TUmap

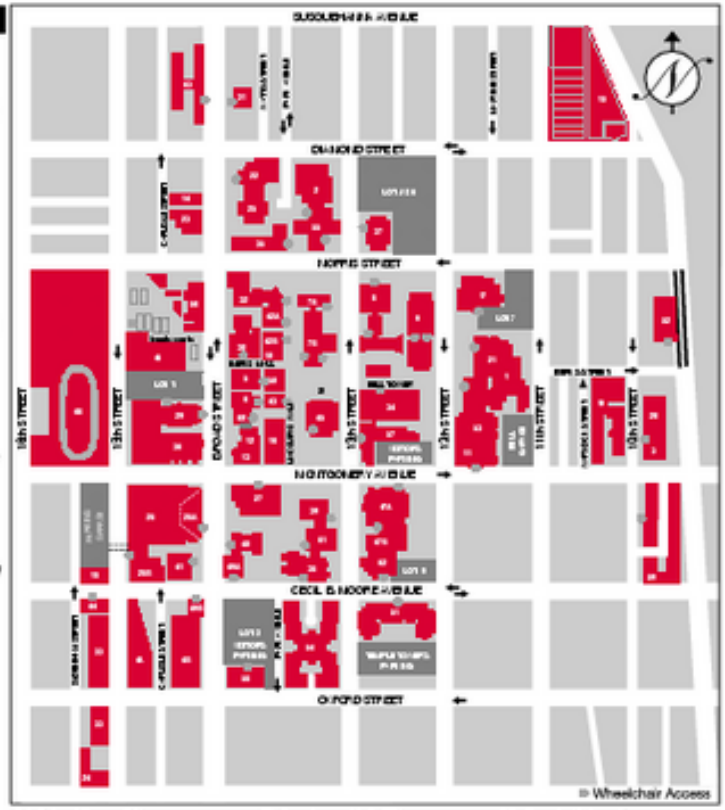
Final Presentation

Adama Coulibaly
Willy Lulciuc
David Mason
Sean Moogan
Benjamin Walker

Main Campus

BUILDINGS and DEPARTMENTS

1. Anderson Hall (AB, AC, AL)
2. Annenberg Hall (AH) (ARTI)
3. Atlantic Terminal (Privately Developed Housing)
4. Avenue North Complex
   - 4A. Student Housing
   - 4B. Shops
5. Baptist Temple
6. Barrack Hall
7. Barton Hall (Physical Science)
   - 7A. north
   - 7B. south
8. Beury Hall (BE)
9. Biology-Life Sciences Building (BL)
10. Campus Police Sub-Station
11. Campus Safety Services
12. Carnell Hall
13. Conwell Hall (CW)
14. Conwell House
15. Edberg-Olson Football Practice Facility
16. 1800 Block Liacouras Walk (student services)
17. Engineering and Architecture (EA)
18. Entertainment and Community Education Center and retail shops
19. Facilities Management Office
20. Founder's Garden
21. Gladfelter Hall (GH)
22. Hardwick Hall (student housing)
23. Hillel Foundation
24. Elmira Jeffries (student housing)
25. Johnson Hall (student housing)
26. Karden Building (Privately Developed Housing)
27. Klein Law Building (James E. Beasley School of Law)
28. The Liacouras Center
    - 28A. Esther Boyer Theater
    - 28B. Independence Blue Cross Recreation Center
29. McGonigle Hall (MG)
30. Mitten Hall (Diamond Club)
31. Newman Center
32. "1940" (student housing)
33. Oxford Village (Privately Developed Housing)



34. Paley Library (PL)
35. Peabody Hall (student housing)
36. Pearson Hall (PH)
37. Presser Hall (PR)
38. Ritter Hall Annex (RAV Kiva Auditorium
39. Ritter Hall (RH)
40. Rock Hall (RC)
41. 1700 N. Broad St.
42. The Shops on Liacouras Walk:
    - 42A. and 42B.
43. Shusterman Hall
44. Small Business Development Center (1510 Cecil B. Moore Ave.)
45. Speakman Hall (SP) (The Fox School of Business and Management)
46. Sports and Recreation Fields
47. Student Center/Bookstore
    - 47A. Student Center
    - 47B. Student Center Annex
48. Student Pavilion
49. Subway Station and Plaza (SEPTA)
    - 49A. northbound
    - 49B. southbound
50. Sullivan Hall (SU)
51. Temple Towers (student housing)
52. Temple U. Regional Rail Station (SEPTA)
53. Temple University Tech Center & Welcome Center
54. "1300" (student housing)
55. Tomlinson Theater (TT)
56. Triangle Apartments (student housing)
57. Tuttleman Learning Center
58. University Services Building
59. University Village (Privately Developed Housing)
60. Wachman Hall (Computer/Mathematics)
61. Walk Auditorium
62. Weiss Hall (WH)
63. James S. White Hall (student housing)

TEMPLE UNIVERSITY

Problem

- Temple's campus is compact
  - buildings are hard to distinguish from one another
- Assistance provided is out-dated
  - stationary street corner maps are difficult to update
  - printed handouts are difficult to follow

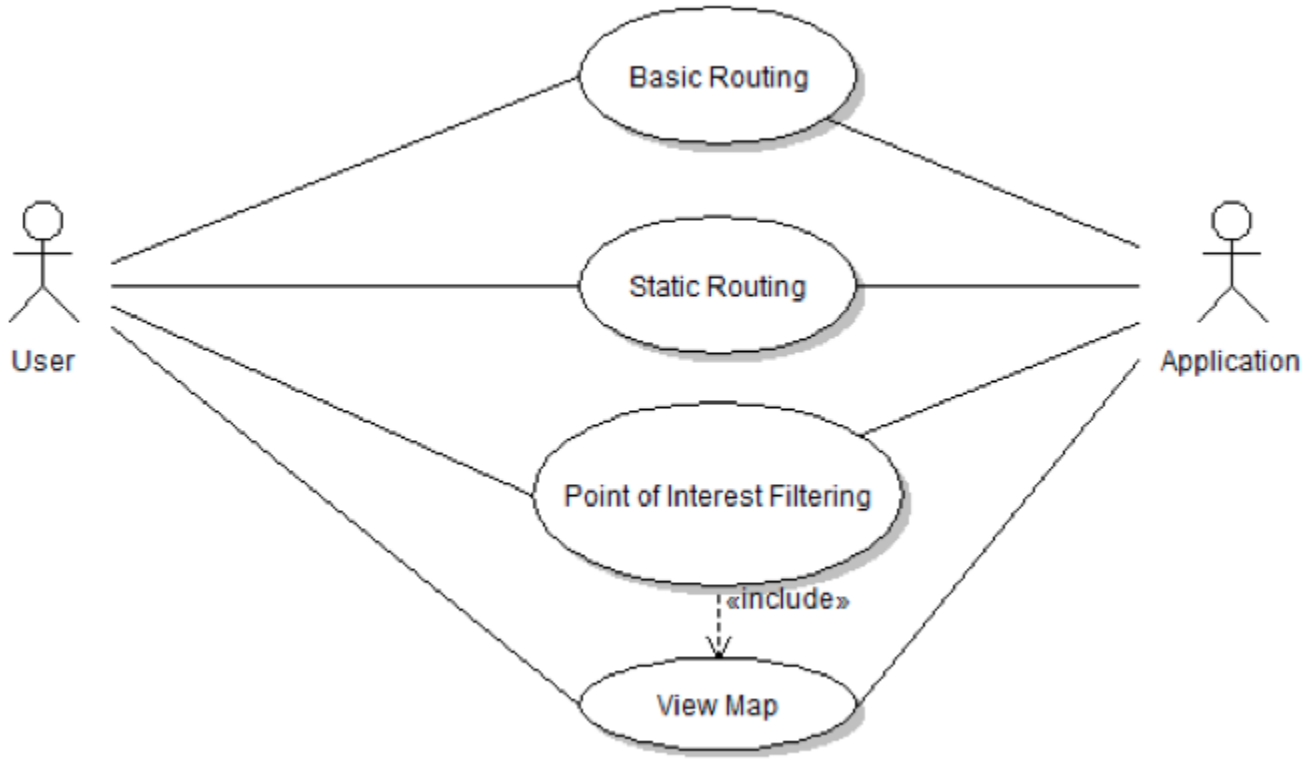
Approaches

- Host Temple's printed map online
  - Distribution and updating are simpler but readability is still poor
- Use Google maps
  - Does not take walking paths into account
  - Cannot search by building name

Overview

- assists incoming freshman and visitors
  - users can carry map around with them
- serves as a clean visual guide:
  - zoomable map
  - dynamic routing
  - quickly identify locations by name
  - more accurate walking paths

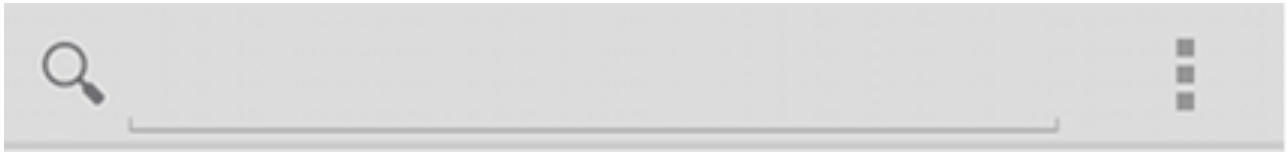
Use Case Diagram



Architecture

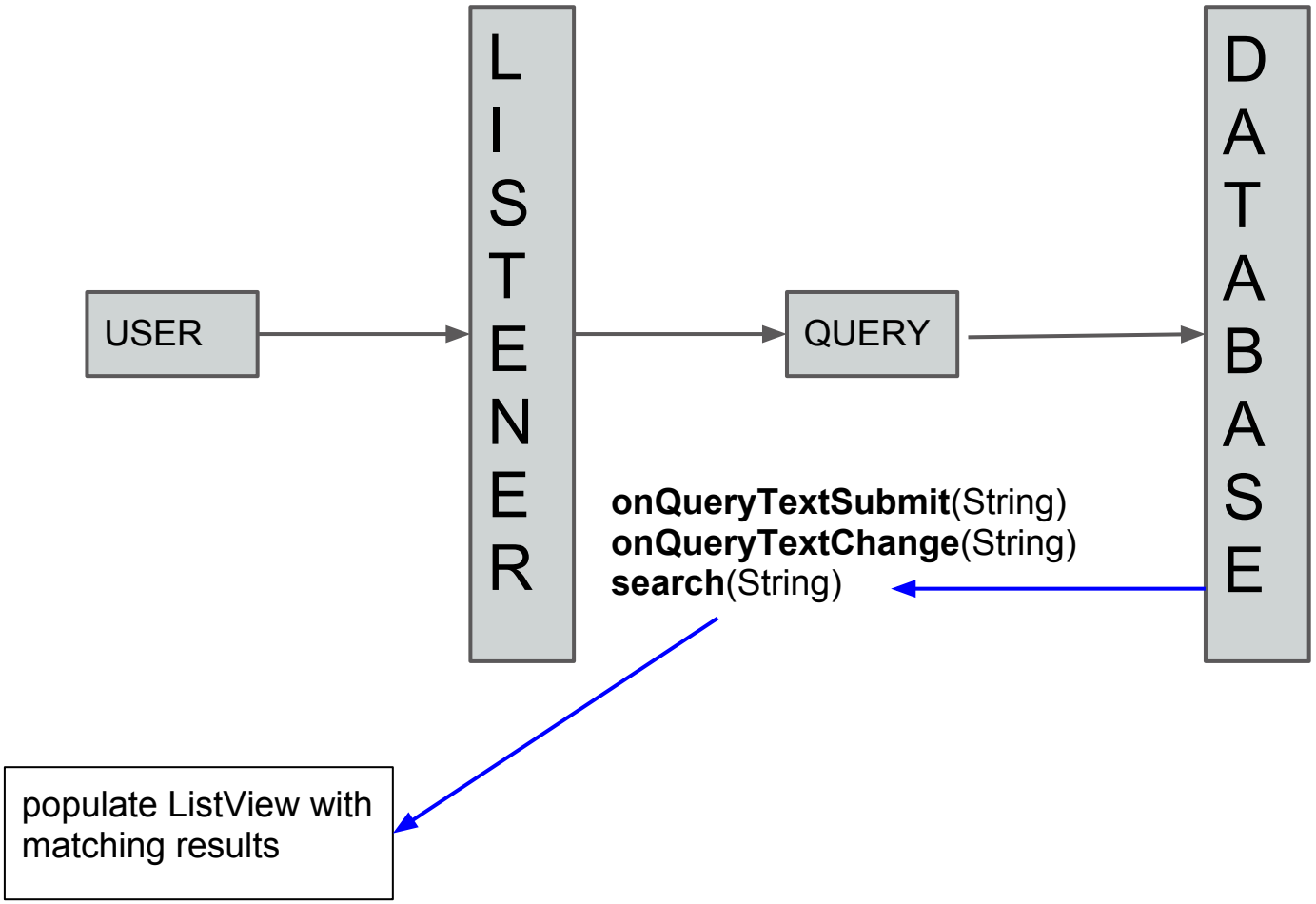
- Platform Version
  - Android 3.0 and higher
  - API Level 11
- Widgets
  - SeachView
- Internal Data Storage
  - Android SQLiteDatabase
- External APIs
  - OSMDroid (.jar ver 3.0.8)
  - CloudMade

Architecture (cont.)



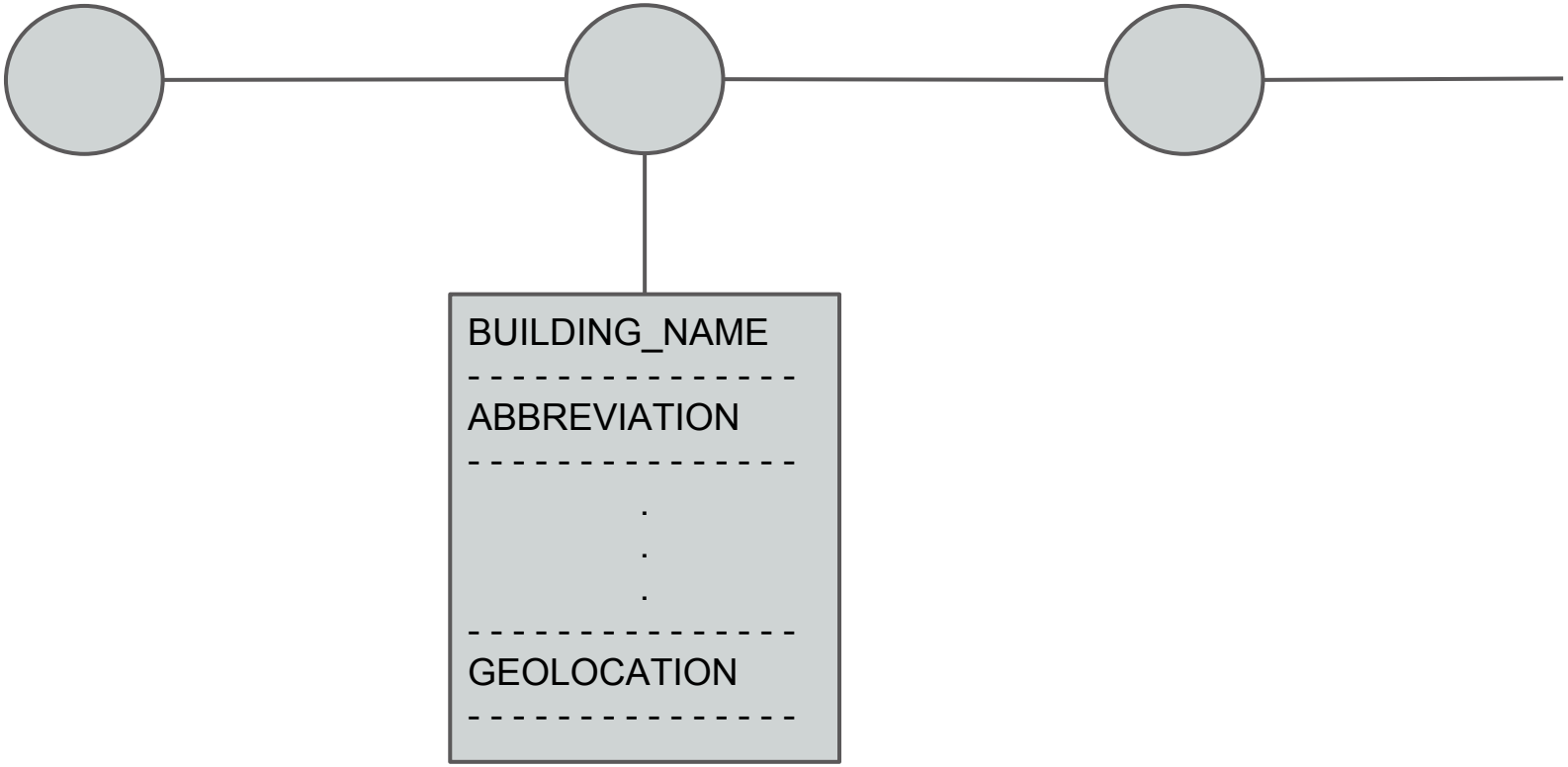
- SearchView Widget
  - available in Android 3.0 and higher
  - interface for users to enter a search query and submit a request to the SQLiteDatabase
  - populate a list of results allowing the user to choose a suggestion

Architecture (cont.)



Architecture (cont.)

SQLiteDatabase



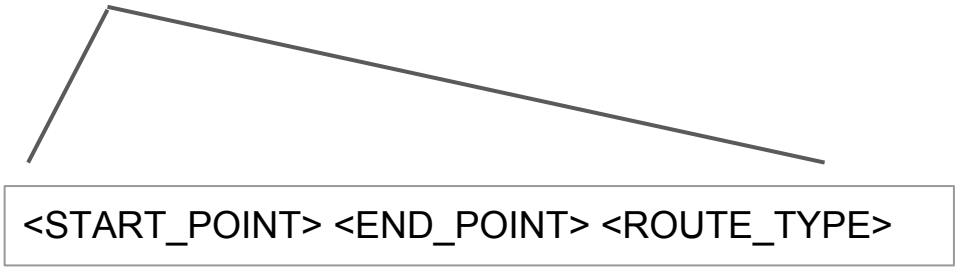
Architecture (cont.)

- OSMDroid (OpenStreetMap)
  - opensource
  - full/free replacement for Androids MapView class
  - provides tools to interact with OpenStreetMap-Data
- CloudMade
  - opensource
  - enables developers to build location based applications and services
  - leverages rich OpenStreetMap-Data to generate routes

Architecture (cont.)

URL

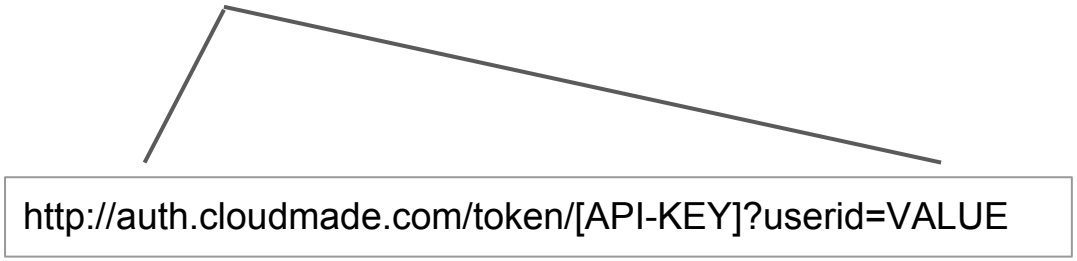
http://routes.cloudmade.com/[API-KEY]/api/0.3/[PARAMS]?token=[TOKEN]



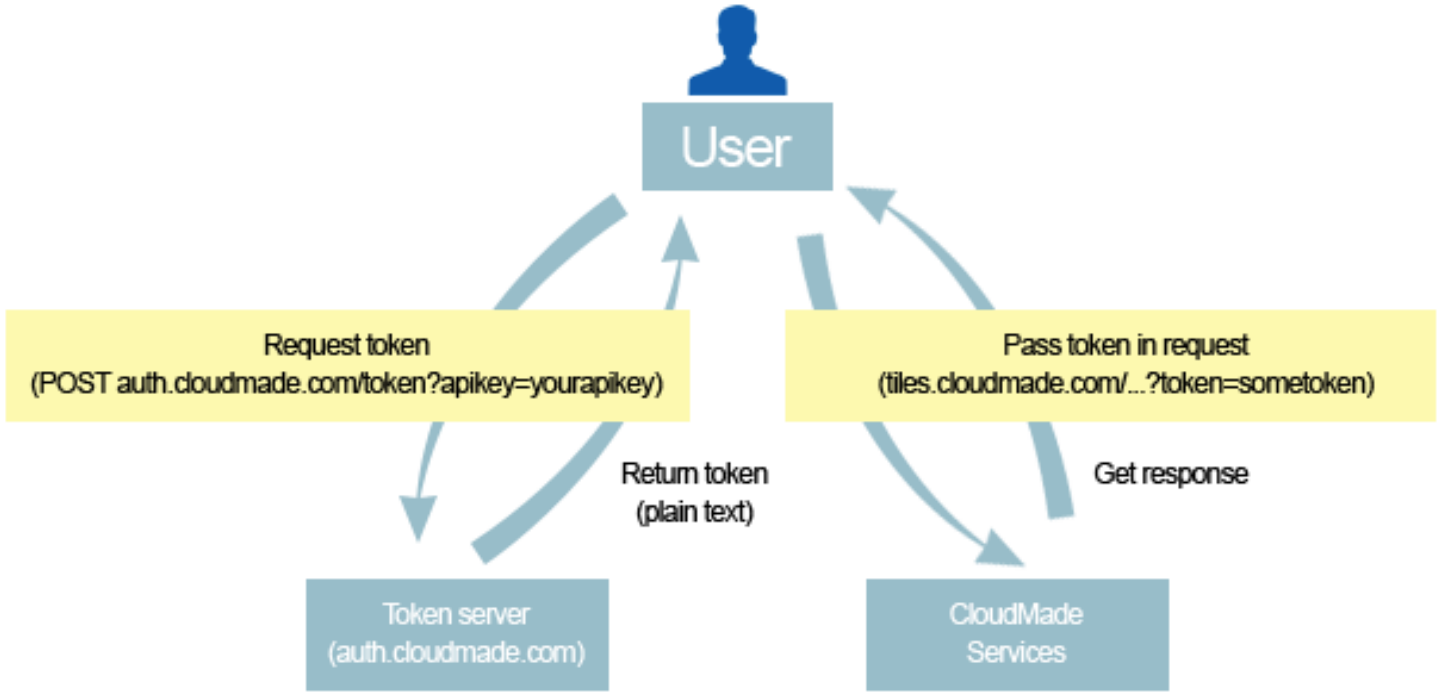
Architecture (cont.)

URL

http://routes.cloudmade.com/[API-KEY]/api/0.3/[PARAMS]?token=[TOKEN]



Architecture (cont.)



Architecture (cont.)

- GPX
  - or GPS eXchange Format
  - XML schema design as a common GPS format
  - describes waypoints, tracks, and routes
  - collections of points
  - latitude and longitude of individual waypoints

Testing Approach & Alternatives

- Why Testing?
- Mistakes are inevitable and bugs will appear
- Tests execute slowly in Emulator or device
- No way to do TDD

Why Robolectric?

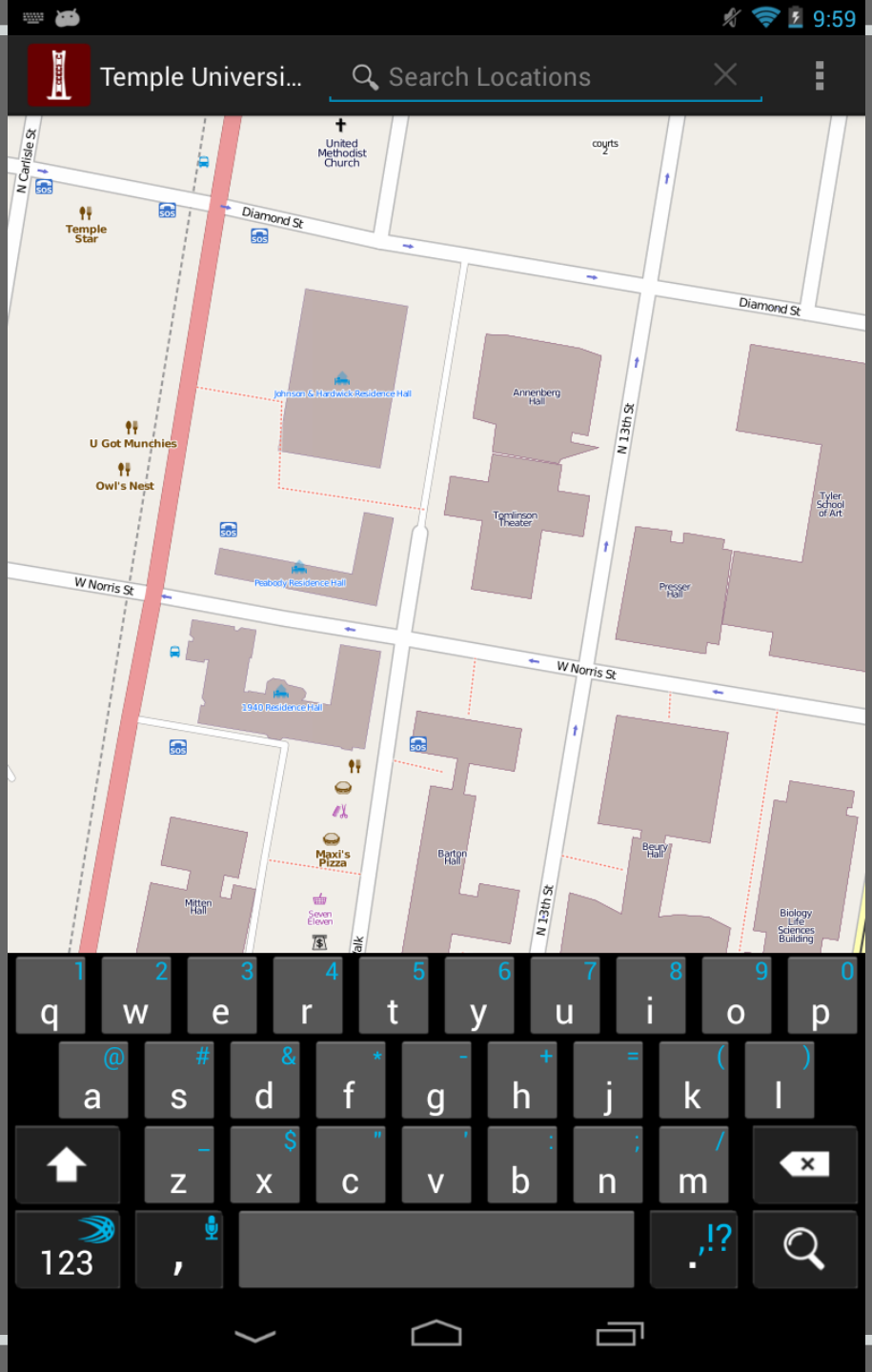
- Tests run outside of the emulator in JVM
- Iterate quickly
- Allow black box style texting
  - Features
    - Shadow Objects
    - View and Resource loading

Troubleshooting

Google stripped the classes in android.jar

java.lang.RuntimeException: Stub!

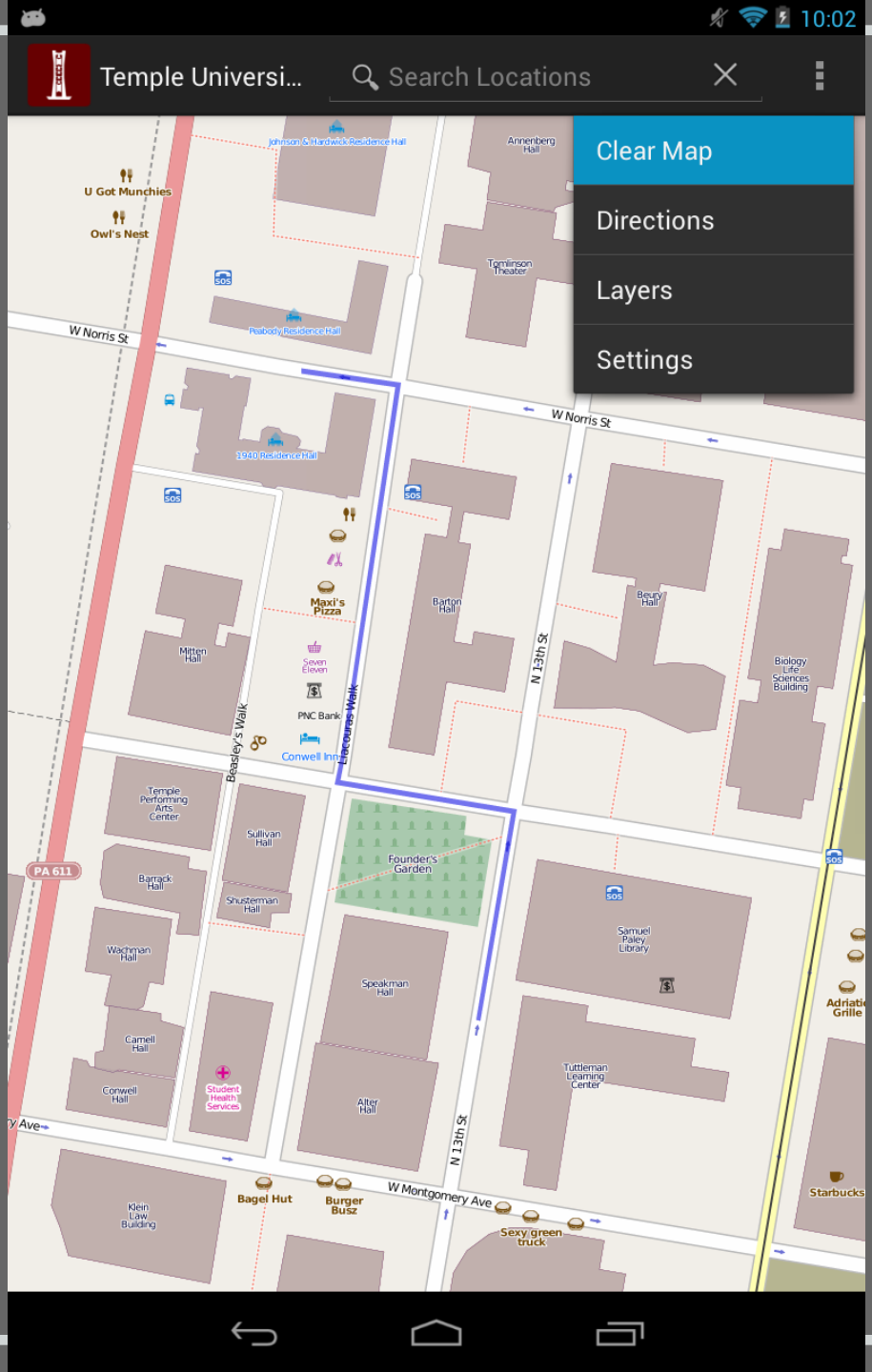
9:58
Temple University
White Hall Residence Hall
Newman Center
Mcdonalds
United Methodist Church
courts
N Carlisle St
Diamond St
Temple Star
Johnson & Hardwick Residence Hall
Annenberg Hall
U Got Munchies
Owl's Nest
Tomlinson Theater
Tyler School of Art
Peabody Residence Hall
Presser Hall
W Norris St
1940 Residence Hall
Maxi's Pizza
Barton Hall
Beury Hall
Mitten Hall
Seven Eleven
PNC Bank
Biology Life Sciences Building
Beasley's Walk
Liacouras Walk
Conwell Inn
Temple Performing Arts Center
Sullivan Hall
Founder's Garden
N 13th St

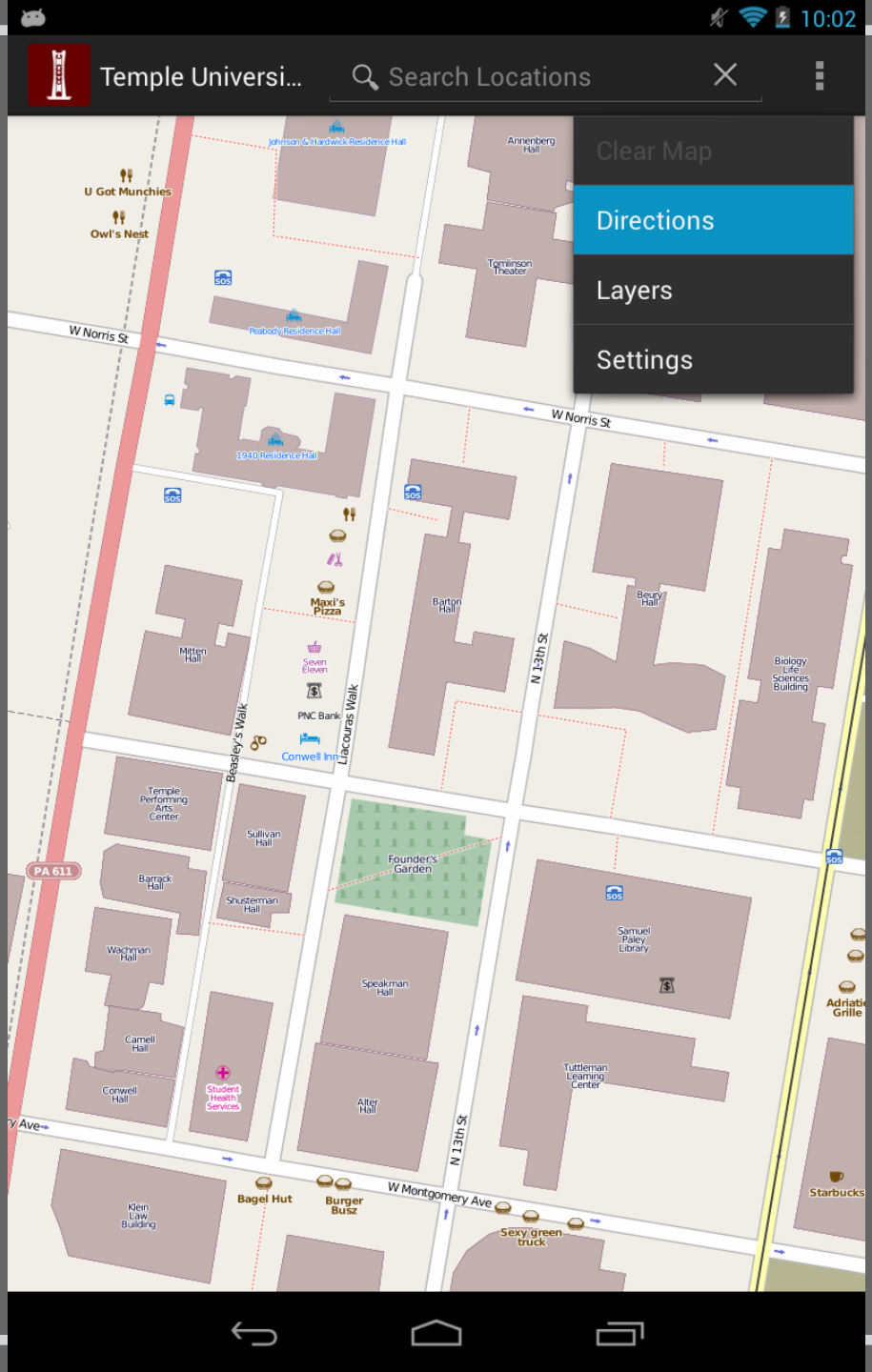

9:59
Temple Universi...
Search Locations
United Methodist Church
courts
N Carlisle St
Diamond St
Temple Star
Johnson & Hardwick Residence Hall
Annenberg Hall
N 13th St
U Got Munchies
Owl's Nest
Tomlinson Theater
Tyler School of Art
Peabody Residence Hall
Presser Hall
W Norris St
1940 Residence Hall
Maxi's Pizza
Barton Hall
Beury Hall
Mitten Hall
Seven Eleven
Biology Life Sciences Building
1 2 3 4 5 6 7 8 9 0
q w e r t y u i o p
@ # & * - + = ( )
a s d f g h j k l
_ $ " ' : ; /
z x c v b n m
123
,
.,!?

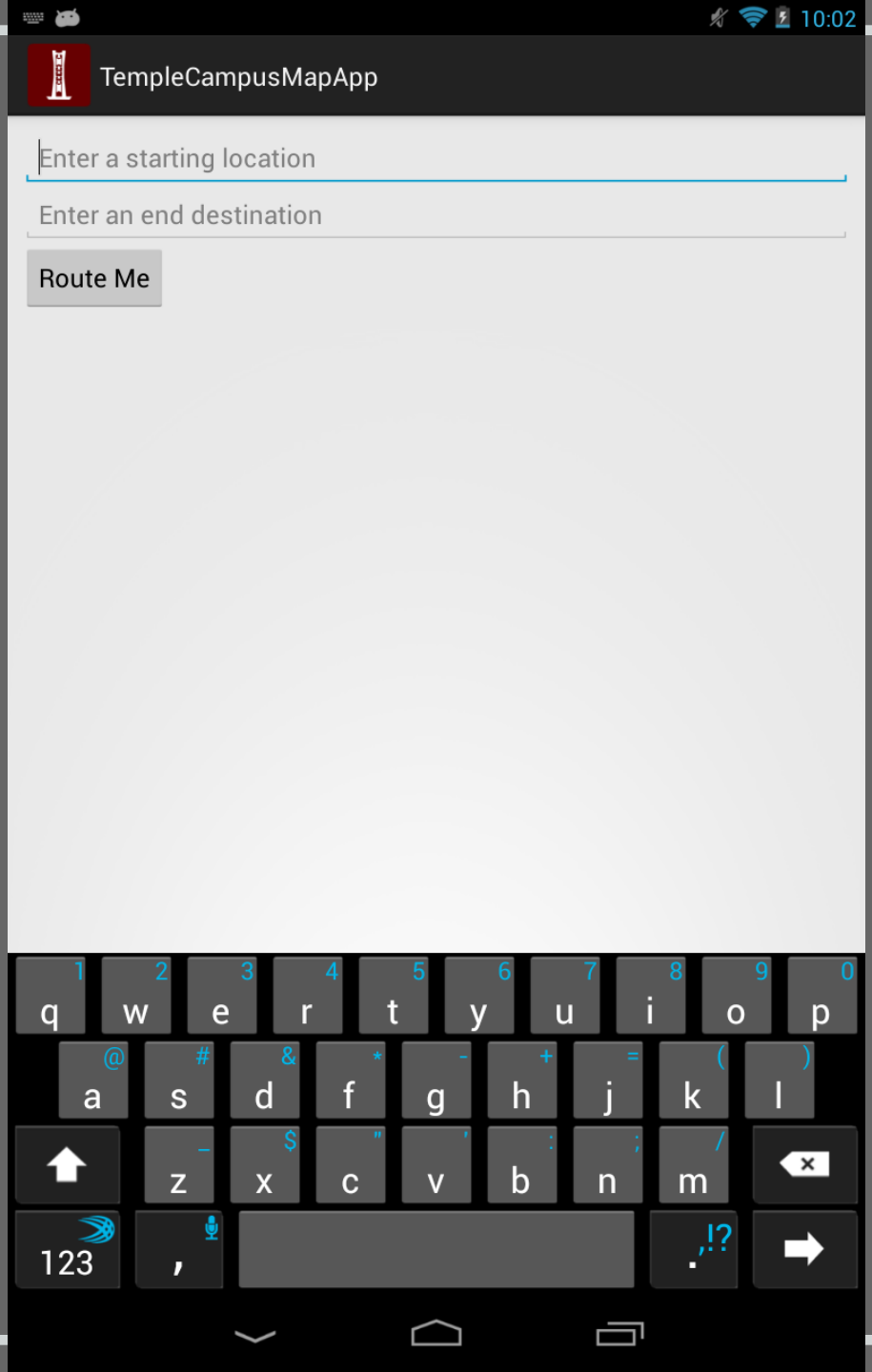
10:00
Temple Universi...
pe
Peabody Hall
2029 N. Broad Street
Philadelphia, PA 19122
Pearson Hall PEARSH
1802 N Broad Street
Philadelphia, PA 19122
Maxi's Pizza
Mitten Hall
Seven Eleven
PNC Bank
Conwell Inn
Beasley's Walk
Liacouras Walk
Barton Hall
N 13th St
Beury Hall
Biology Life Sciences Building
Temple Performing Arts Center
Sullivan Hall
Barrack Hall
Shusterman Hall
Wachman Hall
Founder's Garden
Samuel Paley Library
Speakman Hall
Adriatic Grille
Camell Hall
Conwell Hall
Student Health Services
Alter Hall
Tuttleman Learning Center
q w e r t y u i o p
a s d f g h j k l
z x c v b n m
123
,
.

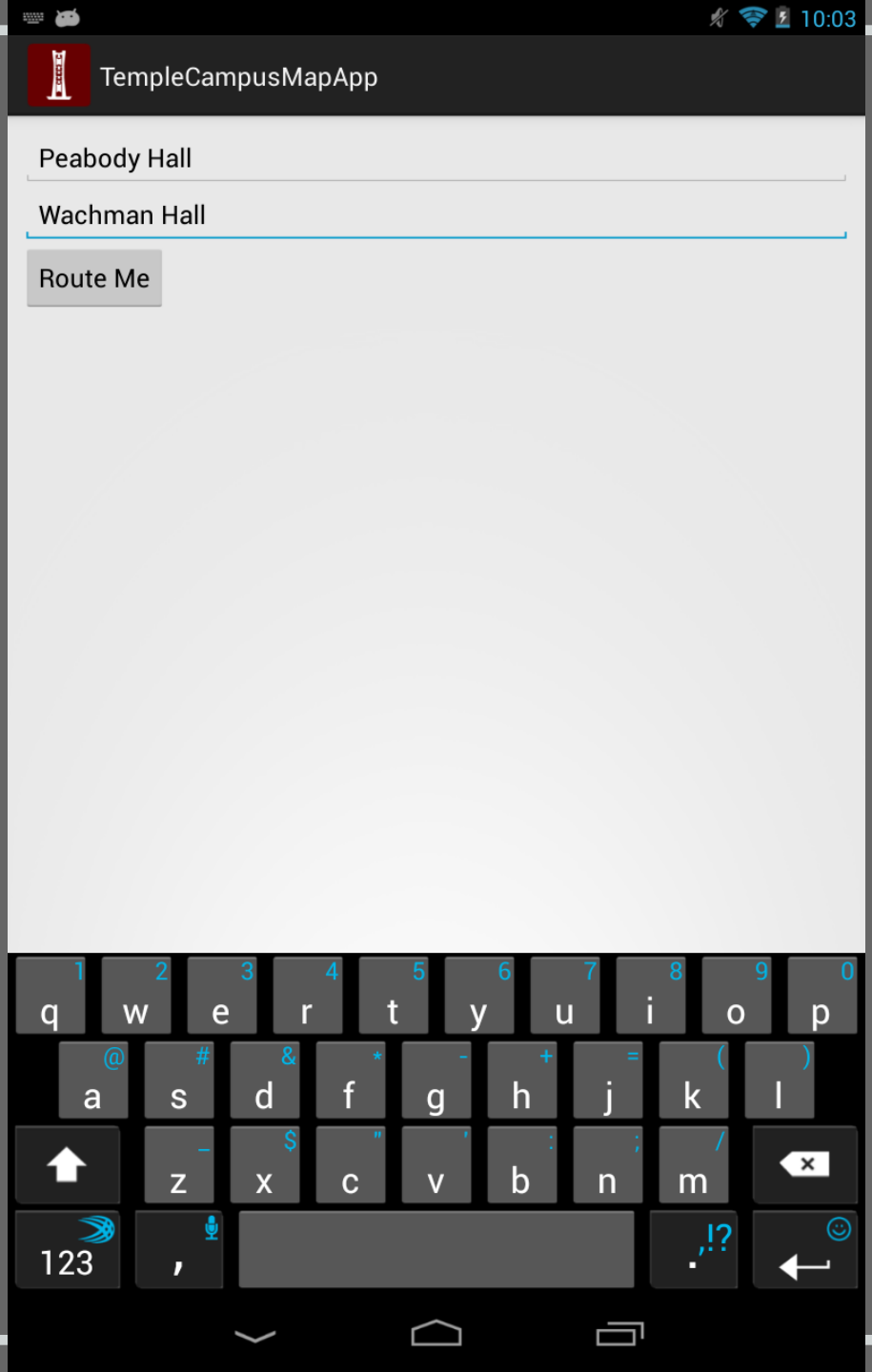
10:01
Temple Universi...
pe
Peabody Hall
2029 N. Broad Street
Philadelphia, PA 19122
Pearson Hall PEARSH
1802 N Broad Street
Philadelphia, PA 19122
Maxi's Pizza
Barton Hall
Beury Hall
Mitten Hall
Seven Eleven
PNC Bank
Conwell Inn
Beasley's Walk
Lincoura's Walk
N 13th St
Biology Life Sciences Building
Temple Performing Arts Center
Sullivan Hall
Barrack Hall
Shusterman Hall
Founder's Garden
Wachman Hall
Samuel Paley Library
Speakman Hall
Adriatic Grille
Camell Hall
Conwell Hall
Student Health Services
Alter Hall
Tuttleman Learning Center
123

10:01
Temple Universi...
Search Locations
U Got Munchies
Owl's Nest
Johnson & Hardwick Residence Hall
Annenberg Hall
Tomlinson Theater
Tyler School of Art
Peabody Residence Hall
Presser Hall
W Norris St
1940 Residence Hall
N 13th St
Maxi's Pizza
Mitten Hall
Seven Eleven
PNC Bank
Conwell Inn
Barton Hall
Beury Hall
Biology Life Sciences Building
Beasley's Walk
Lincoln's Walk
Temple Performing Arts Center
Sullivan Hall
Barrack Hall
Shusterman Hall
Founder's Garden
PA 611
Samuel Paley Library
Wachman Hall
Speakman Hall
Adriatic Grille
Camell Hall
Conwell Hall
Student Health Services
Alter Hall
Tuttleman Learning Center
Klein Law Building
Bagel Hut
Burger Busz
W Montgomery Ave
Starbucks

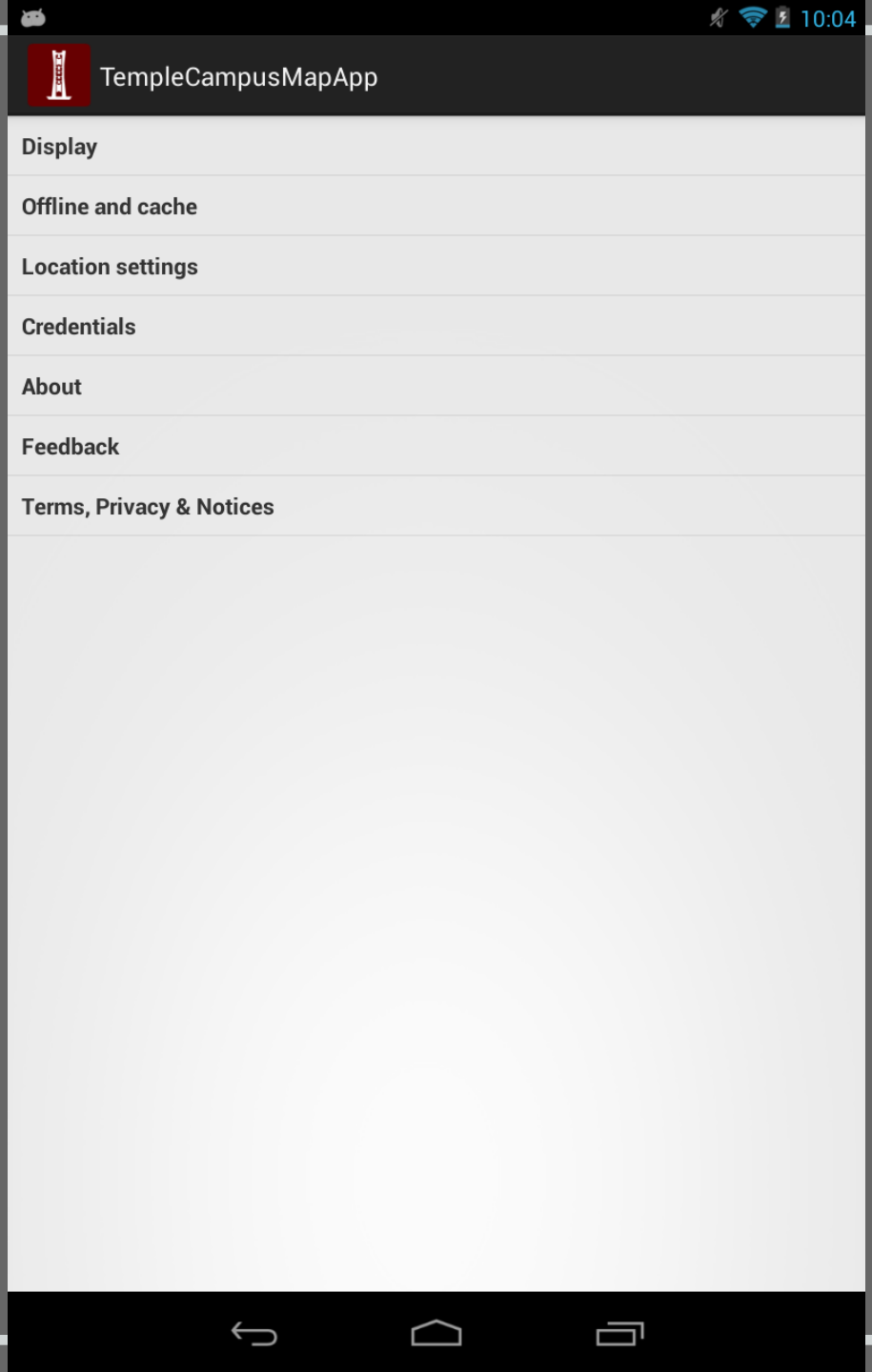

10:02
Temple Universi...
Search Locations
Clear Map
Directions
Layers
Settings
W Norris St
U Got Munchies
Owl's Nest
Johnson & Hardwick Residence Hall
Annenberg Hall
Tomlinson Theater
Peabody Residence Hall
1940 Residence Hall
Maxi's Pizza
Mitten Hall
Seven Eleven
PNC Bank
Conwell Inn
Barton Hall
Beury Hall
Biology Life Sciences Building
N 13th St
Bradley's Walk
Lincoln's Walk
Temple Performing Arts Center
Sullivan Hall
Barrack Hall
Shusterman Hall
Founder's Garden
PA 611
Wachman Hall
Camell Hall
Conwell Hall
Student Health Services
Speakman Hall
Alter Hall
Samuel Paley Library
Tuttleman Learning Center
Adriatic Grille
Starbucks
Klein Law Building
Bagel Hut
Burger Busz
W Montgomery Ave
Sexy green truck


10:02
Temple Universi...
Search Locations
Clear Map
Directions
Layers
Settings
U Got Munchies
Owl's Nest
Johnson & Hardwick Residence Hall
Annenberg Hall
Tomlinson Theater
Peabody Residence Hall
W Norris St
1940 Residence Hall
Maxi's Pizza
Mitten Hall
Seven Eleven
PNC Bank
Conwell Inn
Beasley's Walk
Liacouras Walk
Barton Hall
N 13th St
Beury Hall
Biology Life Sciences Building
Temple Performing Arts Center
Sullivan Hall
Barrack Hall
Shusterman Hall
Founder's Garden
PA 611
Wachman Hall
Speakman Hall
Samuel Paley Library
Adriatic Grille
Camell Hall
Conwell Hall
Student Health Services
Alter Hall
Tuttleman Learning Center
Starbucks
Klein Law Building
Bagel Hut
Burger Busz
W Montgomery Ave
Sexy green truck


10:02
TempleCampusMapApp
Enter a starting location
Enter an end destination
Route Me
q w e r t y u i o p
a s d f g h j k l
z x c v b n m
123
.,!?


10:03
TempleCampusMapApp
Peabody Hall
Wachman Hall
Route Me

10:03
Temple Universi...
Search Locations
U Got Munchies
Owl's Nest
Johnson & Hardwick Residence Hall
Annenberg Hall
N 13th St
Tomlinson Theater
Tyler School of Art
Peabody Residence Hall
Presser Hall
W Norris St
1940 Residence Hall
Maxi's Pizza
Mitten Hall
Seven Eleven
PNC Bank
Conwell Inn
Barton Hall
Beury Hall
Biology Life Sciences Building
Bradley's Walk
Lincoln's Walk
Temple Performing Arts Center
Sullivan Hall
Barrack Hall
Shusterman Hall
Founder's Garden
PA 611
Wachman Hall
Speakman Hall
Samuel Paley Library
Adriatic Grille
Camell Hall
Conwell Hall
Student Health Services
Alter Hall
Tuttleman Learning Center
Starbucks
Klein Law Building
Bagel Hut
Burger Busz
W Montgomery Ave
Sexy green truck


10:04
TempleCampusMapApp
Display
Offline and cache
Location settings
Credentials
About
Feedback
Terms, Privacy & Notices