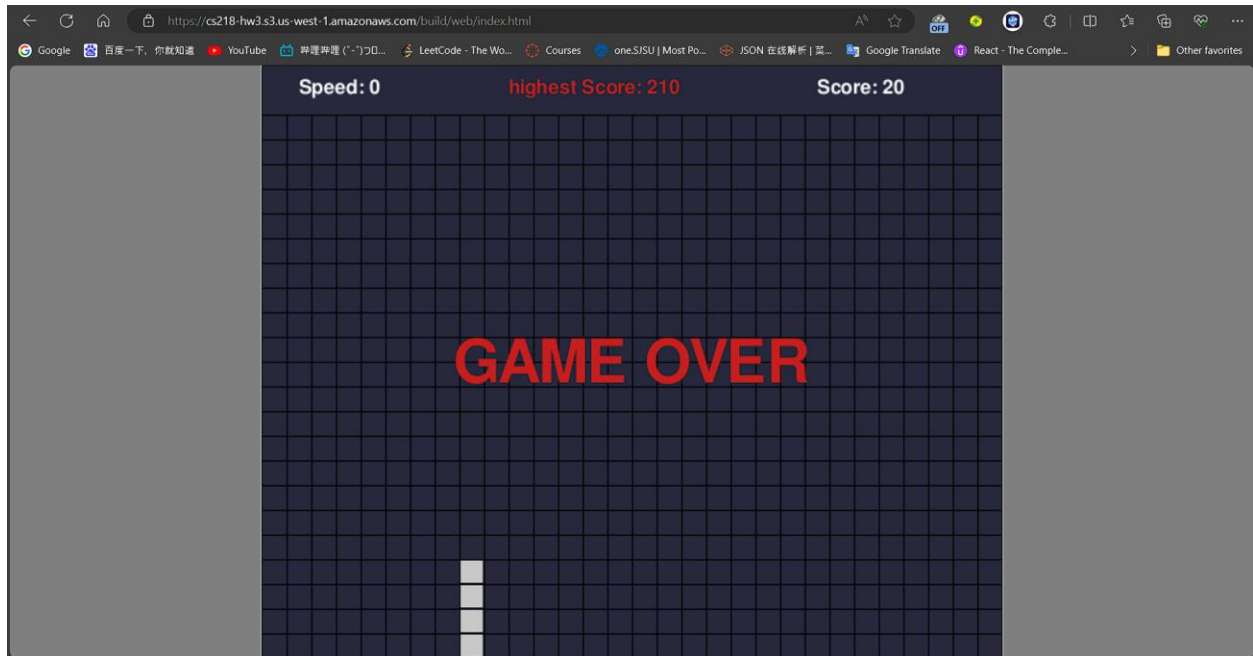


## HW3 Report



At beginning, I tried with the turtle game, but it is very challenging to work with it.

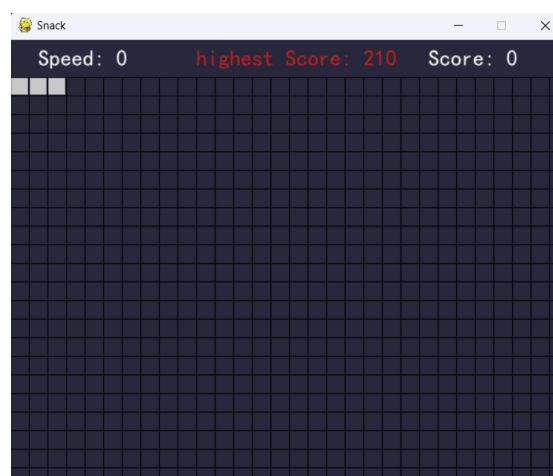
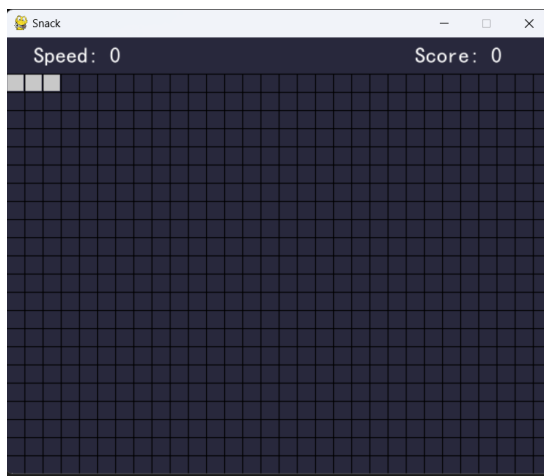
Then I move on to pygame, here are two video tutorials I watch:

[Export Python pygame Game to Web with WebAssembly \(pygbag tutorial\) - YouTube](#)

[Running PyGame in the web browser with Pygbag! mini Python tutorial Wasm WebAssembly - YouTube](#)

Next, I search on GitHub for pygames. I found a snack game. [guliang21/pygame: Python 小游戏 \(github.com\)](#)

I add “track highest score” feature to it.



Instruction to pygbag is at “[pygame-web/pygbag: python and pygame wasm for everyone \( packager + test server + simulator \) \(github.com\)](#)”

I need to add “import asyncio”, “async def main():”, “await asyncio.sleep(0)”, “asyncio.run(main())” to the game code.

Then I run “pygbag snack” to build and run.

To deploy on cloud. I use aws S3.

First, I create a bucket, and uncheck the “block all public access”.(important)

#### Block Public Access settings for this bucket

Public access is granted to buckets and objects through access control lists (ACLs), bucket policies, access point policies, or all. In order to ensure that public access to this bucket and its objects is blocked, turn on Block all public access. These settings apply only to this bucket and its access points. AWS recommends that you turn on Block all public access, but before applying any of these settings, ensure that your applications will work correctly without public access. If you require some level of public access to this bucket or objects within, you can customize the individual settings below to suit your specific storage use cases. [Learn more](#)

##### ☐ Block all public access

Turning this setting on is the same as turning on all four settings below. Each of the following settings are independent of one another.

##### ☐ Block public access to buckets and objects granted through *new* access control lists (ACLs)

S3 will block public access permissions applied to newly added buckets or objects, and prevent the creation of new public access ACLs for existing buckets and objects. This setting doesn't change any existing permissions that allow public access to S3 resources using ACLs.

##### ☐ Block public access to buckets and objects granted through *any* access control lists (ACLs)

S3 will ignore all ACLs that grant public access to buckets and objects.

##### ☐ Block public access to buckets and objects granted through *new* public bucket or access point policies

S3 will block new bucket and access point policies that grant public access to buckets and objects. This setting doesn't change any existing policies that allow public access to S3 resources.

##### ☐ Block public and cross-account access to buckets and objects through *any* public bucket or access point policies

S3 will ignore public and cross-account access for buckets or access points with policies that grant public access to buckets and objects.

Next, I go to properties, find Static website hosting, enable it.

#### Static website hosting

Use this bucket to host a website or redirect requests. [Learn more](#)

Edit

Static website hosting

Enabled

Hosting type

Bucket hosting

Bucket website endpoint

When you configure your bucket as a static website, the website is available at the AWS Region-specific website endpoint of the bucket. [Learn more](#)

<http://cs218-hw3.s3-website-us-west-1.amazonaws.com>

Finally, I upload files to this bucket, the game works at <https://cs218-hw3.s3.us-west-1.amazonaws.com/build/web/index.html>