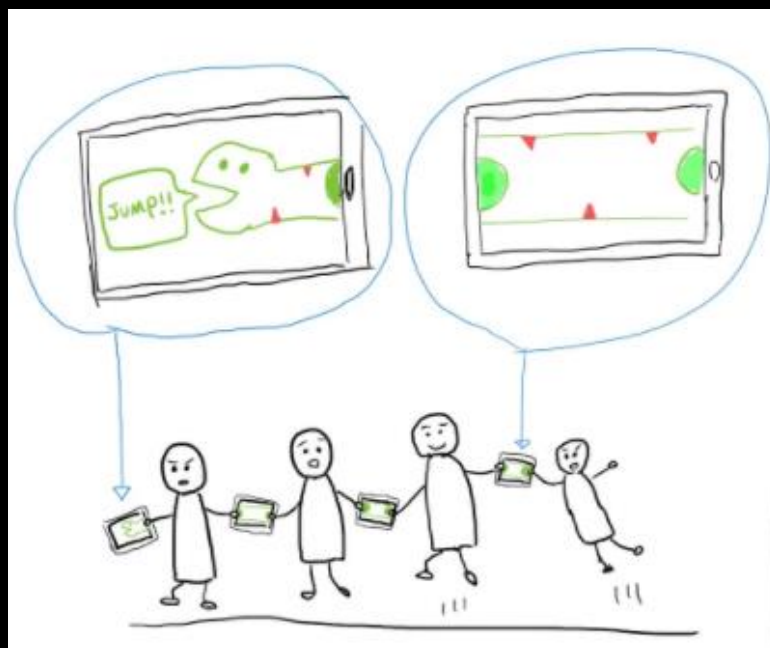# SNAKE.CITY
A PLAY BLUEPRINT

INTRODUCTION

- Are you passionate about games as well as urban spaces?

- Do you enjoy interacting with technology while experiencing the real/tangible reality?

Then Snake.City is the right opportunity for you to learn how to create your own urban game.

You will be guided step by step on how to create new game using pervasive technology.

We will explain to you how to create the game server and the programming game code, and on to finally realise your own Snake.City inspired game!

Figure 1. An early sketch of gameplay with touch interaction inspired by Bounden

But first, a bit more explanation about Snake.City!

In Summer 2019, a group of programmers, urban planners and architects were recruited in Amsterdam as the first trainees of the European School of Urban Game Design - Trust in Play.

Between 2019 and 2020 in Amsterdam and Athens, attendees enjoyed meetings, workshops and conducted experiments. We learned and tested game mechanics and coded while bouncing off our different backgrounds and expertise.

A few working teams got formed and the one composed by Tomo, Gavin and Giulia, decided to undertake the voyage towards the realisation of the first Snake.City.

WHAT DO YOU NEED TO PLAY THE GAME?

Snake.City only requires access to a smartphone that has a web browser.

HOW SNAKE.CITY WORKS?

Context
The game can be played anywhere - parties, festivals, university campus, schoolyards, and conferences. We think it works particularly well in festival locations, where, for example, we can make use of the logon process people go through on public WiFi to provide a convenient and very public link to the game.

However, before we tell you more, we need to talk about COVID-19. When we started this project, we were living in a world without COVID-19.

It depends where you live and the local rules, but it might not be a good idea to rush out and play closely with strangers in these worrying times.

That said, there are three big reasons you might be interested in Snake.City.

First, the three of us wanted to learn new tech that would make multi-player physical games possible. We want to share that tech with you.

Secondly, we are worried that we will forget how to play nicely with each other. If you have house mates or friends within your bubble, Snake.City might help you reconnect.

Lastly, we think Snake.City is fun. You might too.

Gameplay
The game requires to place your thumb on your smartphone with another person who is also placing his/her thumb on your phone, and in turn, they do the same with a third person, and so on: a human chain connected by smartphones devices will be the final result.

When any person removes a finger, the snake is broken, and the time is up.

The game records the time and length of each active snake and we will eventually create a global leader board and map of all the Snake.City created around the world.

To start the game, a player will go onto the website https://snake.city who becomes the snake's head.

They will invite their friends or strangers to join their snake as that new person holds the phone with them. That person will be invited to pass on a code and invite new players to join the snake e.g. https://snake.city/vipercobra. Two names of the snake for each unique snake will provide a unique enough key for the time being.

INSPIRATIONS
There were many ideas behind the Snake.City, from single moments of inspirations to playing an actual follow my leader snake game devised by Simon.

In this section we are going to mention some games that were influentially and that we think you should check out.

Bounden

This game allows two people two dance together in what can be described as choreographed mobile-phone ballet. Bounden is instantly recognisable from its screen with two circles that shows clearly where to place fingers - we are inspired by the detail and it suggested how we make both detect and instruct people to form a chain of players

Figure 2. Bounden screenshot

Read about Bounden here: https://playbounden.com/

Noby Noby Boy

This game is a little crazy. Players take control of a worm-like character referred to as Boy. You control this character as you wind it around cartoon like villages and cities as you grow longer and longer. The game inspired players outside the game itself to work together and place points online to help Boy's friend Girl grow and reach the stars. The combined player effort sent Girl to Pluto in by November 23, 2015 and she is currently heading outside the solar system.

https://en.wikipedia.org/wiki/Noby_Noby_Boy

Correspondingly, we want to encourage lots of players. We would like to show an interactive map of where people might be playing Snake.City. The following games

Ocarina

This mobile game has a magical map of people playing its ocarina in the world. You can listen to people from all over the world playing familiar songs, as we are connected through their music.
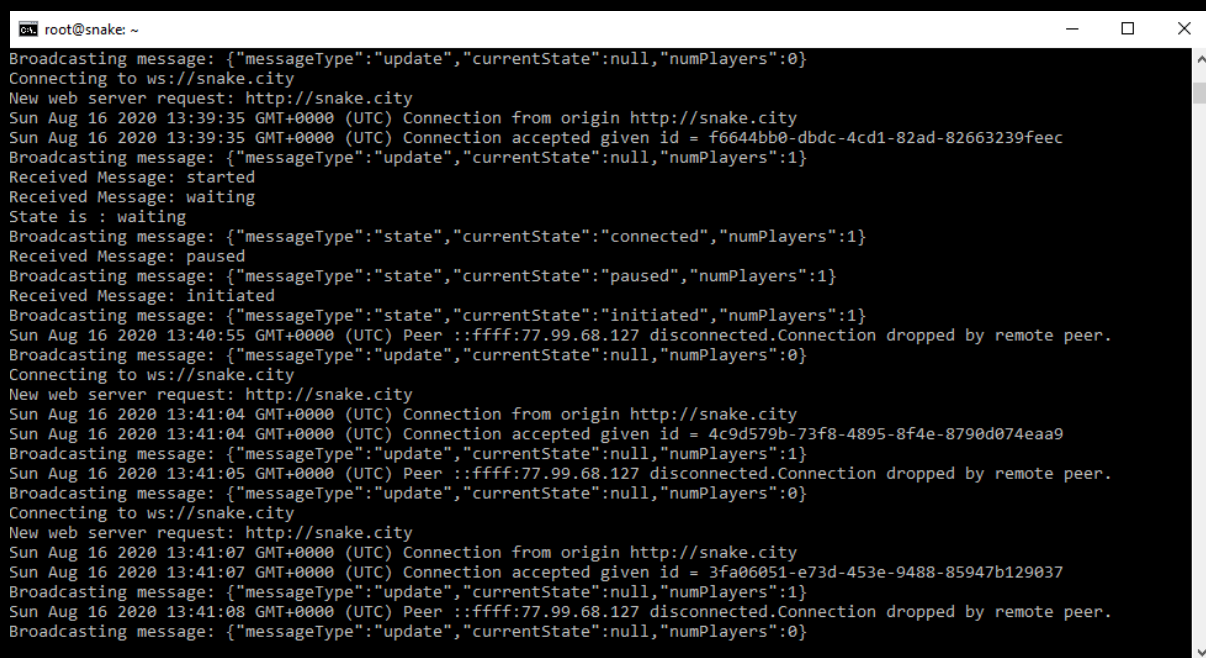
https://apps.apple.com/us/app/ocarina/id293053479

Paperstorm.it

This game helps people to protest through an interactive map where you drop papers.

https://studiomoniker.com/projects/paperstorm

DEBUGGING YOUR GAME

The game is written in two parts – the JavaScript server and webpages. For both we can find out what our game is doing by printing debug messages to the screen.

The diagram below shows debug prints from the nodeServer.js on the server. The JavaScript console.log("with your message and variables e.g. " + new Date()) can help you find bugs.

Figure 3. Debug prints from the server

To look at what your program is doing at the client side we can use Google Chrome as our web browser. There are several different ways Chrome can help you debug your code. You can read about those here. In the following screenshot, F12 was used to open the console and we can see debug messages sent from the server.
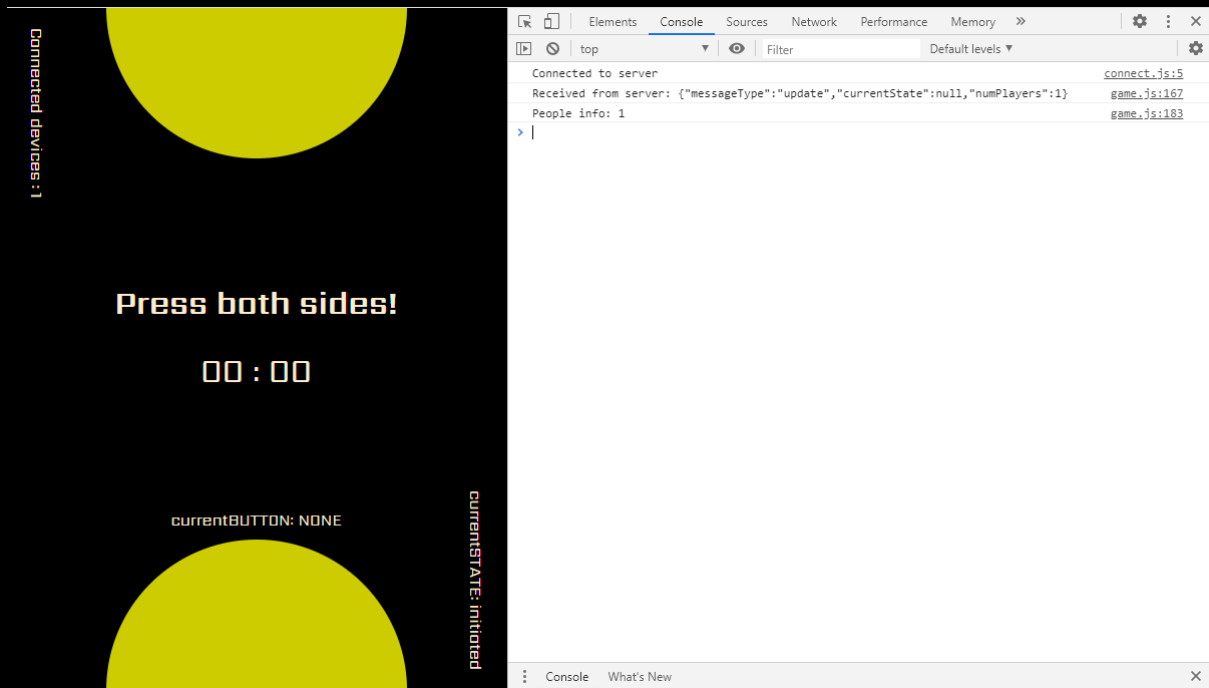
Figure 4. Console Log