School Environmental Explorer

Concept by Team Randoms:

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Aims

- Create a tool for use by school children
- Self Discovery of their nearby environment
- Exposure to digital tools for 5-7 year olds
- 'Helper' opportunity also for older children
- Can be extended for use by policy makers

How

- Children often learn by doing
- Give them Interactive exploration
- Added excitement by personal relevance
- Mentoring if older children assist younger children

What

- Start by finding their own school
- Using “autocomplete”
  - can become familiar with letters in their school name

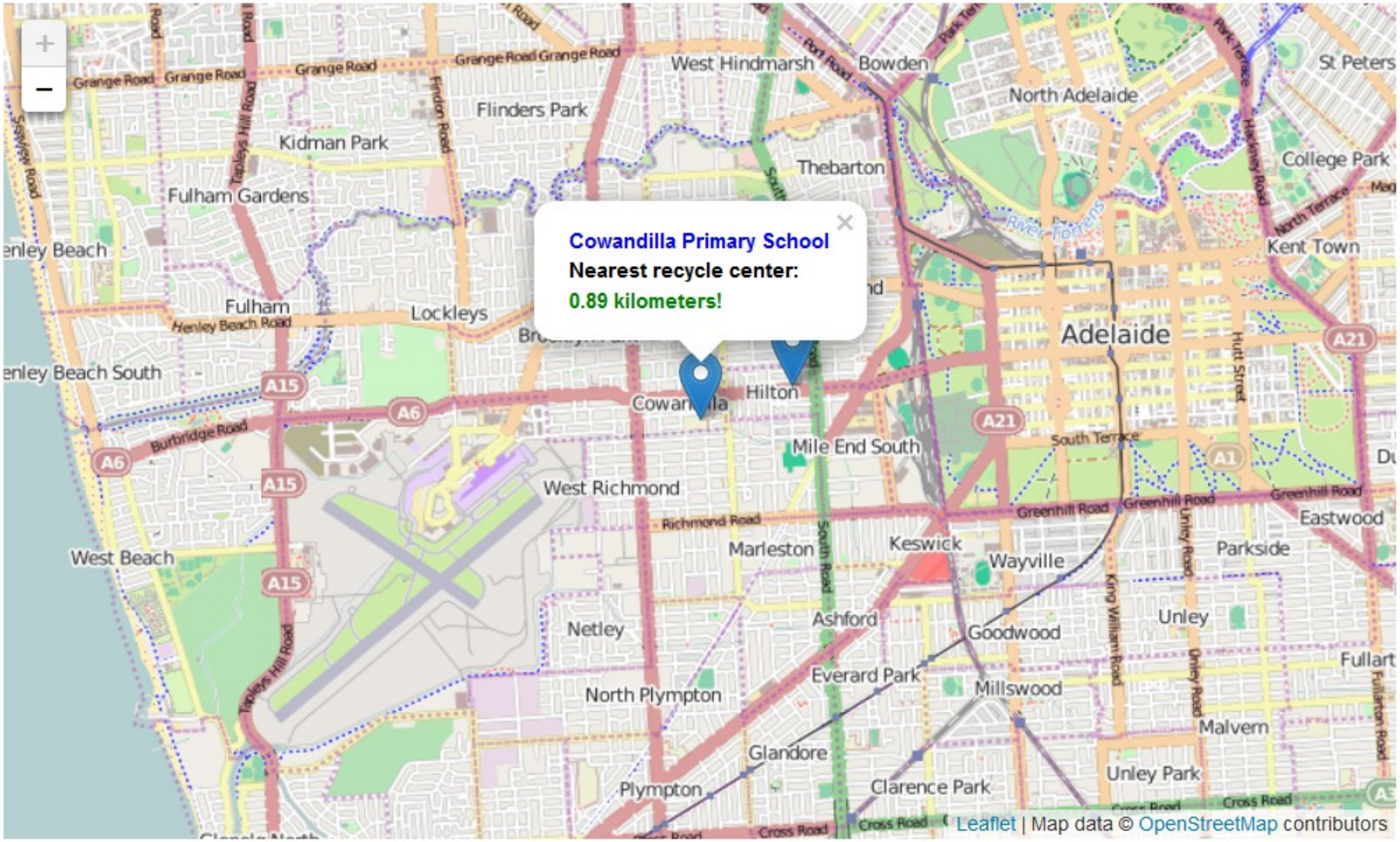
Feedback

- Computer then shows a map
- Shows school, and nearest recycle center
- Chance to learn / teach about geography

Welcome to the School Environment Explorer :-)

(A Team Randoms Production)

Your chosen school is Cowandilla Primary School (Return to search).



Exploration

- Can click on school for more menu options
- Can then find nearby:
  - watercourses, habitats
  - playgrounds
  - other features of interest
- And learn about local area
  - display list of related informational articles to nearby area
  - chance for older children to read to younger children and they both learn something

Teaching with Interest

- Playground – something young children like
- Water course, habitat
  - can learn about nearby environment at same time
- Recycle center
  - can learn about practical measures to help environment
- Wikipedia
  - can learn about history or current information of area

The Data

- data.sa.gov.au -Zero Waste SA
  - for recycle center information
- www.sa.gov.au site
  - for state school information
- Open Street Map
  - for location context
- Wikipedia
  - For information about the locality

The Prototype Software

- It took us a while to find our 'Unleashed' feet
- We developed some tools to help automate data transformation
- We had a day or so left to hack on the web code

Prototype

- Demonstrates use of auto complete
- Demonstrates use of map distances
- Demonstrates use of map markers

Next Step

- Find the time to finish the code!
- Find an artist to add lots of flourish
- Need to make tool attractive to children :-)

Next Step - Details

- Integrate information – wikipedia popups
- Integrate additional data (habitats, water)
- Include non-government schools
- Find other relevant data sets to add

Extensions for Policy Makers

- Concept can extend to a useful tool
- By showing links cross department:
  - demographic data related to area
  - unemployment levels
- Planning example:
  - government provided incentive for:
    - encouraging location of future recycling aggregation
    - in underserved areas that have high unemployment

Credits

- Kylie – recycle centre concept
- Andrew – web development & prototype web hosting
- Kylie – dataset discovery and CSV extraction
- Andrew – SQL data processing
- Zachary – video recording
- Kylie – Video production
- Andrew – team page
- Andrew – this presentation
- Andrew – software source code (GitHub)