

IS 590 Assignment 6 Report

Team Member Contribution

Roger Ho:

User Interface -- Main.py

Vera Vasileva:

Data Importation of Nodes & Edges & Map.png for reference -- Navigation.py's data part

Zijun Cai:

Map & Navigation & List buildings , ReadMe, Report -- Navigation.py's other part

Examples:

1. List Buildings Lexicographically

```
===== Welcome to NaviGrapher =====
----- Please Enter the "number" of choices below to use NaviGrapher -----
(1). List all buildings
(2). Navigate!
(3). Run all navigation tests
(4). Exit
```

Enter your Choice: **1**

NAME	MAIL CODE
Altgeld Hall	382
Animal Sciences Lab	630
Armory	528
Davenport Hall	151
Edward R. Madigan Lab	51
English Building	718
Foreign Language Building	164
Gregory Hall	462
Henry Administration Building	368
Illini Union	384
Illini Union BookStore	312
Institute For Genomic Biology	195
Lincoln Hall	456
Main Library	522
Medical Sciences Building	714
Native American House	139
Roger Adams Lab	712
School of Information Sciences	493
Smith Memorial Hall (Music)	56
UI Ice Arena	525

2. Navigation

(1). Normal Navigation

```
===== Welcome to NaviGrapher =====
----- Please Enter the "number" of choices below to use NaviGrapher -----
(1). List all buildings
(2). Navigate!
(3). Run all navigation tests
(4). Exit
```

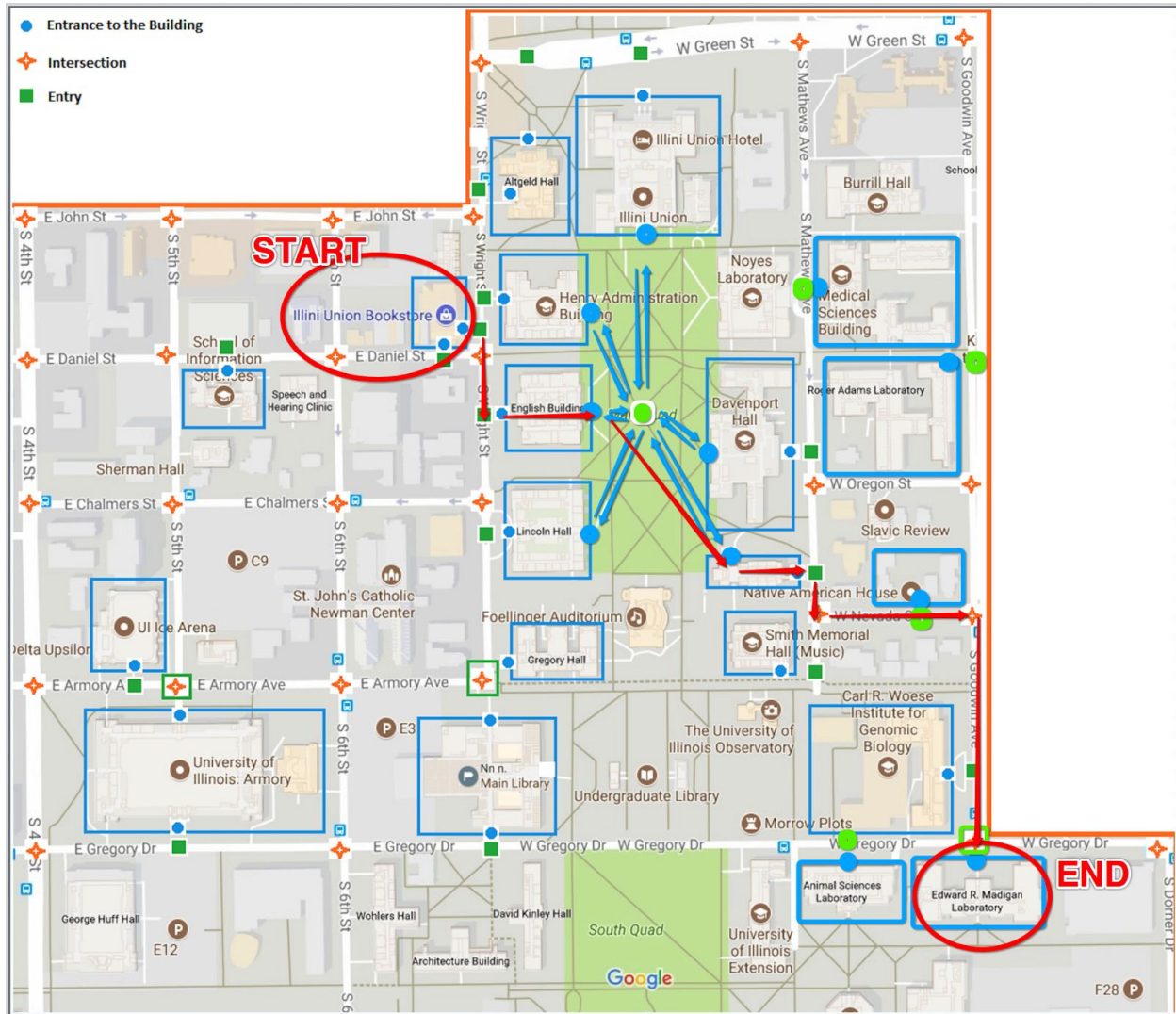
Enter your Choice: 2

```
===== Navigation Mode =====
Choose the corresponding NUMBER of TWO buildings where you would like to navigate between.
You will be asked to choose the number of the building two times.
First time will be the starting building of where you want to start.
Second will be the building of the destination you want to arrive at.
===== Choice : (Buildings, Address, Mailcode) =====

1: ('Altgeld Hall', '1409 W. Green St.', 382)
2: ('Animal Sciences Lab', '1207 W. Gregory', 630)
3: ('Armory', '505 E. Armory Ave.', 528)
4: ('Davenport Hall', '607 S. Mathews Ave.', 151)
5: ('Edward R. Madigan Lab', '1201 W. Gregory', 51)
6: ('English Building', '608 S. Wright St.', 718)
7: ('Foreign Language Building', '707 S. Mathews Ave.', 164)
8: ('Gregory Hall', '810 S. Wright St.', 462)
9: ('Henry Administration Building', '506 S. Wright St.', 368)
10: ('Illini Union', '1401 W. Green St.', 384)
11: ('Illini Union BookStore', '807 S. Wright St.', 312)
12: ('Institute For Genomic Biology', '1206 W. Gregory Dr.', 195)
13: ('Lincoln Hall', '702 S. Wright St.', 456)
14: ('Main Library', '1408 W. Gregory Dr.', 522)
15: ('Medical Sciences Building', '506 S. Mathews', 714)
16: ('Native American House', '1206 W. Nevada', 139)
17: ('Roger Adams Lab', '600 S. Mathews', 712)
18: ('School of Information Sciences', '501 E. Daniel St.', 493)
19: ('Smith Memorial Hall (Music)', '805 S. Mathews Ave.', 56)
20: ('UI Ice Arena', '406 E. Armory Ave.', 525)
21: End Navigation Mode
```

Choose your 'STARTING' building No.: 2
Choose your 'DESTINATION' building No.: 20

```
=====Starting Navigation=====
Travel from Illini Union BookStore to Edward R. Madigan Lab:
Starting on S. Wright St. turn South
Go through the English Building
At Main Quad go through the path on the lawn
Go through the Foreign Language Building
At S. Mathews Ave. turn South
At W. Nevada St. turn East
At S. Goodwin Ave. turn South
Proceed until you arrive at Edward R. Madigan Lab
=====End Of Navigation=====
```



(2). Run all navigation tests

```
===== Welcome to NaviGrapher =====
----- Please Enter the "number" of choices below to use NaviGrapher -----
(1). List all buildings
(2). Navigate!
(3). Run all navigation tests
(4). Exit
```

Enter your Choice: 3

```
===== Navigation Mode =====
Choose the corresponding NUMBER of TWO buildings where you would like to navigate between.
You will be asked to choose the number of the building two times.
First time will be the starting building of where you want to start.
Second will be the building of the destination you want to arrive at.
===== Choice : (Buildings, Address, Mailcode) =====

1: ('Altgeld Hall', '1409 W. Green St.', 382)
2: ('Animal Sciences Lab', '1207 W. Gregory', 630)
3: ('Armory', '505 E. Armory Ave.', 528)
4: ('Davenport Hall', '607 S. Mathews Ave.', 151)
5: ('Edward R. Madigan Lab', '1201 W. Gregory', 51)
6: ('English Building', '608 S. Wright St.', 718)
7: ('Foreign Language Building', '707 S. Mathews Ave.', 164)
8: ('Gregory Hall', '810 S. Wright St.', 462)
9: ('Henry Administration Building', '506 S. Wright St.', 368)
10: ('Illini Union', '1401 W. Green St.', 384)
11: ('Illini Union BookStore', '807 S. Wright St.', 312)
12: ('Institute For Genomic Biology', '1206 W. Gregory Dr.', 195)
13: ('Lincoln Hall', '702 S. Wright St.', 456)
14: ('Main Library', '1408 W. Gregory Dr.', 522)
15: ('Medical Sciences Building', '506 S. Mathews', 714)
16: ('Native American House', '1206 W. Nevada', 139)
17: ('Roger Adams Lab', '600 S. Mathews', 712)
18: ('School of Information Sciences', '501 E. Daniel St.', 493)
19: ('Smith Memorial Hall (Music)', '805 S. Mathews Ave.', 56)
20: ('UI Ice Arena', '406 E. Armory Ave.', 525)
21: End Navigation Mode
```

Travel from Altgeld Hall to Altgeld Hall:

Proceed until you arrive at Altgeld Hall

Travel from Altgeld Hall to Animal Sciences Lab:

Starting on S. Wright St. turn South

Go through the Henry Administration Building

At Main Quad go through the path on the lawn

Go through the Foreign Language Building

At S. Mathews Ave. turn South

At W. Nevada St. turn East

At S. Goodwin Ave. turn South

At W. Gregory Dr. turn West

Proceed until you arrive at Animal Sciences Lab

Travel from Altgeld Hall to Armory:

Starting on S. Wright St. turn South

At E. John St. turn West

At S. 6th St. turn South

At E. Armory Ave. turn West

At S. 5th St. turn South

Proceed until you arrive at Armory

Travel from Altgeld Hall to Davenport Hall:

Starting on S. Wright St. turn South

Go through the Henry Administration Building

At Main Quad go through the path on the lawn

Proceed until you arrive at Davenport Hall

(3). End Navigation Mode

```
===== Navigation Mode =====
Choose the corresponding NUMBER of TWO buildings where you would like to navigate between.
You will be asked to choose the number of the building two times.
First time will be the starting building of where you want to start.
Second will be the building of the destination you want to arrive at.
===== Choice : (Buildings, Address, Mailcode) =====

1: ('Altgeld Hall', '1409 W. Green St.', 382)
2: ('Animal Sciences Lab', '1207 W. Gregory', 630)
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15: ('Medical Sciences Building', '506 S. Mathews', 714)
16: ('Native American House', '1206 W. Nevada', 139)
17: ('Roger Adams Lab', '600 S. Mathews', 712)
18: ('School of Information Sciences', '501 E. Daniel St.', 493)
19: ('Smith Memorial Hall (Music)', '805 S. Mathews Ave.', 56)
20: ('UI Ice Arena', '406 E. Armory Ave.', 525)
21: End Navigation Mode
```

Choose your 'STARTING' building No.: 21

Aborting Navigation

```
===== Welcome to NaviGrapher =====
----- Please Enter the "number" of choices below to use NaviGrapher -----
(1). List all buildings
(2). Navigate!
(3). Run all navigation tests
(4). Exit
```

Enter your Choice:

(3). Exit Program

```
===== Welcome to NaviGrapher =====
----- Please Enter the "number" of choices below to use NaviGrapher -----
(1). List all buildings
(2). Navigate!
(3). Run all navigation tests
(4). Exit
```

Enter your Choice: 4

Thank you for using NaviGrapher. GoodBye~!