At the same, once a phone number is provided and verified (through text message code), full access to the app and its functionalities are greeted to the user immediately, unlike the case of using background checks, which are time consuming. Although some people may not have phone numbers, users who will be helping or requesting help through the app will likely need that form of communication regardless.

Decision #2: How will kudos be earned and distributed?

- Choice: *Kudos amount is determined by hours worked and difficulty of task*
- Justification: Since the amount of kudos a user has directly links to the perks that they will receive, it's crucial that the amount given from a deed is related to both the performance and effort put into completing it. People would be deterred from deeds that require much more work if every deed gives the same constant amount of kudos, and having users determine the worth of their deeds would lead to inconsistent and unfair amounts of kudos. A simple algorithm to compute the number of kudos a deed should have can be based on the difficulty of the task (ranging from easy to medium to hard) and the number of hours worked by the helper. People will be more willing to use the app knowing that the kudos system is consistent and as unbiased as possible.

Decision #3: Who is involved in a deed?

- Choice: *Deeds can have multiple helpers*
- Justification: To have the most engagement between users and increase efficiency of deed completion, multiple users should be allowed to work together on a task. If deeds were between two people, it would severely limit the types of jobs and tasks that could be considered deeds, since they may require more manpower or collaboration. At the same time, deeds should still act as a personal and unique contract between a requester and helper and should not have multiple requesters, since they can otherwise create their own deeds. Local organizations that want to use the app will greatly benefit from this choice, as they can act as the requester and recruit several helpers for their tasks.

Decision #4: When can deeds be completed?

- Choice: *If there is a helper(s), requesters can deem a deed completed*
- Justification: Since requesters are the ones who are essentially in charge and own the deed, they have more responsibility and freedom in determining what deems as completion. This ensures that malicious helpers can not take advantage of requesters and their deeds, by stalling the deed or not performing any work until the deadline. This also takes into account at least some input from the users, otherwise, if deed completion was not dependent on them, there would be a decreased sense of engagement and community among the users.