Chester Square Park Green Space

Team 5
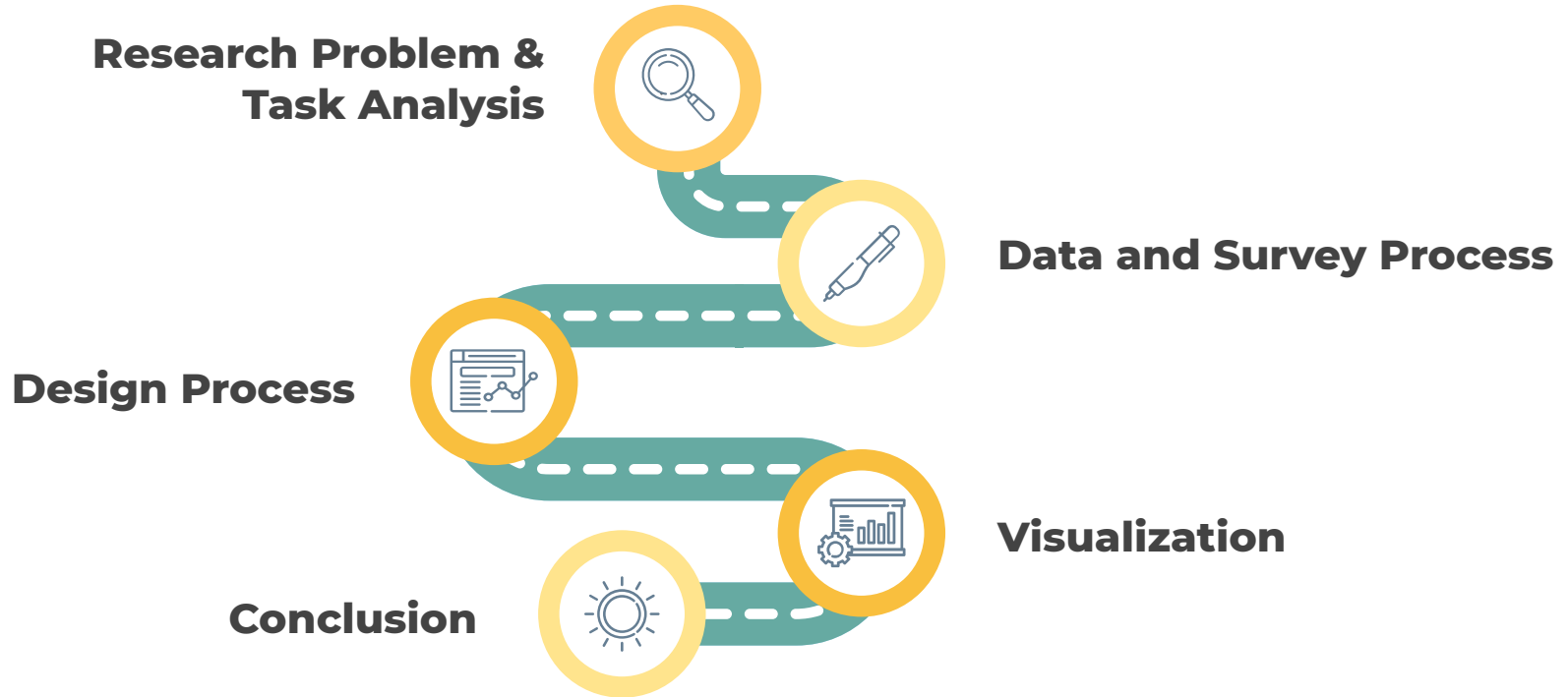
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DS4200 Fall 2019 — Professor Cody Dunne
Northeastern University

Agenda

Research Problem & Task Analysis

Data and Survey Process

Design Process

Visualization

Conclusion

OUR RESEARCH PROBLEM

In such a limited space, what is the best, most effective way to utilize the park to improve the neighborhood?
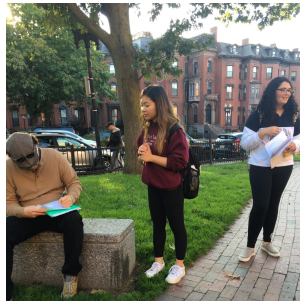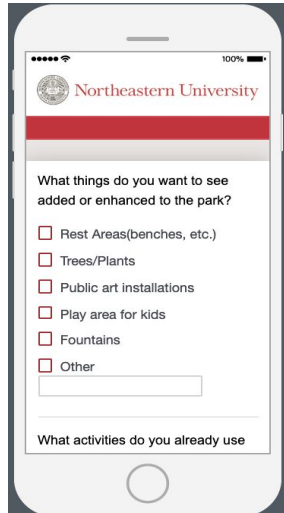
Task Analysis

High Level:
summarize

Mid Level:
explore

Low Level:
identify

Data and Survey Process

Draft Sample
01
Questions were sent to Carol for approval and later fixed with edits

Qualtrics Online Survey
02
Based on a Marketing Research class, an online survey was created in Qualtrics. Carol distributed the survey link to the Chester Park and Friends of Chester Square Park email list.
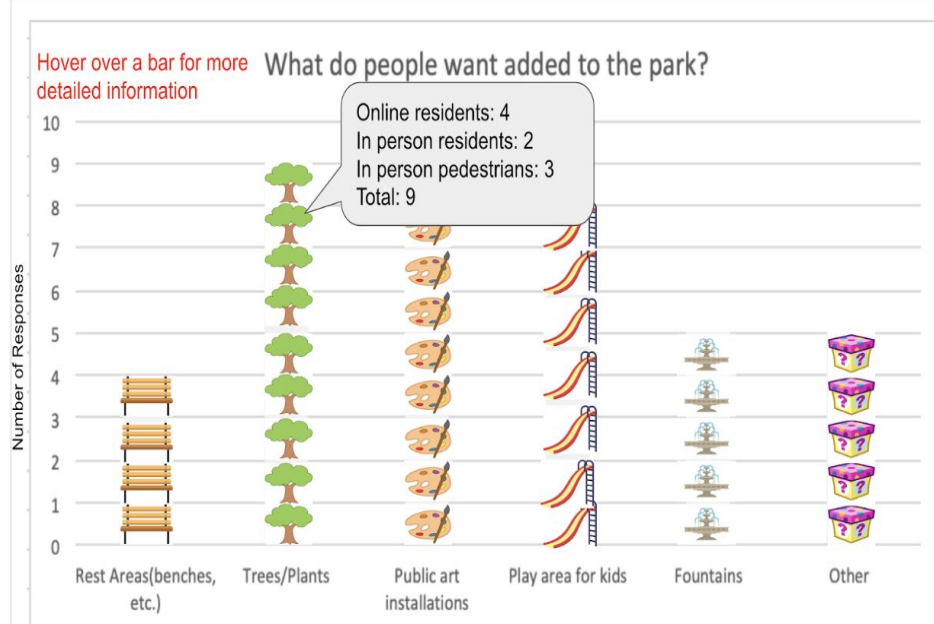
In Person Survey
03
We printed out paper versions of the surveys and distributed to residents and pedestrians in person.
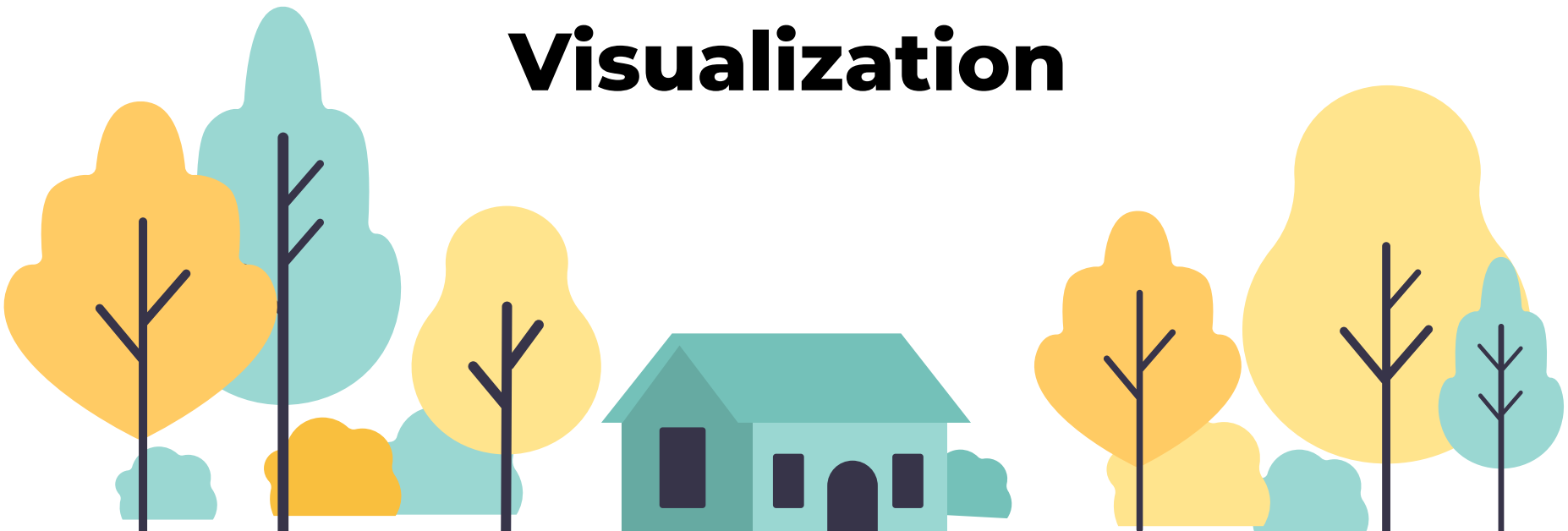
Sample Size
N = 27

Design Process

Visualization

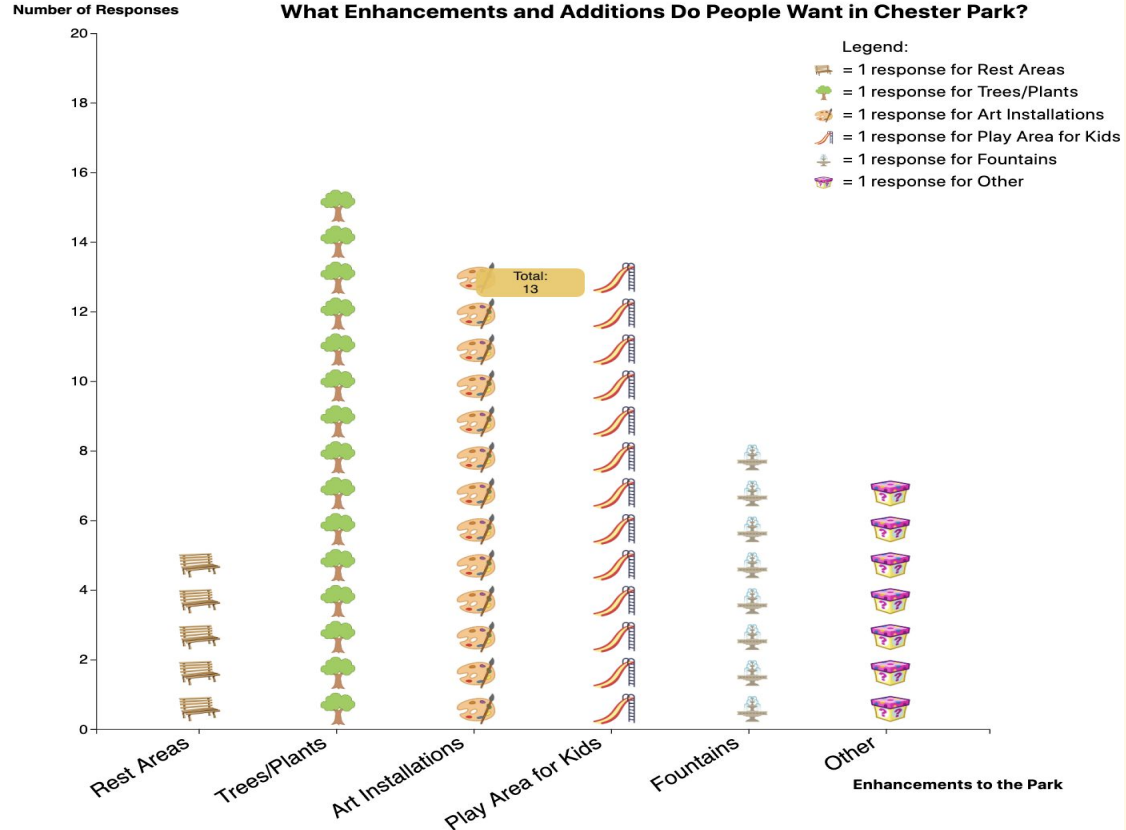# What Enhancements and Additions Do People Want in Chester Park?

Isograph
Visually stimulating, each unit represents a response

Legend
Discussed with Carol which categories to include.

Contains an "Other" section for open ended responses

What Enhancements and Additions Do People Want in Chester Park?

Number of Responses

Legend:
= 1 response for Rest Areas
= 1 response for Trees/Plants
= 1 response for Art Installations
= 1 response for Play Area for Kids
= 1 response for Fountains
= 1 response for Other

Total: 13

Rest Areas   Trees/Plants   Art Installations   Play Area for Kids   Fountains   Other

Enhancements to the Park
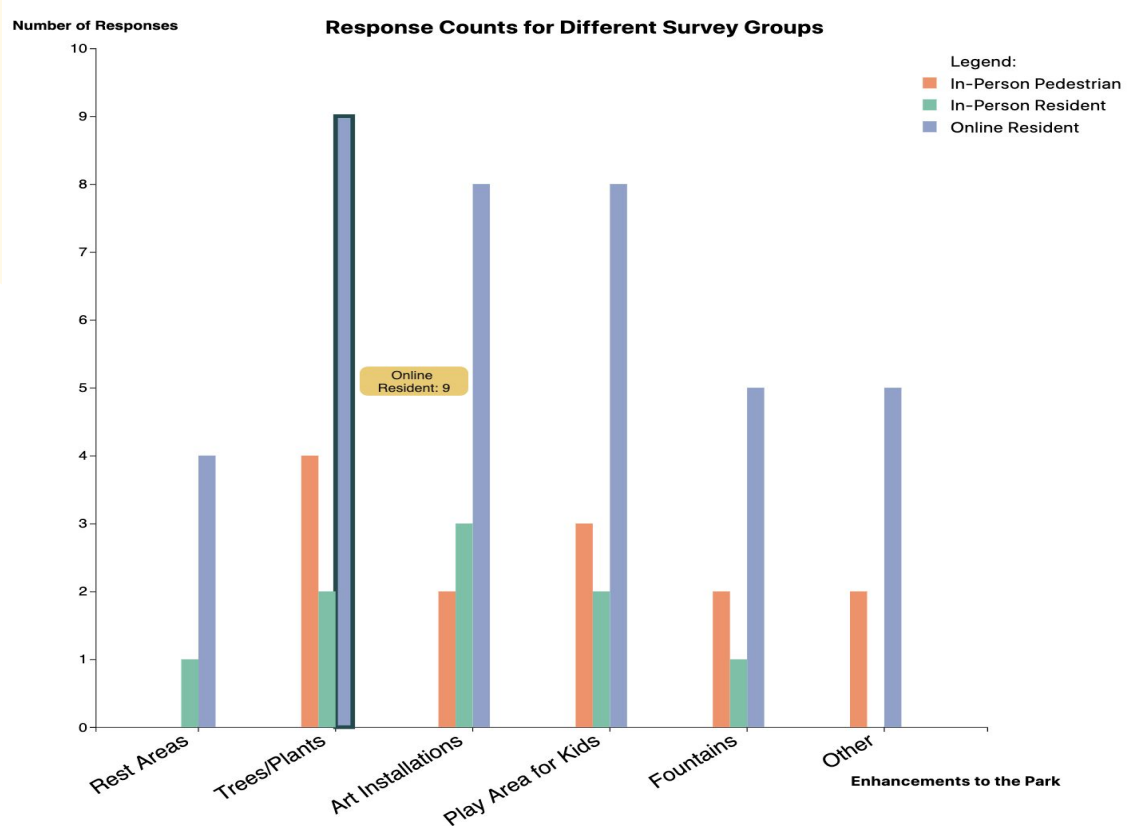
Response Counts for Different Survey Groups

Grouped Bar Chart
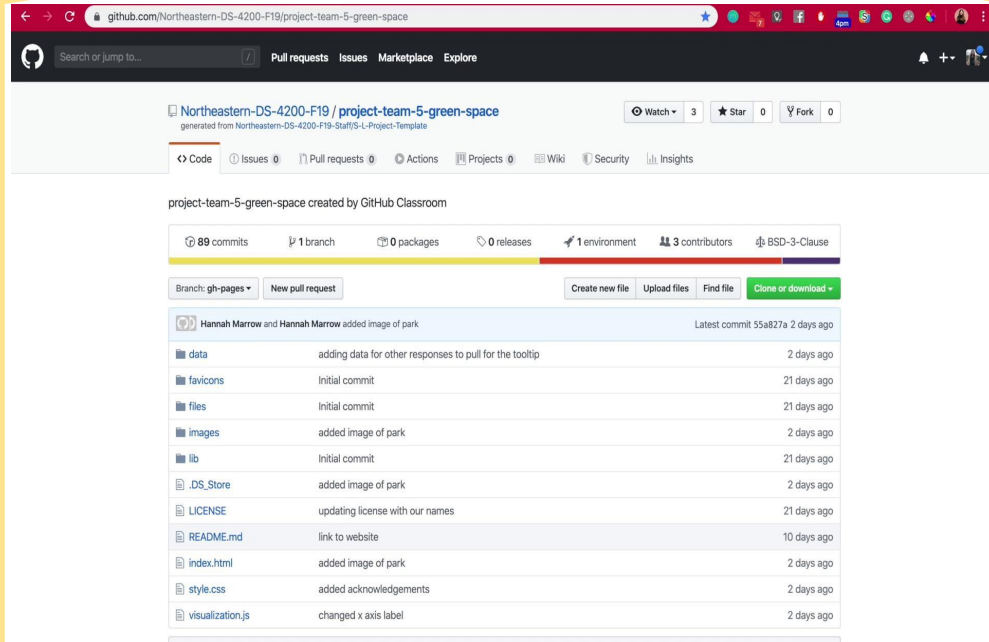Used color encoding to differentiate between the three different survey groups.

Colors have been tested for color blindness

Breakdown
Deeper insights to draw analysis - what kind of people responded in what way?

Number of Responses

Response Counts for Different Survey Groups

Legend:
- In-Person Pedestrian
- In-Person Resident
- Online Resident

Online Resident: 9

Rest Areas | Trees/Plants | Art Installations | Play Area for Kids | Fountains | Other

Enhancements to the Park

Website Demonstration

Conclusion

Data Insights

01
Define Target Population

Depending on the person's background, they have different needs.
- **Residents**
- **Pedestrians**

02
Focus on the Current Functionality

Instead of implementing all brand new features, focus on the things that already exist in the park, like trees and fountains, and improve these.

03
Most Desired Enhancements

The data shows the most frequent responses to our research question to be trees/plants, followed closely by art installations and a play area for kids.
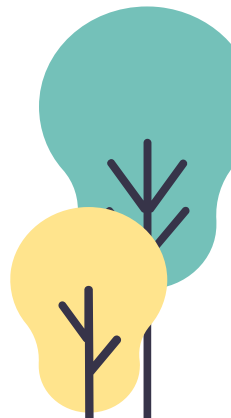
Challenges

STARTED WITH NO DATA, NO APIS
Had to figure out what we wanted to ask, and go out and collect our own data.

LACK OF SURVEY RESPONSES
We did not have much data to work with after first online survey, so we had to go out in person and collect survey data on paper in order to create meaningful, robust visualizations

LEARNING D3
Difficult working in D3 Version 5.
Very few examples, especially for the isograph.

Future Improvements

CONNECT SURVEY DEMOGRAPHICS TO RESPONSES
Link gender/age info to responses to draw further conclusions

BE CLEAR ON WHAT SURVEY ANSWERS MEAN
(Drinking fountains vs decorative fountains. Plants OR trees.)

INDICATE PERCENTAGES ON GROUPED BAR
Different totals for each response type might be misleading

CREATE VISUALIZATIONS FOR EACH QUESTION WE ASKED
How often do you use the park? How would that change?

DO MORE DATA COLLECTION
More data is always better!

THANK YOU

Does anyone have any questions?

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https://github.com/Northeastern-DS-4200-F19/project-team-5-green-space