Ubiquitous and Mobile Computing
CS 403x: Urbanopoly - A Social Crowdsourcing Game

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What is Urbanopoly?

- A Game with a Purpose (GWP) designed to conduct quality assurance on urban data (e.g. restaurant information) using the user's current location and social graph
What is Urbanopoly?

- Ultimately intended to use Human Computation (crowdsourcing) to create a high quality dataset of urban data
  - **Problem:** Curated datasets are expensive, plus faulty information can hamper the usefulness of datasets
  - **Solution:** crowdsourcer data using an interactive, social monopoly-like mobile game
Methodology

- Uses OpenStreetMap for map data
- Uses Facebook API for social sharing
- Achieves QA using:
  - Data collection
  - Data validation
  - Data ranking
Gameplay

- User is a landlord, whose aim is to create a "rich portfolio of venues"
  - Venues
    - Real places surrounding the user
    - Orange ones belong to the user, blue ones do not
  - All have monetary values
- Budget
  - User uses money to buy venues
Venues

- Location
- Type
- Hours
- Rating
- Extra info (food served, smoking rules)
Gameplay

- Data Collection
  - Venue purchase
    - Users required to name venue and specify its type
  - Venue advertisement
    - Store owners can rank ads
- Quizzes
  - Ask general questions about venue
Example Quizzes

DiVino
Restaurant

what's its cuisine type?
- Italian
- Burger
- Chicken
- Chinese
- No one

EDA
Restaurant

is smoking allowed? (yes/no)
- No
- OK
- I don't know

Irene Celino
830.500
75.785
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Similar Work

- While not specifically mentioned, similar apps exist:
  - Foursquare
  - Yelp
  - Google Maps

- Urbanopoly differs by gathering data through a gaming platform
  - Other apps usually use surveys
  - Gathers more data types
Observations

● Likes
  ● Social aspect makes it more appealing
  ● Gaming aspect makes it very engaging for users; more "fun" than just surveys (e.g. Google Rewards)
  ● Leaderboard to compete against friends

● Dislikes
  ● Paper is not very in-depth
  ● Only available in certain locations
  ● Possibly slow to start
Conclusions

- Available in the Milan and Lombardy
- Users spend an average 11 minutes ALP
- Potentially more accurate
- Focus on keeping players invested
- More useful data than competition
References

- Paper
- Yelp Logo <http://s3-media2.fl.yelpcdn.com/assets/srv0/www_pages/95212dafe621/assets/img/brand_guidelines/yelp-2c.png>
- Foursquare Logo <http://www.websitemagazine.com/images/blog/foursquarenew.png>