# Circle

*Initial project name: TastyU

Team HDMI | CS8803-MAS Sprint 2

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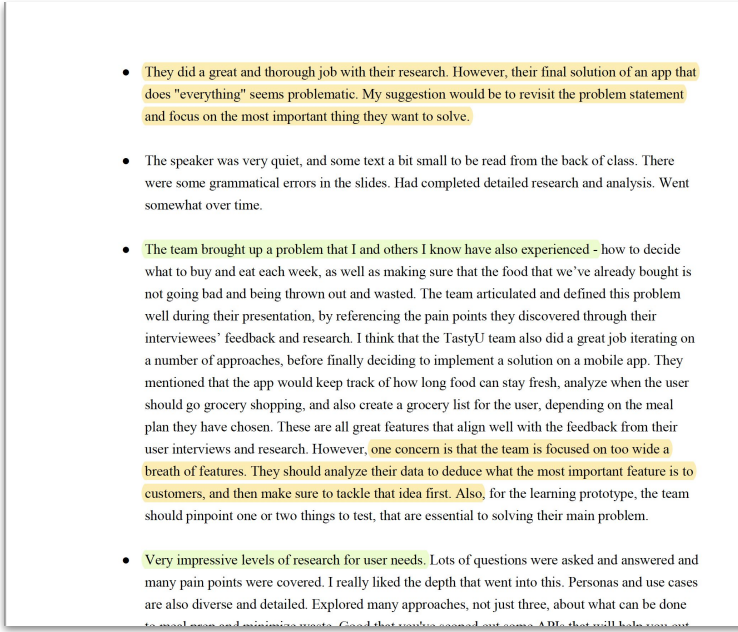
# Yes, we changed the topic

1. Studied peer review feedback and instructor's feedback
    a. Hard to narrow down problem space
    b. Desired solution is out of scope
2. Conducted additional research
    a. Smart Appliance
3. Explored relevant problem area
    a. Household supplies and room mate grocery shopping
    b. Party food planning and grocery shopping



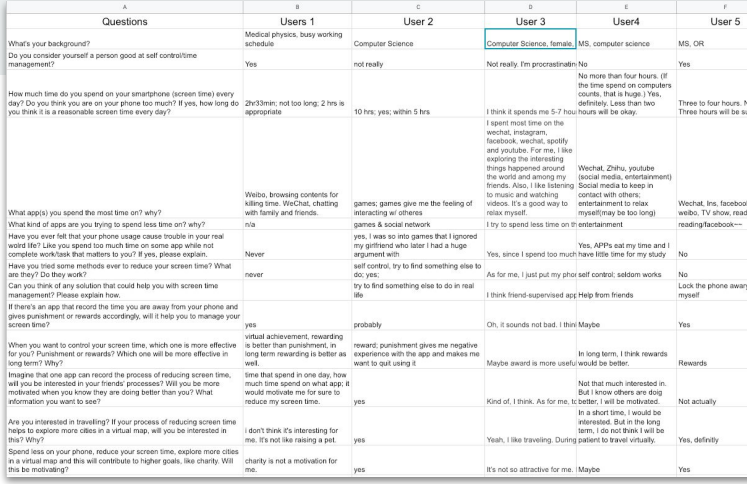
- They did a great and thorough job with their research. However, their final solution of an app that does "everything" seems problematic. My suggestion would be to revisit the problem statement and focus on the most important thing they want to solve.
- The speaker was very quiet, and some text a bit small to be read from the back of class. There were some grammatical errors in the slides. Had completed detailed research and analysis. Went somewhat over time.
- The team brought up a problem that I and others I know have also experienced - how to decide what to buy and eat each week, as well as making sure that the food that we've already bought is not going bad and being thrown out and wasted. The team articulated and defined this problem well during their presentation, by referencing the pain points they discovered through their interviewees' feedback and research. I think that the TastyU team also did a great job iterating on a number of approaches, before finally deciding to implement a solution on a mobile app. They mentioned that the app would keep track of how long food can stay fresh, analyze when the user should go grocery shopping, and also create a grocery list for the user, depending on the meal plan they have chosen. These are all great features that align well with the feedback from their user interviews and research. However, one concern is that the team is focused on too wide a breath of features. They should analyze their data to deduce what the most important feature is to customers, and then make sure to tackle that idea first. Also, for the learning prototype, the team should pinpoint one or two things to test, that are essential to solving their main problem.
- Very impressive levels of research for user needs. Lots of questions were asked and answered and many pain points were covered. I really liked the depth that went into this. Personas and use cases are also diverse and detailed. Explored many approaches, not just three, about what can be done

Highlighted Peer Feedback

# Problem Description

“Great technology should improve life, not distract from it”. - Google

People spend too much time on their smartphones, which is not good for their digital wellbeing. Our design aims to **assisting people better manage tech usage, so they can focus on what really matters for them, and develop healthy tech usage habit.**



| Questions | Users 1 | User 2 | User 3 | User4 | User 5 |
|---|---|---|---|---|---|
| What's your background? | Medical physics, busy working schedule | Computer Science | Computer Science, female. | MS, computer science | MS, OR |
| Do you consider yourself a person good at self control/time management? | Yes | not really | Not really. I'm procrastinatin | No | Yes |
| How much time do you spend on your smartphone (screen time) every day? Do you think you are on your phone too much? If yes, how long do you think it is a reasonable screen time every day? | 2hr33min; not too long; 2 hrs is appropriate | 10 hrs; yes; within 5 hrs | I think it spends me 5-7 hou | No more than four hours. (If the time spend on computers counts, that is huge.) Yes, definitely. Less than two hours will be okay. | Three to four hours. M Three hours will be s |
| What app(s) you spend the most time on? why? | Weibo, browsing contents for killing time. WeChat, chatting with family and friends. | games; games give me the feeling of interacting w/ otheres | I spent most time on the wechat, instagram, facebook, wechat, spotify and youtube. For me, I like exploring the interesting things happened around the world and among my friends. Also, I like listening to music and watching videos. It's a good way to relax myself. | Wechat, Zhihu, youtube (social media, entertainment) Social media to keep in contact with others; entertainment to relax myself(may be too long) | Wechat, Ins, facebool weibo, TV show, read |
| What kind of apps are you trying to spend less time on? why? | n/a | games & social network | I try to spend less time on th | entertainment | reading/facebook~~ |
| Have you ever felt that your phone usage cause trouble in your real waird life? Like you spend too much time on some app while not complete work/task that matters to you? If yes, please explain. | Never | yes, I was so into games that I ignored my girlfriend who later I had a huge argument with | Yes, since I spend too much | Yes, APPs eat my time and I have little time for my study | No |
| Have you tried some methods ever to reduce your screen time? What are they? Do they work? | never | self control; try to find something else to do; yes; | As for me, I just put my phor | self control; seldom works | No |
| Can you think of any solution that could help you with screen time management? Please explain how. | | try to find something else to do in real life | I think friend-supervised app | Help from friends | Lock the phone awar myself |
| If there's an app that record the time you are away from your phone and gives punishment or rewards accordingly, will it help you to manage your screen time? | yes | probably | Oh, it sounds not bad. I think | Maybe | Yes |
| When you want to control your screen time, which one is more effective for you? Punishment or rewards? Which one will be more effective in long term? Why? | virtual achievement, rewarding is better than punishment, in long term rewarding is better as well. | reward; punishment gives me negative experience with the app and makes me want to quit using it | Maybe award is more usefu | In long term, I think rewards would be better. | Rewards |
| Imagine that one app can record the process of reducing screen time, will you be interested in your friends' processes? Will you be more motivated when you know they are doing better than you? What information you want to see? | time that spend in one day, how much time spend on what app; it would motivate me for sure to reduce my screen time. | yes | Kind of, I think. As for me, t | Not that much interested in. But I know others are doig better, I will be motivated. | Not actually |
| Are you interested in travelling? If your process of reducing screen time helps to explore more cities in a virtual map, will you be interested in this? Why? | I don't think it's interesting for me. It's not like raising a pet. | yes | Yeah, I like traveling. During | In a short time, I would be interested. But in the long term, I do not think I will be patient to travel virtually. | Yes, definitly |
| Spend less on your phone, reduce your screen time, explore more cities in a virtual map and this will contribute to higher goals, like charity. Will this be motivating? | charity is not a motivation for me. | yes | It's not so attractive for me. | Maybe | Yes |

# User Research Insights

1. Survey (10 responses)
2. Interview (5 participants)

- People consider long time phone usage is a problem, that would affect their productivity, health, and social interaction in real world. [pain]
- Most people want to solve this problem, but few has effective solution. [pain]
- App approach is acceptable, and rewarding incentive is prefered than punishment.
- People spend most time on social media, instant message, entertainment apps, for 2~10 hours daily.

# Domain Research

1. Brain focus/Pomodoro timer
   Feature: Create a list of things to accomplish and Track the time by task
   Shortcoming: Has no usage monitoring or avoiding distraction functions

2. Google Digital Wellbeing/Apple Screen Time Dashboard
   Feature: Monitor the app usage and detailed report for screen time usage analysis
   Shortcoming: Only valid on Android or ios and has no incentive system

3. Forest/Sleep town
   Feature: Combine the virtual tree or house gaming award and time slot completing
   Shortcoming: The award and penalty incentive system is not efficient

# Approach

1. Lock phone while performing tasks via setting timer

2. Mobile APP to provide rewards
   (digital rewards & real life when users follow the timer）

3. Mobile APP to punish users when failing to follow the timer

# Use Cases

### Primary Use Case

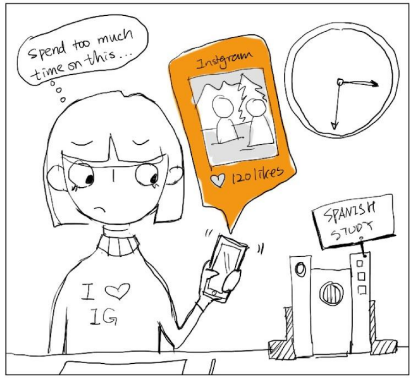
**Use this design to stay focus on task, reduce screen time**

1. Set up timer (by selecting city and site)
2. Start the task and stay focus on what matters
3. If achieve the goal, user will gain reward; failed, would get punishment (gamification)
4. Check performance and monitor progress

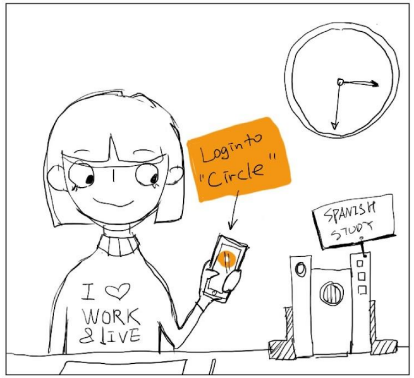
### Secondary use case

**Use this design to reduce screen time, encourage social interaction**

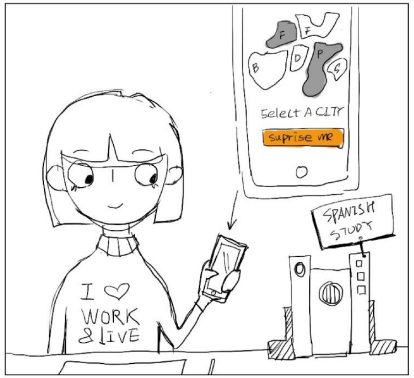
1. Set up timer
2. Go to meet with friends or talk to family members without looking at phone
3. Achieve goal and review performance with other people




1. Sam found herself spend too much time on instgram, and have no time to study Spanish.

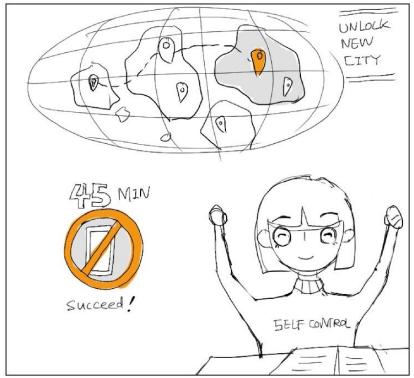



2. She decides to use screen time management app "Circle" to solve her problem.

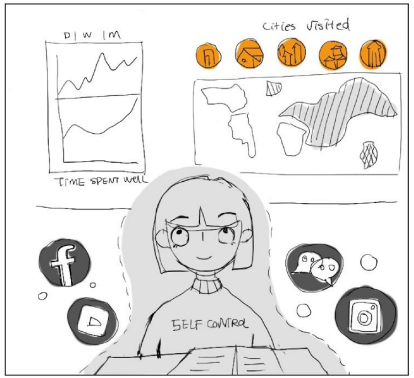



3. She opens the app, and select a City that has a time goal. She pressed "surprise me" and system selects Sydney for her.


4. Sam wants to focus on Spanish study for 45 min and she starts the timer. She really wants to complete this task and did not use the phone the whole time.



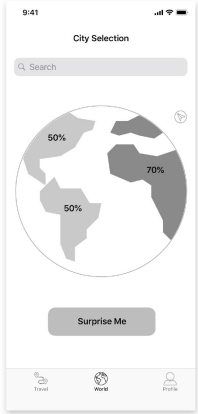

5. After 45 min past, Sam did not use the phone and unlocked new city on her travel map in Circle. She gained more self-control over her time.




6. By using this app, Sam feels that her screen time has been reduced dramatically! She can also view her performance in the app.

# Paper Prototype & A/B Testing


City Selection

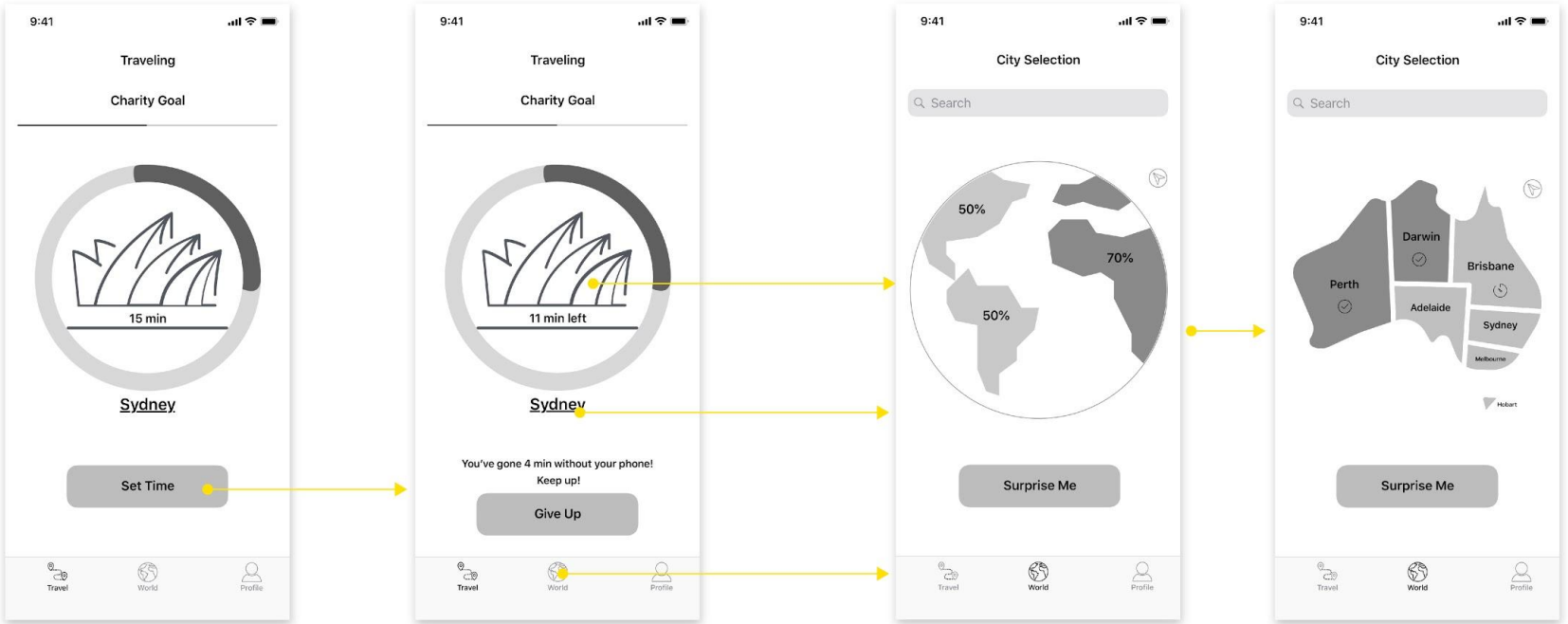

*Test within group to gain further insights about feature design

A

B

# “Traveling”

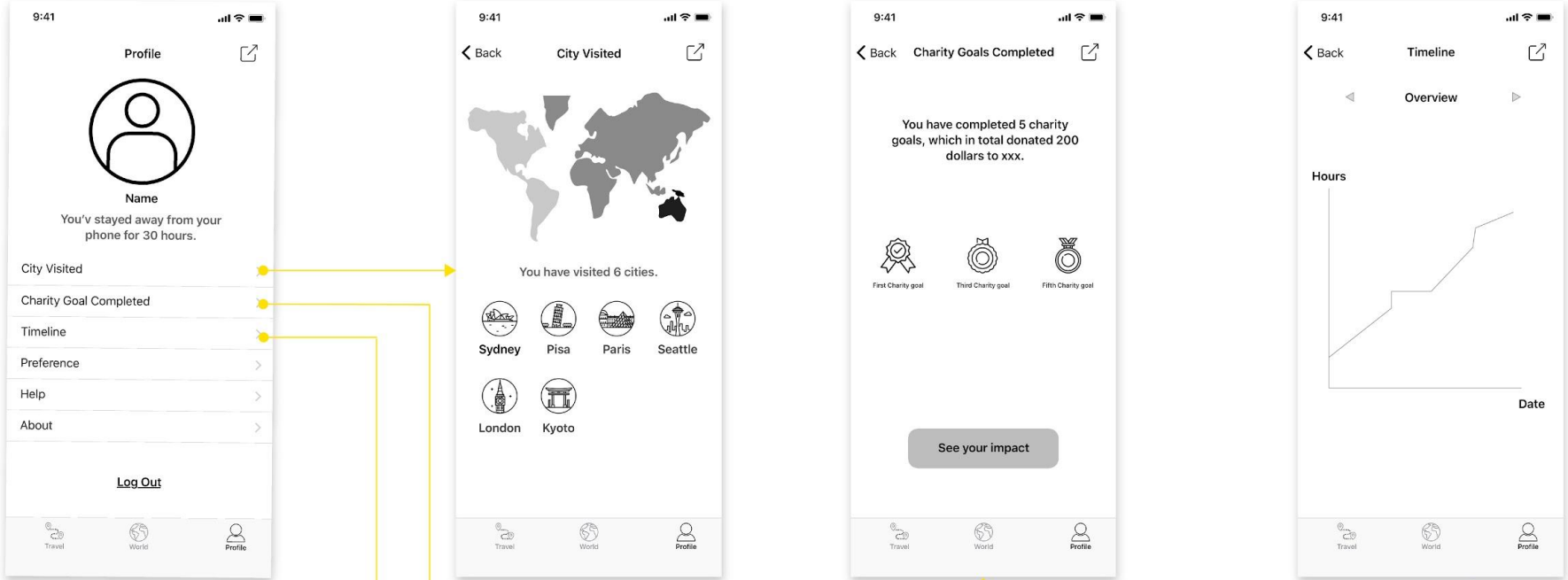
# City Selection



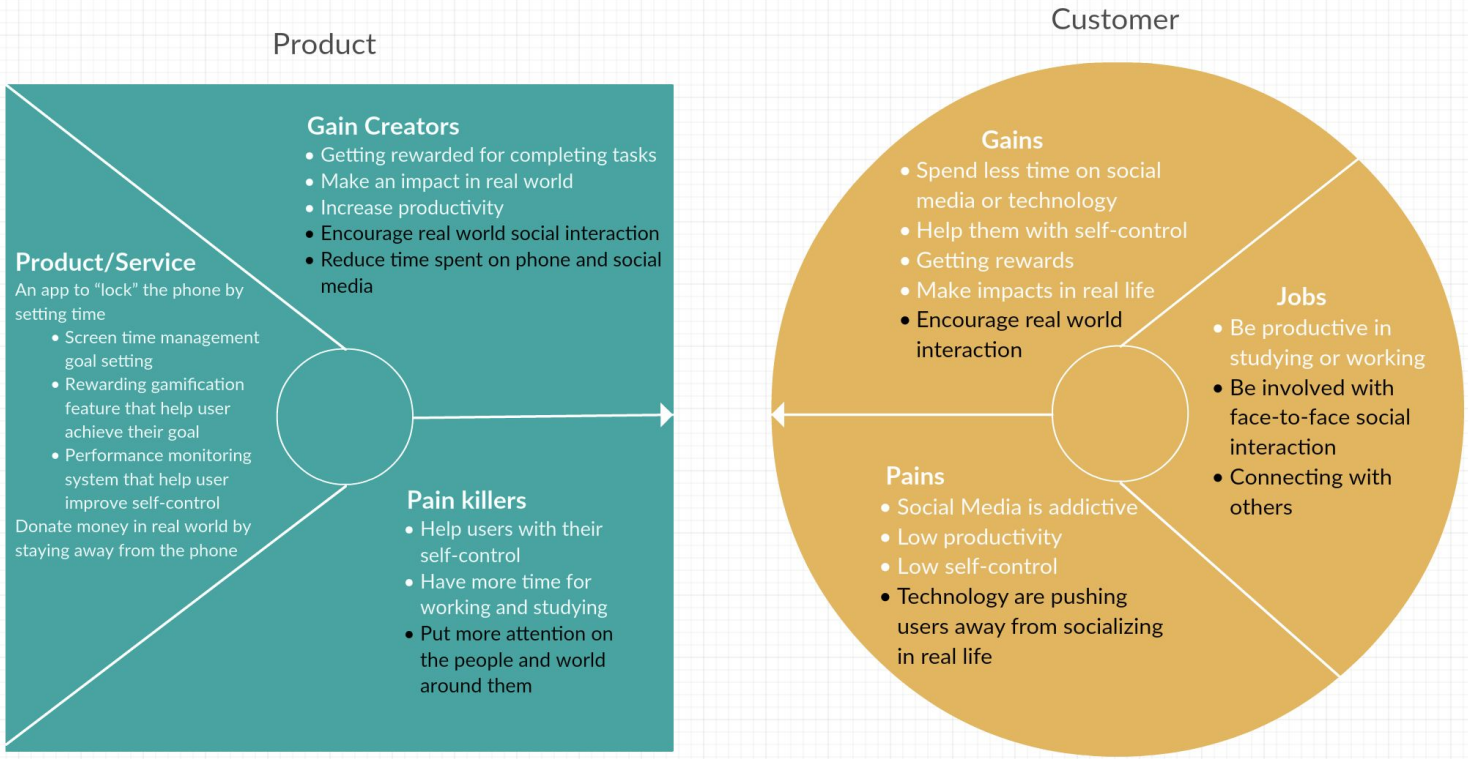

% shows charity goal progress

Zoom in for cities &
Visual distinction for vistied places

# Profile (Rewards & Achievements)



# VALUE PROPOSITION DESIGN EXPLANATION



# Learning Prototype

## Design Team

- **Storyboard:**
  stakeholders, tasks
- **Paper prototype:**
  user flow, main functions
- **Mock-up:**
  keyframes and main features
- **Test requirements and features hypothesis**

## Tech Team

- **Construct the architecture**
- **Data models and REST APIs**
- **Check core functionalities:**
  authentication by facebook, twitter
  locking the screen
  setting time by system clocks
- **Design system and architecture and test technical feasibility**

# Learning Prototype

**Important features:**

- **Setting of the timer:**
  the minimum time slot
  the time interval for each adding
  the default time slot
  the history of timer setting
  the interaction for setting timer

- **City selection:**
  the expected time to unlock a new site the interaction for overviewing all cities

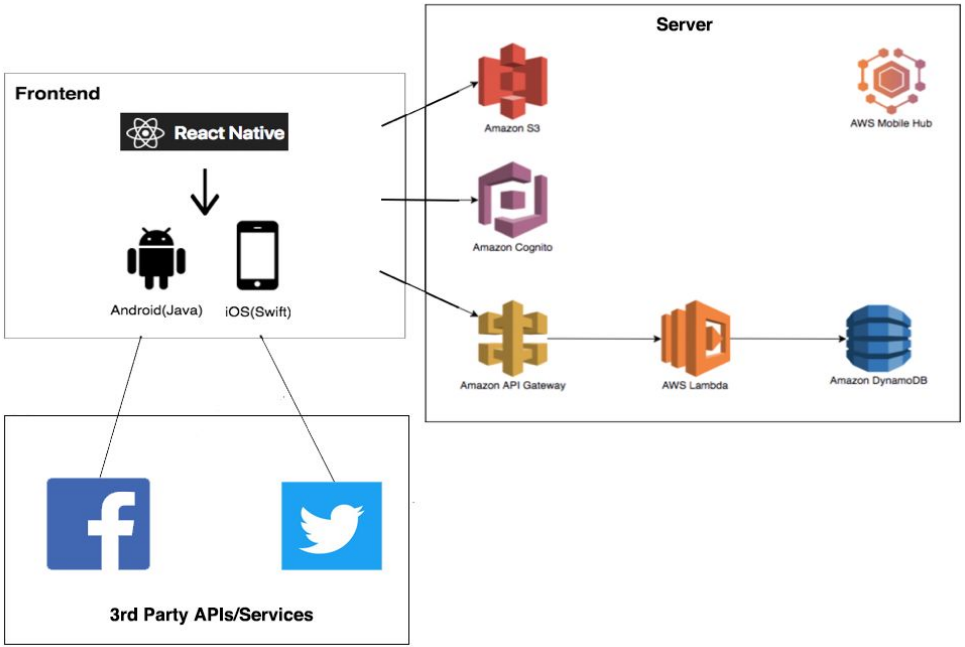
**Less important features**

- **The user profile**
  basic information
  the badges for the charity donation

➔ We confirmed the features from interview and survey results.

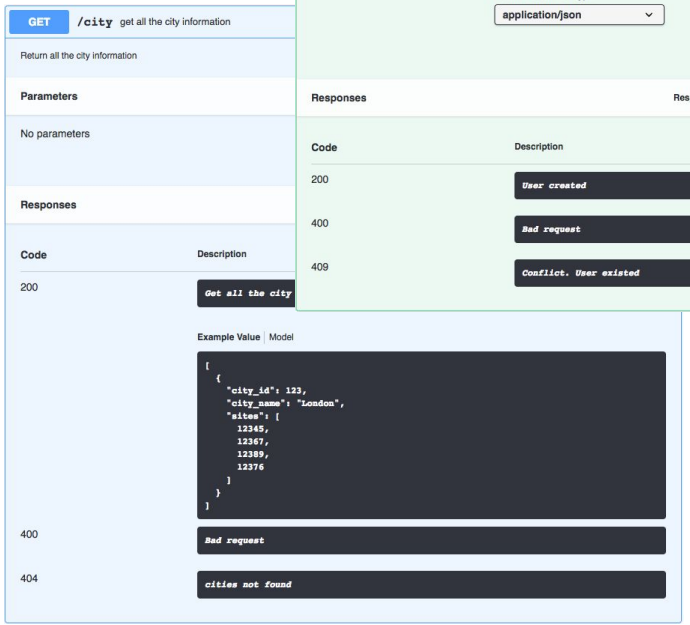
➔ We improved and reconfirmed the features from the paper prototypes test.

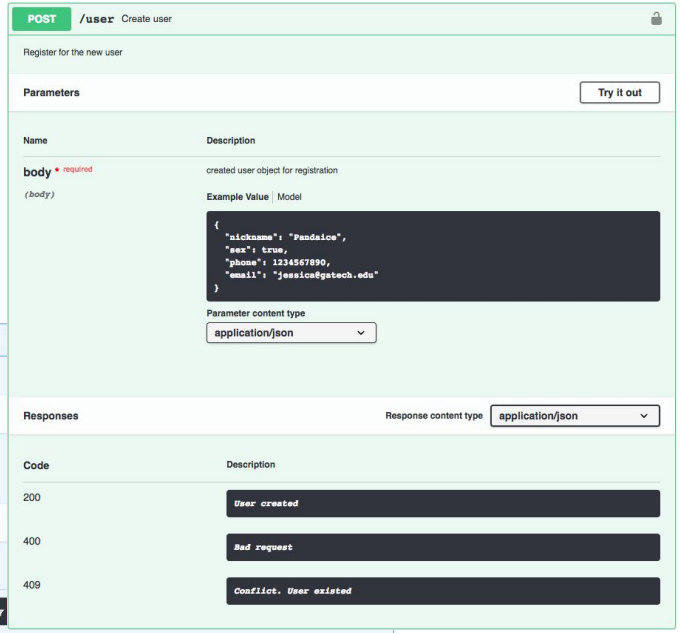
# Architecture for Learning Prototype



# Resources to Be Considered

We discuss the data models and design the main REST APIs between the front end and back end.




Used Contextual Information from device

- current and local time
- user location
- application execution state