Circle

Team HDMI | CS8803-MAS Sprint 3

Xiuxiu Yuan, xyuan40@gatech.edu
Xuejin Tan, tanxjs@gatech.edu
Bin Xie, bxie41@gatech.edu
Anjian Peng, penganjian@gatech.edu

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.**

First Round of User Feedback Sessions

Conducted feedback sessions on the app with low-fidelity prototypes.

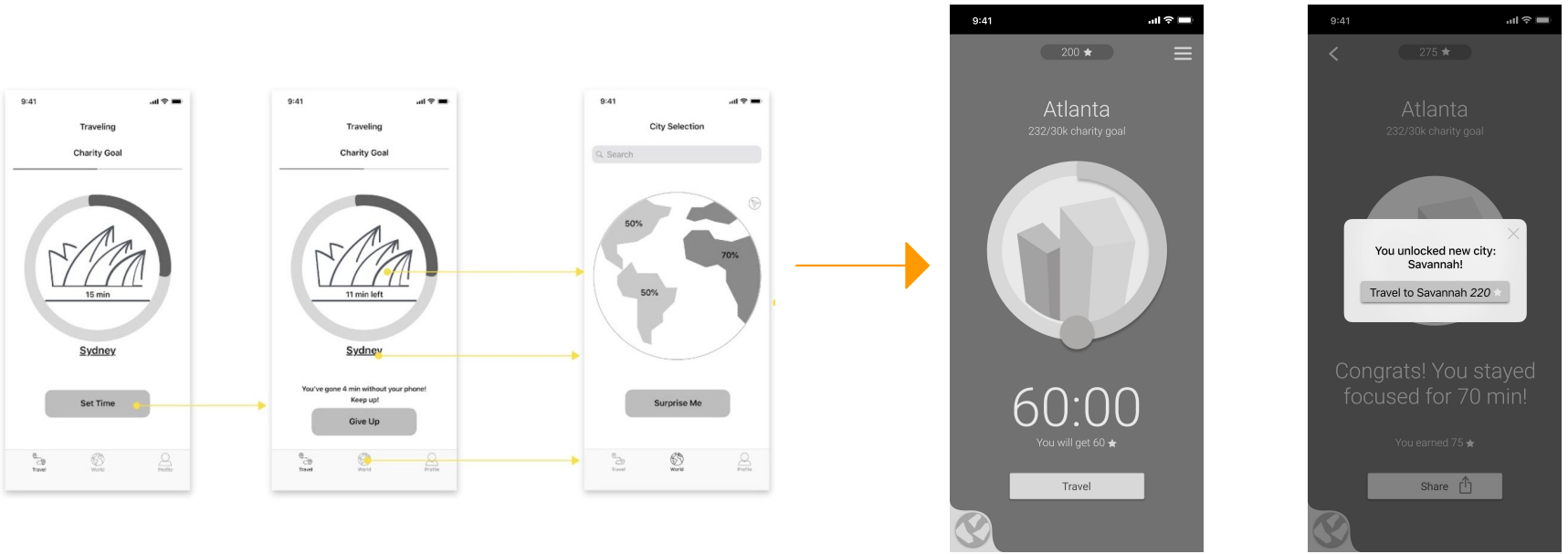
- Concept
- Interactions
- Users likes/dislikes/concerns/suggestions

Significant Updates - Design

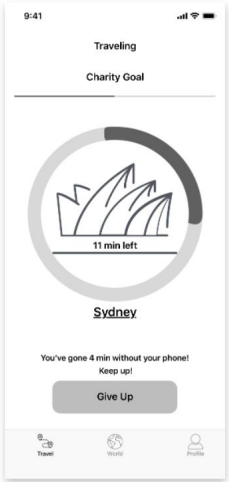
1. **Game Design**
    a. How can we incentivize our users to complete a timer?
    b. How can we make the controls more more flexible to our users?

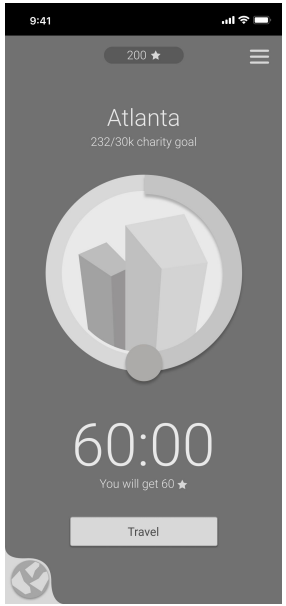
2. **UI Changes**
    a. How to reduce the learning time for this app?

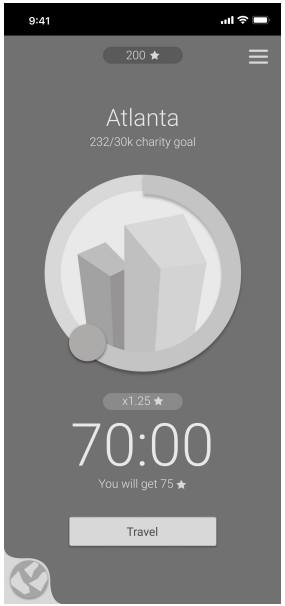
How can we better incentivize our users to complete a timer?



How can we make the controls more flexible to our users?







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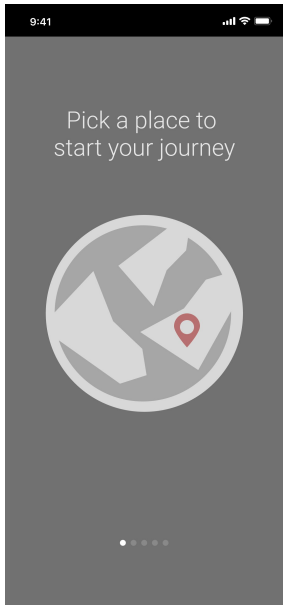
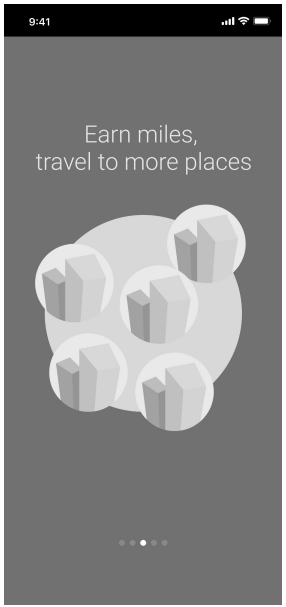
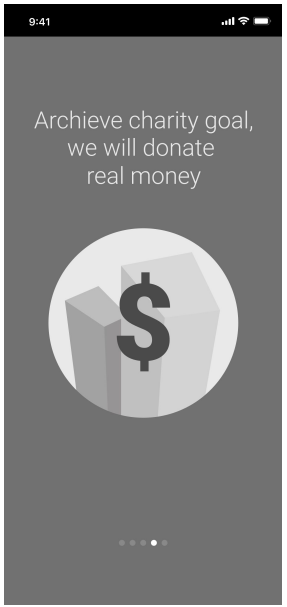
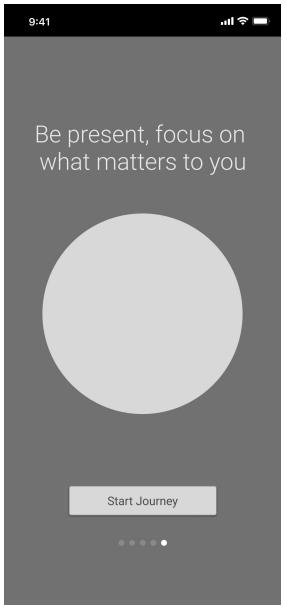
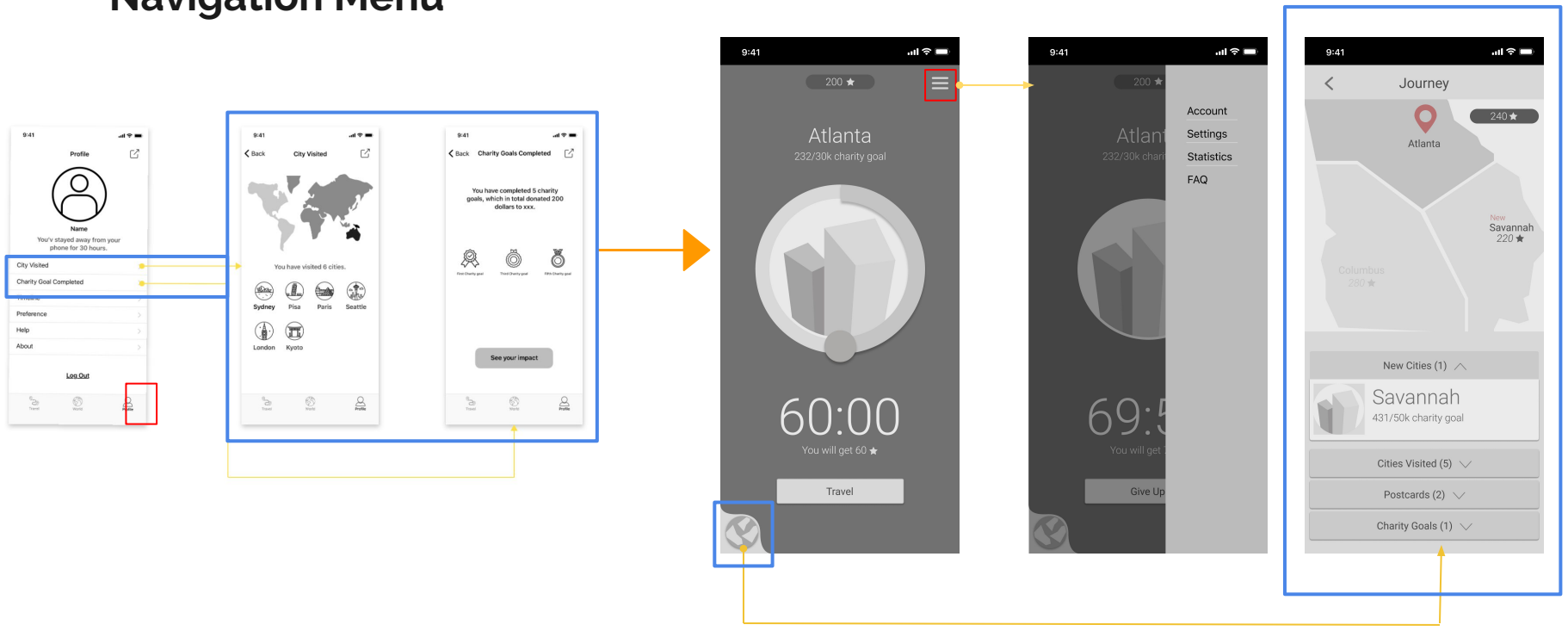








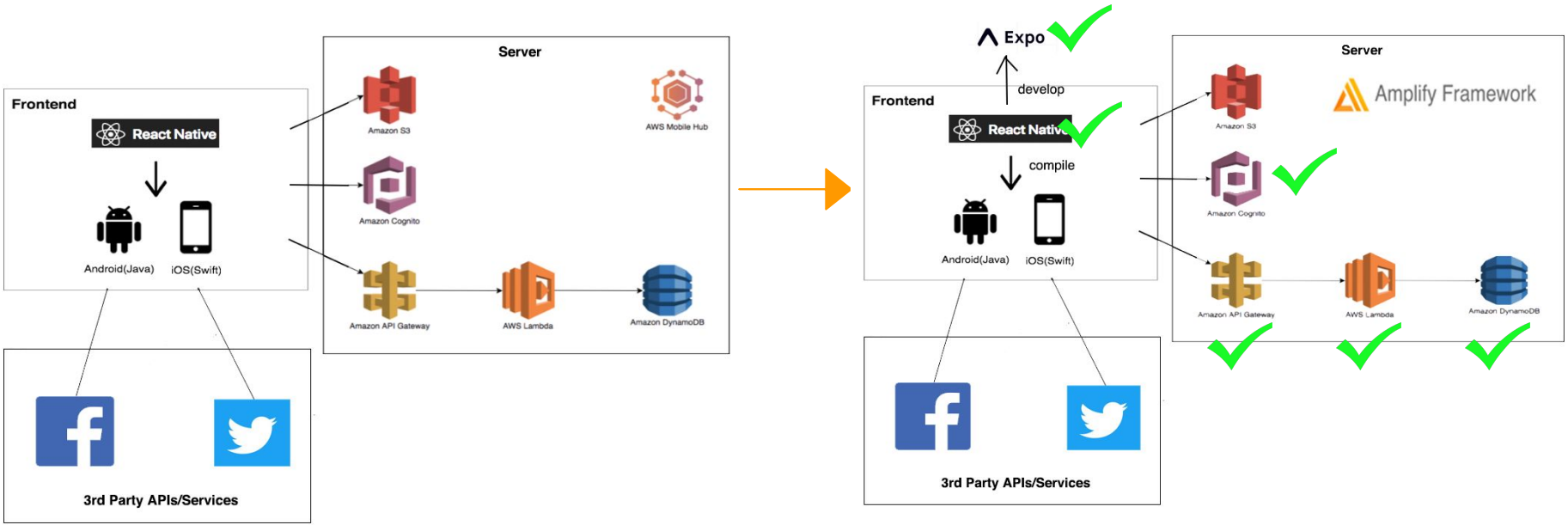
Navigation Menu



Significant Updates - Tech

1. **Architecture update**
    a. Combine new development tool expo and new framework amplify
    b. Construct the data models and REST APIs
2. **Some UI implementation**
    a. **See the learning prototype demo**

Architecture Update



Data models construction

User {

id	integer($int64)
name	string
password	string
phone	string
email	string

}

City {

id	integer($int64)
name	string
category	integer($int64)

}

Site {

id	integer($int64)
name	string
city_id	integer($int64)
total_time	integer($int64)
finished_time	integer($int64)

}

Timer {

id	integer($int64)
start_time	string($ISO-8601) *example: 2019-02-18T20:00Z*
end_time	string($ISO-8601) *example: 2019-02-18T20:00Z*
site_id	integer($int64)
user_id	integer($int64)

}

Report {

user_id	integer($int64)
total_time	integer($int64)
successed_times	integer($int64)
failed_times	integer($int64)
completed_sites	integer($int64)
completed_cites	integer($int64)

}

REST APIs implementation

sites

GET	/users/{userId}/sites
POST	/users/{userId}/sites
GET	/users/{userId}/sites/{siteId}
PUT	/users/{userId}/sites/{siteId}
DELETE	/users/{userId}/sites/{siteId}

timers

POST	/users/{userId}/sites/{siteId}/timers/{timer_id}
GET	/users/{userId}/sites/{siteId}/timers/{timer_id}
PUT	/users/{userId}/sites/{siteId}/timers/{timer_id}

users

GET	/users
POST	/users
GET	/users/{userId}
PUT	/users/{userId}
DELETE	/users/{userId}

Learning Prototype

Design Team

Medium Fidelity Prototype

- User flow
- Onboarding Screens
- Main functionalities
- Click through prototype

Tech Team

Second Learning Prototype

- More UI implementation
- Timer function implementation
- Map visualization implementation
- White list of apps solution research

Learning Prototype Demo

1. ***Learning Prototype Demonstration,*** https://youtu.be/yfgpBoehDx4

Second round of User Feedback Sessions

Because of change in game design, we still focused on testing the *user flow and interaction* in this round.

Since we have the whole flow this time, we conducted the usability testings based on two tasks:

- **Go through the onboarding tutorials**
- **Start a timer and unlock a new city**

Followed by some interview questions.

Findings / Key Insights

(1) By reviewing the ***on-boarding process***, user can get a sense of what the app is intended to do.

(2) The ***charity goal*** feature requires more explanation and related information, and needs to be tied closely with the overall game design.

(3) ***Timer*** setup requires detailed design on various user needs: (1) minimum and maximum range, (2) recommendation for setting up the timer.

(4) Users have high requirements for ***interface consistency***. Even small offset makes users uncomfortable.

(5) Animation between screen switches are necessary and need to be added in the future.

Next Steps - Challenges

Game Design

How to determine how much stars are required to unlock a new city without too much effort on the backend?

Charity high goal

Users are interested in the charity goal. How to explain the charity goal to users clearly and give a good design for users to understand?

Next Steps

Design Team

1. Address problems we have identified from the prototypes

2. Create high-fidelity UIs

Tech Team

1. Refine the API and database design
2. Implement the remaining features for testing
3. Deploy App to public service and then test the functionality and data flow