

#### Problem

- ➤ Public spaces are meant to be open, inclusive and democratic, but today we see physical, social and cultural barriers. [1] Marginalized communities face barriers like safety concerns, improper infrastructure, discrimination etc.
- There is no information on whether a place is safe and accessible for a minority group
- ➤ Decision makers and service providers do have an idea about how different regions are lacking in terms of inclusivity
- The lack of facilities to access, live and enjoy the public space often isolate communities, limiting their freedom to engage into the public sphere. Thus the community suffers<sup>[2]</sup>

#### Personas



Rita | Identifies as Male

- ➤ Goes to a restaurant and faces discrimination
- ➤ Voices their experiences to create awareness



George | Urban Planner

- ➤ Works in Illinois Urban Planning
- ➤ Wants to improve public parks' facilities and safety

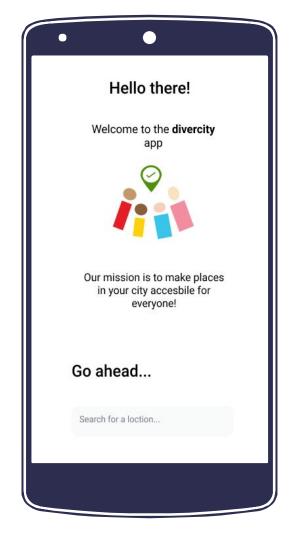


Jennifer | Restaurant Owner

- ➤ Wants to create an inclusive environment in their cafe
- ➤ Notices a decline in African
  American visitors at their cafe

#### Solution

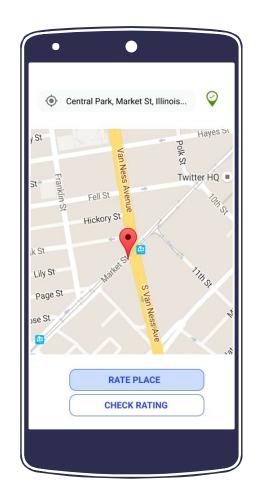
- Through a democratized rating system for urban spaces (parks, streets, markets, restaurants, commercial complexes etc.), we aim to provide a platform to help marginalized groups voice their concerns and share their experiences anonymously while at the same time check how safe it is for them to visit a place
- Thus creating a feedback loop that brings about a shift in behaviour, alerts the authorities and stakeholders to take decisive action

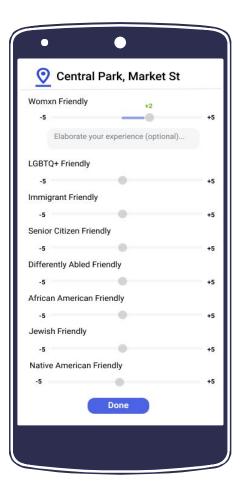


#### **Key Features**

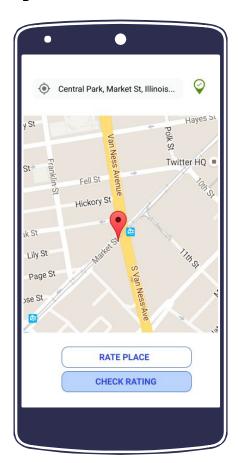
➤ Give ratings and reviews anonymously

> Check ratings and reviews for places in the city

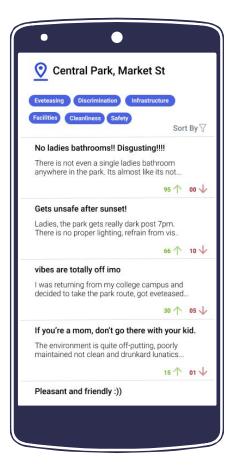




#### **Key Features**









# Workflow



Fishy visits their favourite bar and rates it



Ratings are saved in the backend DB indexed by the timestamp & location.

Mousey has to grab dinner at late hours without feeling unsafe, so they check the ratings of nearby restaurants



In the backend, all the individual ratings for a location are aggregated







# Workflow



If fishy feels comfortable doing so, they can leave a review in addition to their rating, which is stored with the ratings

On Mousey's end, the app will fetch all reviews under a certain group for a certain location



The filter operation is facilitated by tags that are derived from the reviews themselves by a sophisticated process



Additionally, the data collected over time can be used to present summary visualizations in the dashboard using various analytics tools.

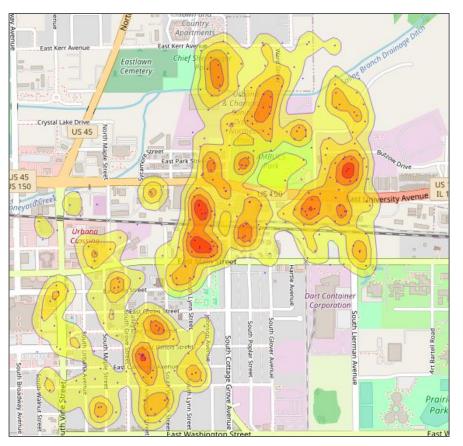
#### Data and Privacy

Given that racial ethnicity and gender identities is highly sensitive information, we ensure that all citizens enjoy full discretion about their data hence we avoid storing any personal information

- Anonymity (no sign up required)
- > No location permission, geolocation tracking etc
- No cookies (in compliance with GDPR)
- > No PII (personally identifiable information) taken from the user
- Device ID stored in hash encrypted form



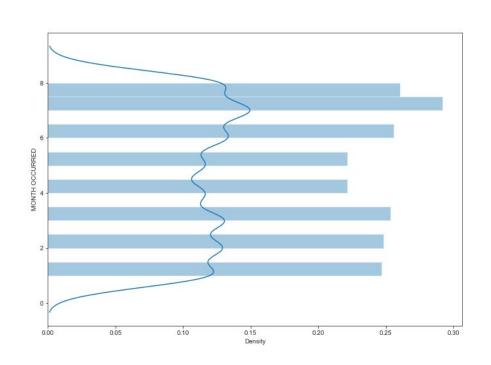
## Geo Mapping

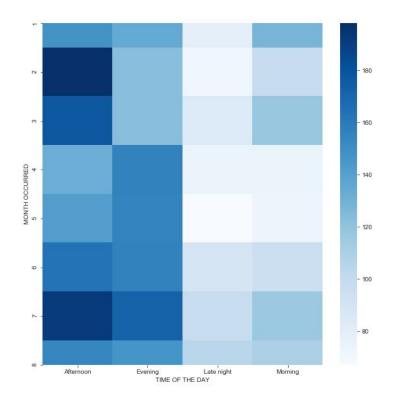


- We combine the data gathered by our application and data of police incidents reported by Urbana Police to calculate a safety score
- Can be used for determining a safe route of travelling for citizens when commuting at odd times
- The data of the heat maps can be time dependant and show a safety score based on the time of the day

Current heatmap is plotted using random data points from the police incidents dataset by Urbana Police added with a dummy data points generated from the application

# **Dashboard and Insights**





### Dashboard and Insights

- ➤ Analytics to aid municipal design and management decisions and implementation of urban agendas
- > Location based insights and NLP models to parse reviews and perform sentiment analysis

➤ Detailed reporting and analysis of business ratings and reviews, providing a birds eye view of performance

## Challenges and Risks

Quality control of ratings and reviews data (no PII collected poses risk of poor quality reviews)

Value proposition to two separate groups is dependent on penetration in the other (Chicken and Egg problem)

## References

[1] Bravo, L. (2018) "We the public space. Strategies to deal with inequalities in order to achieve inclusive and sustainable urban environments", The Journal of Public Space, 3(1), pp. 163-164. doi: <a href="https://doi.org/10.5204/jps.v3i1.326">https://doi.org/10.5204/jps.v3i1.326</a>.

[2] Yasminah Beebeejaun (2017) Gender, urban space, and the right to everyday life, Journal of Urban Affairs, 39:3, 323-334, DOI: 10.1080/07352166.2016.1255526

Dataset used: <a href="https://data.urbanaillinois.us">https://data.urbanaillinois.us</a> (Police-Incidents-Since-1988)

