



Erasmus+

2021-1-BG01-KA220-HED-000027624

Emanuil Slavov
@BoomRaid

ENGAGING STUDENTS WITH ADVENTURE GAMES



An aerial night photograph of a city, showing a dense grid of streets and illuminated buildings. A semi-transparent red rectangular box is centered over the image, containing the title text in white. The city lights are primarily yellow and orange, with some blue and green lights visible in the distance.

WHAT IS A CITY ADVENTURE GAME

Teams compete to solve riddles as fast as they can

Riddles consist of two parts

1. Where to go

2. How to find the answer there

Nothing is forbidden. Can use any sort of help

We don't alter the city in any way

VIENNA

On Graben street you need to be,
the disease pillar is not new,

a hand with no body you'll see,
to which letters it points to?

Go to the location

The answer can only
be found at the location

THE PLAGUE COLUMN



LE



We do not hide anything, nor leave any objects

We do not change the city in any way

We use public and free locations

The answers are not Googleable, or on Street View

RANKING



There are easy, medium and hard riddles.

They bring 1, 2 or 3 points when solved.

First we rank by points.

When two teams have the same points, sort them by game duration.

#	Team	Points	Time	Hints	Skip
1	XV (15)	24	126:49	0	0
2	The champs (20)	22.5	132:28	1	0
3	Lucky 13 (13)	22.5	148:26	1	0
4	The One (1)	21.5	131:58	2	0
5	Halfteam (19)	21.5	136:16	2	0
6	ОЧЗ (21)	21.5	139:45	2	0
7	Careless (28)	21.5	144:06	2	0
8	Moon22 (22)	21	120:44	1	0
9	Mahmurlii (3)	21	142:50	0	0
10	Жирафите (29)	20.5	142:43	2	1
11	Team of two (12)	20	147:19	3	0
12	26½ (26)	19.5	139:15	2	0
13	Hunters (2)	19.5	145:46	2	0
14	The lonely (11)	19.5	149:36	2	1
15	Великолепната тройка (39)	19	139:09	3	0

THE PROBLEM WITH PAPER

Teams may split to go to locations

Have to start at the exact time

All have to come at an end location

Teams trade answers at the end

Too much time calculating results

Can't make quick changes to riddles

During the COVID pause we made a mobile version.

Mostly to offer cheap games for single teams.

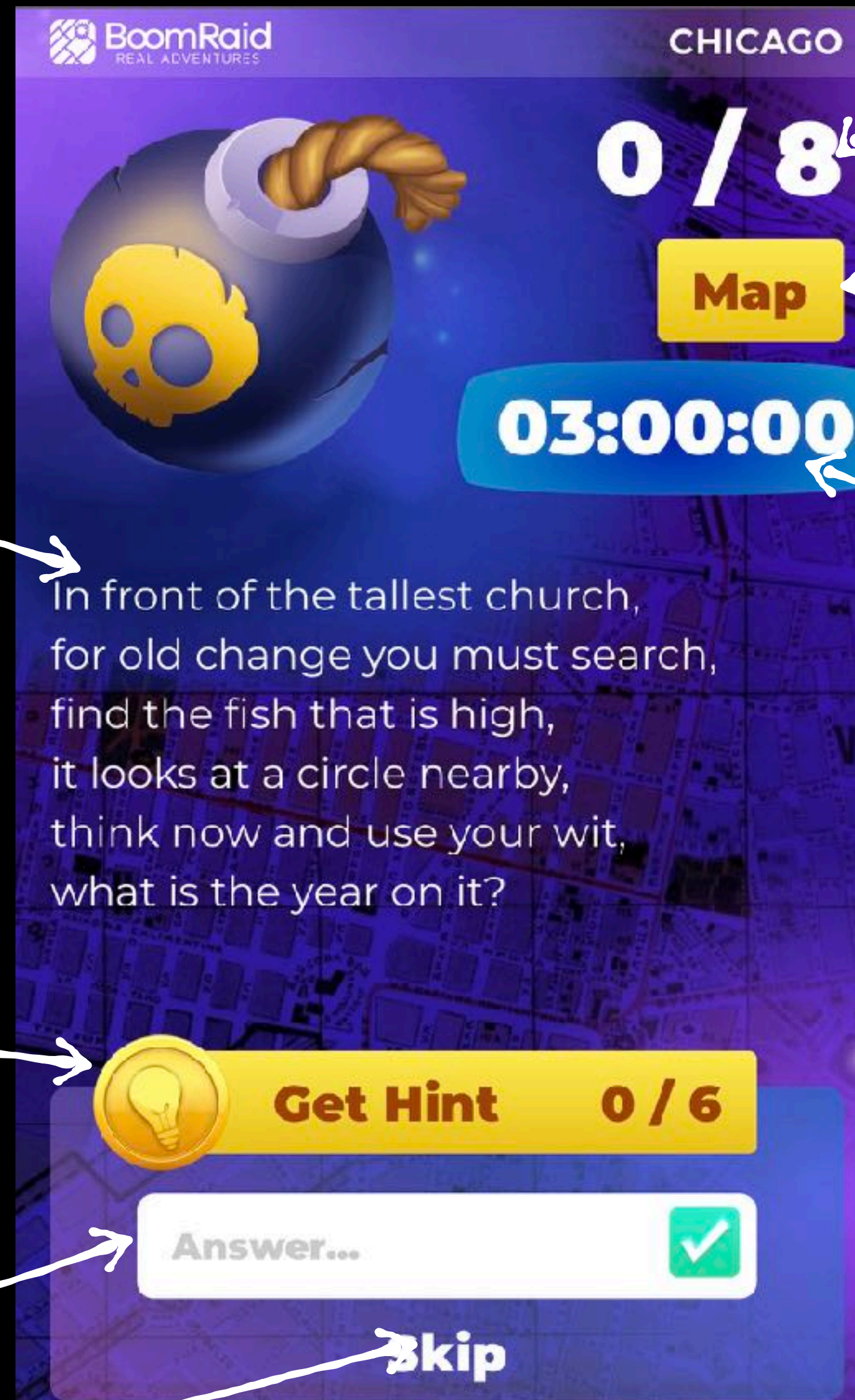
We found it useful for team building purposes.

RIDDLE

USED / REMAINING HINTS

TYPE THE ANSWER

SKIP RIDDLE



CURRENT PROGRESS

GAME AREA

REMAINING TIME

GAME MECHANICS



Riddles unlock one after the other

Hint/Skip system, if you get stuck

Hint can show location on the map

Unlimited tries for the answer

Doesn't accept answers when the game ends

Can give additional info when the riddle is solved

TEAM BUILDING ADVANTAGES



Teams can't split

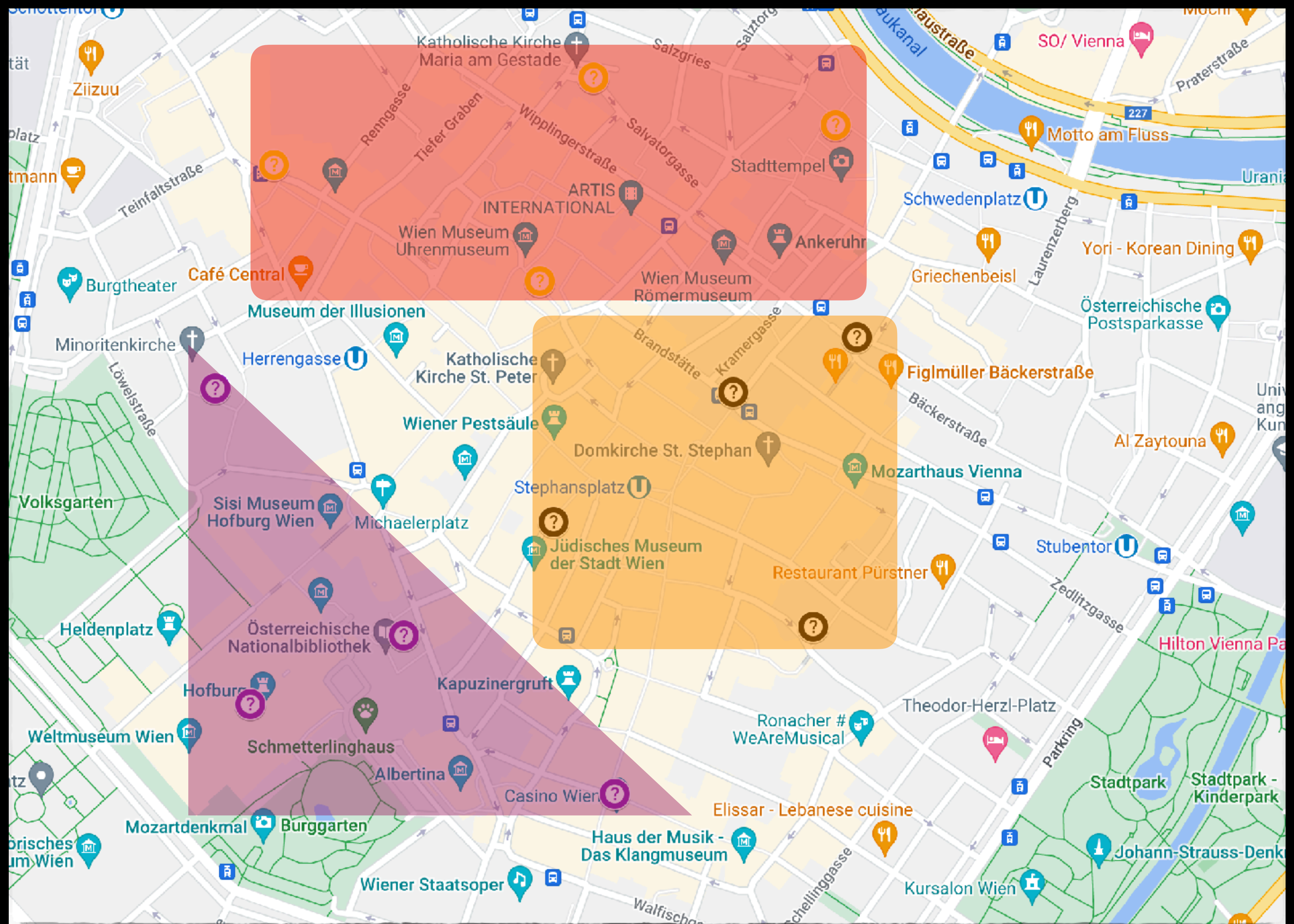
Random route for each team

Real time ranking

Gradual increase of difficulty

Each team can start with a delay

End at different location




```
{
  startLocation: '48.208852, 16.372417',
  path: [
    [
      '48.207802, 16.369740',
      '48.206581, 16.374232',
      '48.209273, 16.372817',
      '48.209898, 16.374979'
    ],
    [
      '48.212330, 16.374627',
      '48.210572, 16.369538',
      '48.212882, 16.370455',
      '48.211898, 16.364997'
    ]
  ]
}
Iteration to try: 50
All async operations completed
All durations: [
  50, 57, 56, 53, 57, 54, 49, 43, 59, 51, 56,
  50, 48, 49, 49, 50, 49, 56, 51, 50, 56, 58,
  53, 57, 55, 58, 50, 56, 54, 54, 58, 49, 59,
  47, 53, 56, 54, 59, 58, 56, 53, 53, 54, 46,
  56, 50, 57, 45, 54, 51
]
All distances: [
  '3.65', '4.15', '4.10', '3.87', '4.16',
  '3.98', '3.60', '3.14', '4.31', '3.71',
  '4.09', '3.62', '3.47', '3.62', '3.55',
  '3.62', '3.57', '4.05', '3.75', '3.66',
  '4.09', '4.21', '3.92', '4.18', '4.00',
  '4.20', '3.64', '4.08', '4.00', '3.94',
  '4.20', '3.53', '4.32', '3.48', '3.82',
  '4.10', '3.94', '4.34', '4.21', '4.08',
  '3.85', '3.91', '4.01', '3.34', '4.10',
  '3.64', '4.17', '3.31', '3.95', '3.75'
]
Max Duration: 59
Min Duration: 43
Median Duration: 54
Max Distance: 4.34
Min Distance: 3.14
Median Distance: 3.94
```


DIFFICULTY LEVELS



1. Poems, wordplays

2. Substitution ($A=1$, $B=2$)

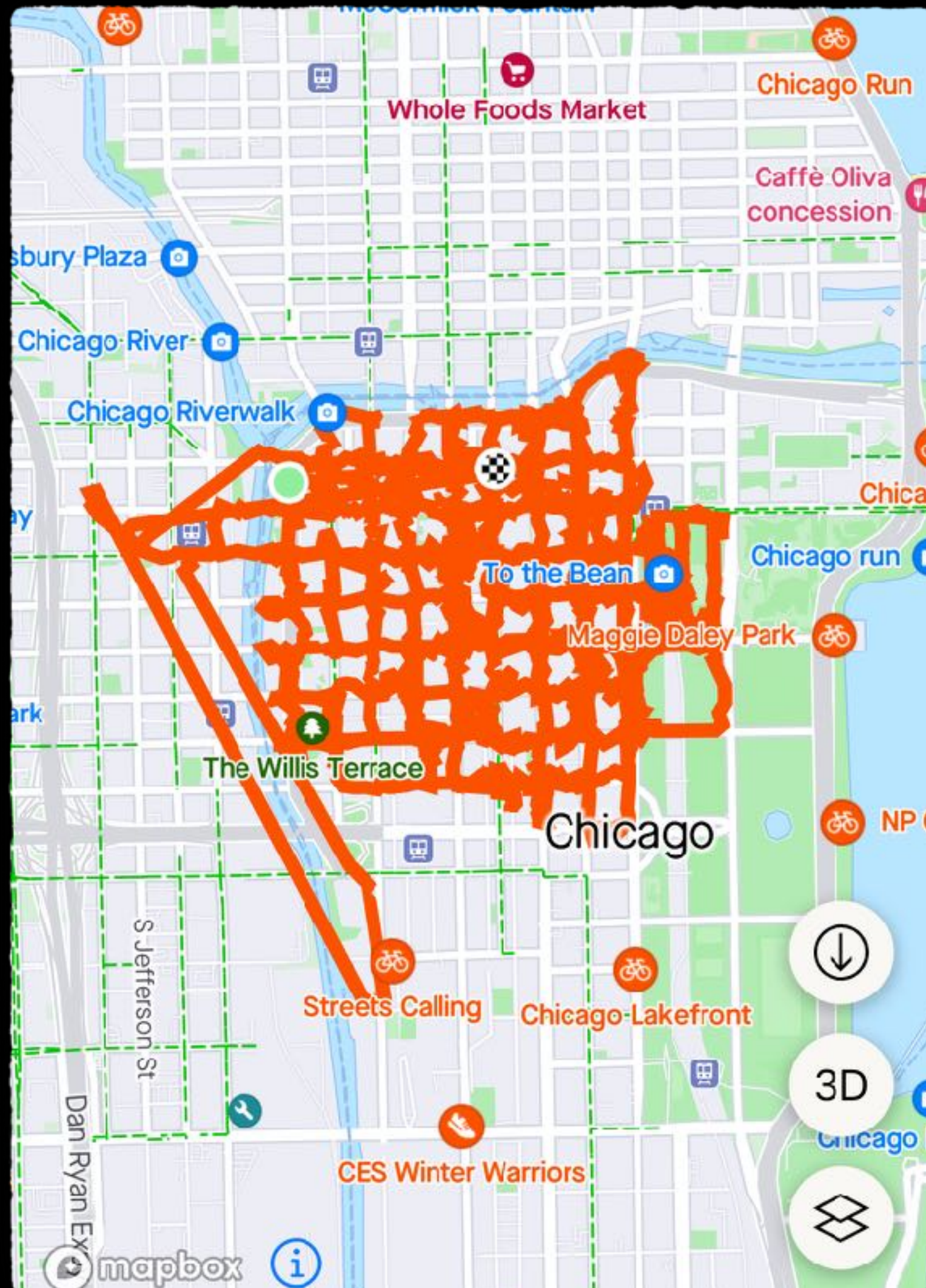
3. Transposition

4. Book Cipher 38-17-3-5

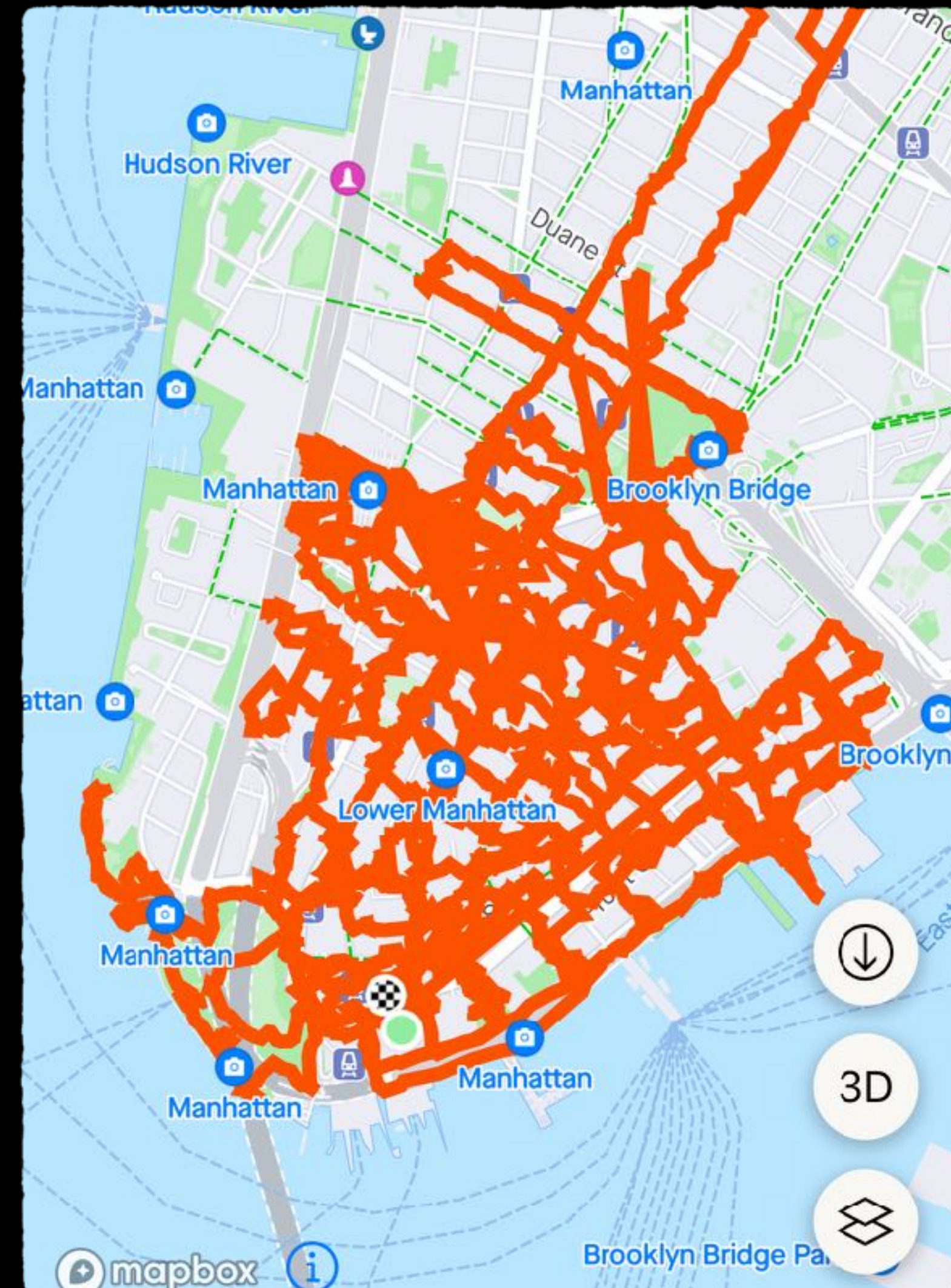
LOCATION SPECIFICS



Chicago



New York



The answer should not be Googleable

The answer should not be solvable by AI

The answer should not be in Street View

EXTRA RIDDLE



Unlocked if some conditions are met

Very Hard. Has remaining time to solve

ENGAGING STUDENTS



Think about interesting locations.

Physical: a book, a section, a floor.

Virtual: a webpage, a book citation, a quote, study materials.

Create riddles for them. The answers shouldn't be googleable.

Use paper. All riddles are independent of each other.

Figure out how the ranking will work.

Add time limit.

If you have people, you can add them as actors / clue keepers.

Small prizes, award ceremony.

QUESTIONS?



Erasmus+

2021-1-BG01-KA220-HED-000027624

