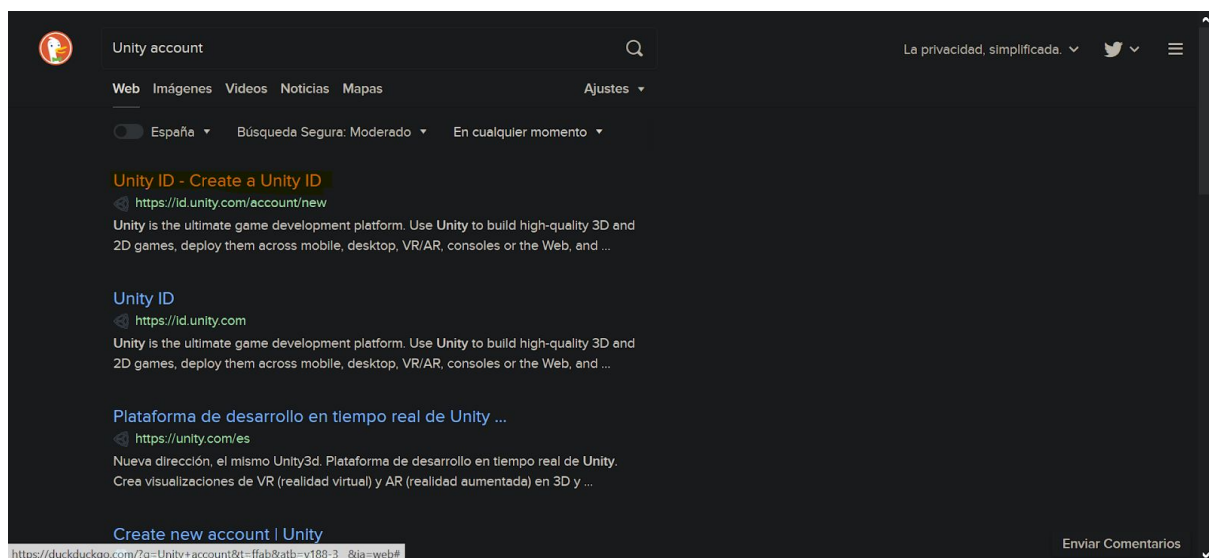




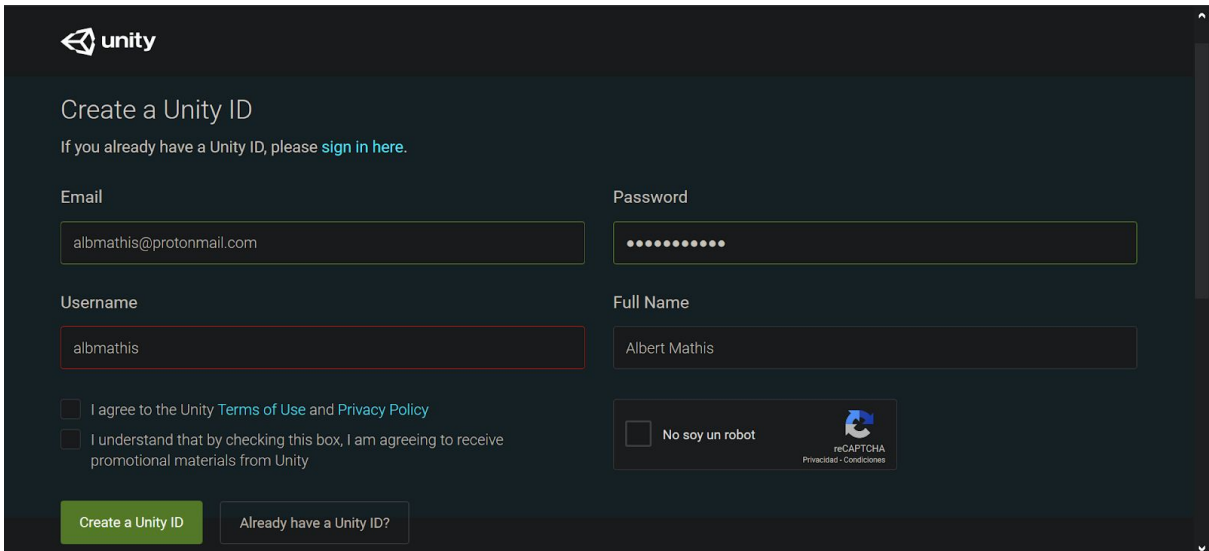
Script Add and Remove from a List of Strings.

1. Console.WriteLine()
2. Console.ReadLine()
3. Strings C#
 - a. IndexOf
 - b. Substring
4. List todoList = new List();
 - a. Count
 - b. Add()
 - c. RemoveAt()
 - d. Insert()
5. int.TryParse(char x)

Unity and Visual Studio Installation



First we search at DuckDuckGo or Google for Unity account and we click on the first link that pops up.



The image shows the 'Create a Unity ID' page. At the top left is the Unity logo. Below it, the heading 'Create a Unity ID' is followed by a link: 'If you already have a Unity ID, please [sign in here](#).' The form contains four input fields: 'Email' (with 'albmthis@protonmail.com'), 'Password' (masked with dots), 'Username' (with 'albmthis'), and 'Full Name' (with 'Albert Mathis'). Below the 'Email' field are two checkboxes: 'I agree to the Unity [Terms of Use](#) and [Privacy Policy](#)' and 'I understand that by checking this box, I am agreeing to receive promotional materials from Unity'. To the right of these is a reCAPTCHA widget with the text 'No soy un robot' and the reCAPTCHA logo. At the bottom are two buttons: 'Create a Unity ID' (green) and 'Already have a Unity ID?' (grey).

unity

Create a Unity ID

If you already have a Unity ID, please [sign in here](#).

Email

albmthis@protonmail.com

Password

.....

Username

albmthis

Full Name

Albert Mathis

☐ I agree to the Unity [Terms of Use](#) and [Privacy Policy](#)

☐ I understand that by checking this box, I am agreeing to receive promotional materials from Unity

☐ No soy un robot

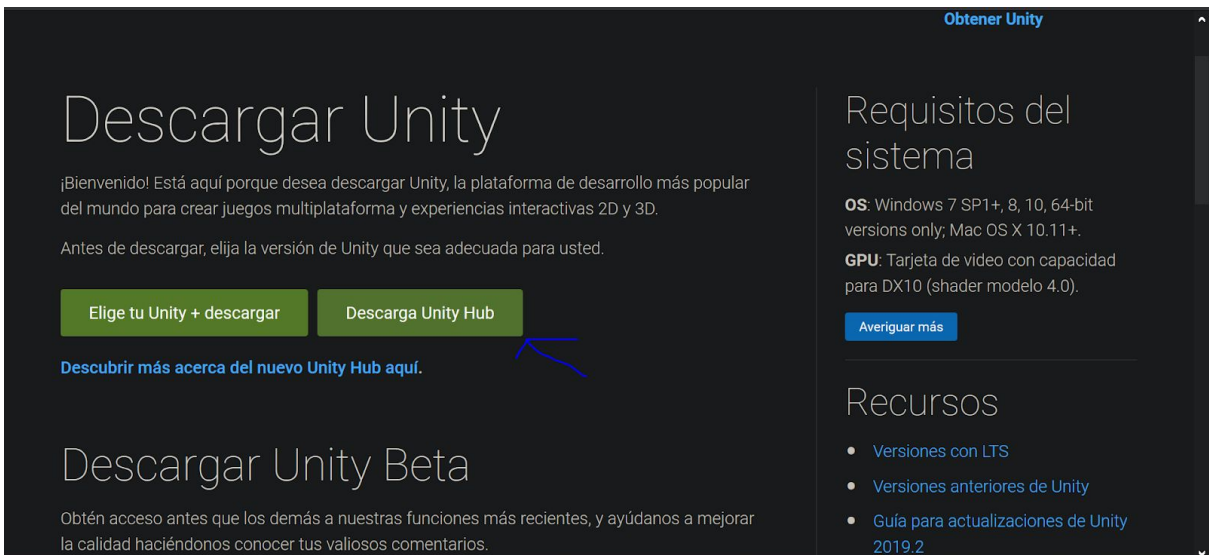
reCAPTCHA

Privacidad - Condiciones

Create a Unity ID

Already have a Unity ID?

And we create our first account like in the image shown on top. (I had already an Unity account)



The image shows the 'Descargar Unity' (Download Unity) page. At the top right is a link 'Obtener Unity'. The main heading is 'Descargar Unity'. Below it is a welcome message: '¡Bienvenido! Está aquí porque desea descargar Unity, la plataforma de desarrollo más popular del mundo para crear juegos multiplataforma y experiencias interactivas 2D y 3D.' This is followed by a note: 'Antes de descargar, elija la versión de Unity que sea adecuada para usted.' There are two green buttons: 'Elige tu Unity + descargar' and 'Descarga Unity Hub'. A blue arrow points to the 'Descarga Unity Hub' button. Below the buttons is a link: 'Descubrir más acerca del nuevo Unity Hub aquí.' The bottom section is titled 'Descargar Unity Beta' and contains text about getting access before others. On the right side, there is a 'Requisitos del sistema' (System Requirements) section with details for OS (Windows 7 SP1+, 8, 10, 64-bit versions only; Mac OS X 10.11+) and GPU (Tarjeta de video con capacidad para DX10 (shader modelo 4.0)). Below this is a blue button 'Averiguar más'. At the bottom right is a 'Recursos' (Resources) section with links to 'Versiones con LTS', 'Versiones anteriores de Unity', and 'Guía para actualizaciones de Unity 2019.2'.

Obtener Unity

Descargar Unity

¡Bienvenido! Está aquí porque desea descargar Unity, la plataforma de desarrollo más popular del mundo para crear juegos multiplataforma y experiencias interactivas 2D y 3D.

Antes de descargar, elija la versión de Unity que sea adecuada para usted.

Elige tu Unity + descargar

Descarga Unity Hub

Descubrir más acerca del nuevo Unity Hub aquí.

Descargar Unity Beta

Obtén acceso antes que los demás a nuestras funciones más recientes, y ayúdanos a mejorar la calidad haciéndonos conocer tus valiosos comentarios.

Requisitos del sistema

OS: Windows 7 SP1+, 8, 10, 64-bit versions only; Mac OS X 10.11+.

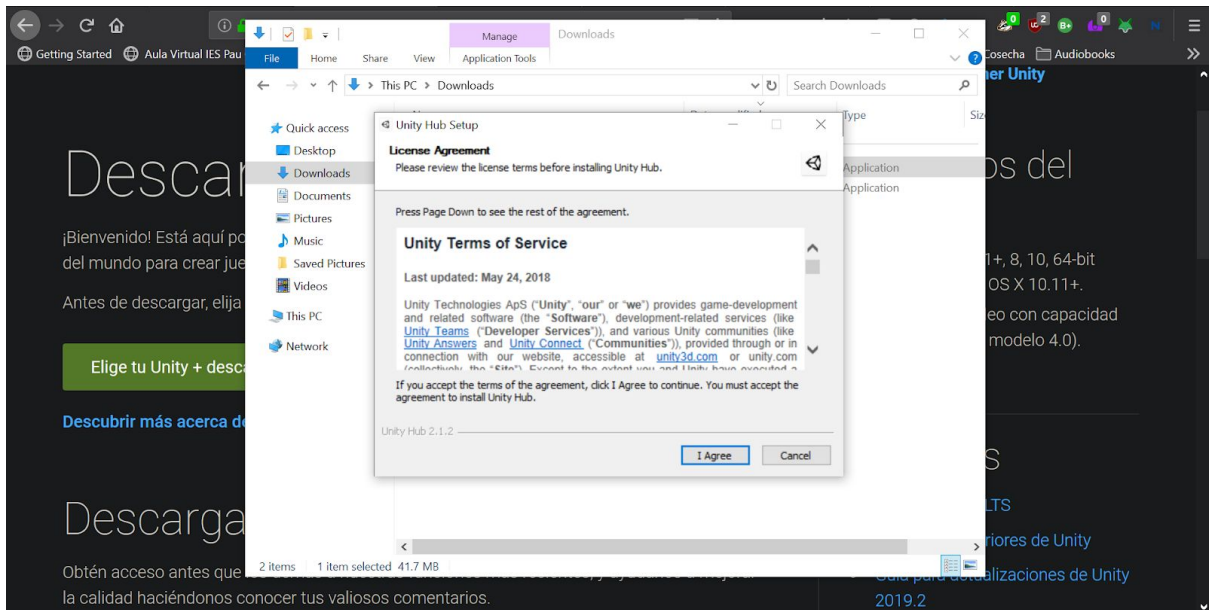
GPU: Tarjeta de video con capacidad para DX10 (shader modelo 4.0).

Averiguar más

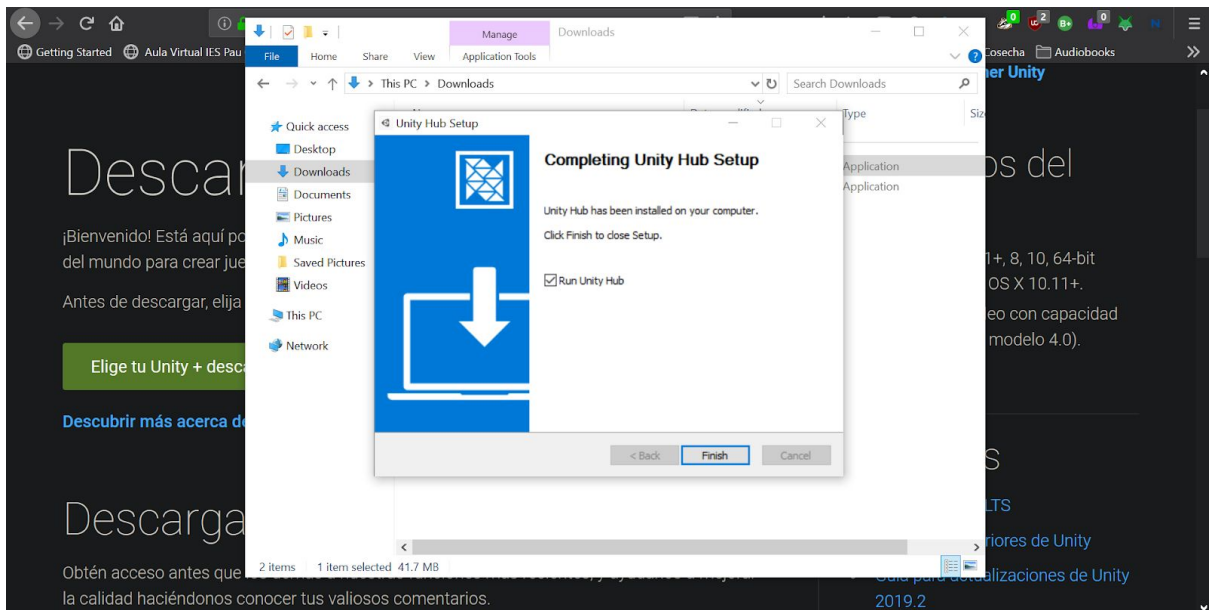
Recursos

- Versiones con LTS
- Versiones anteriores de Unity
- Guía para actualizaciones de Unity 2019.2

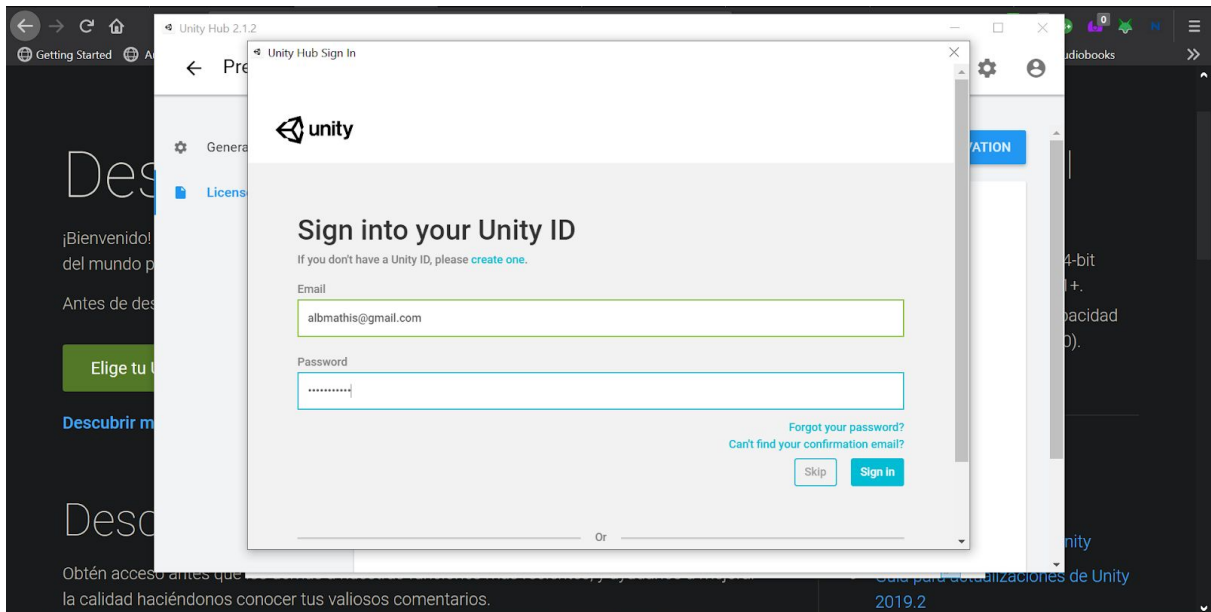
Then we click on Download Unity Hub. (The link based my language preferences based on the ip)



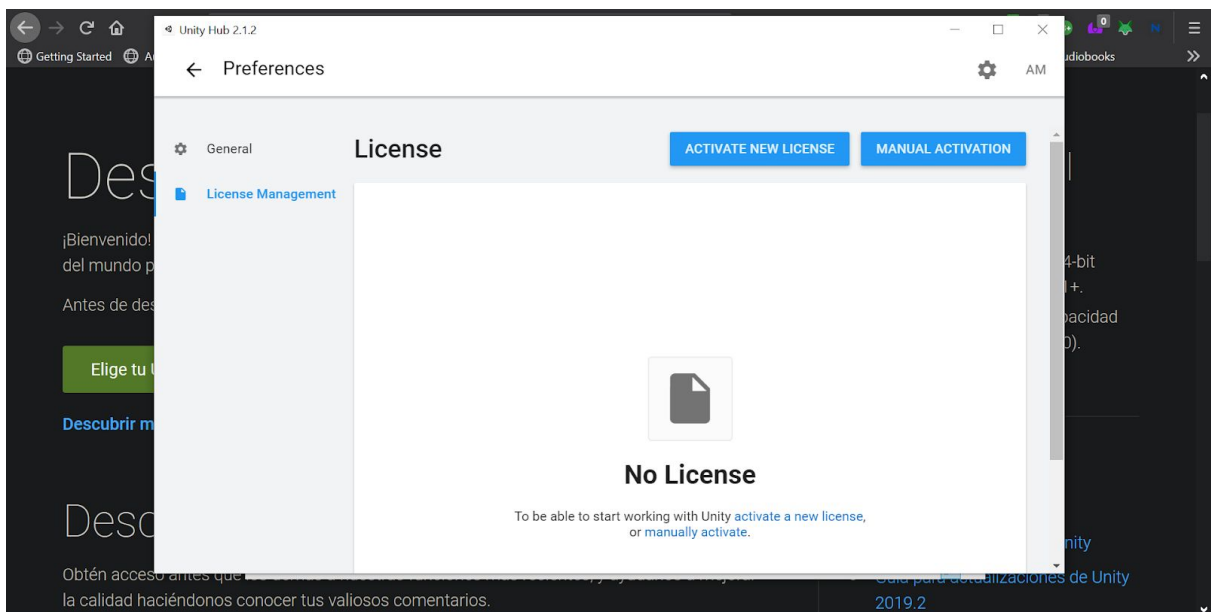
And we accept the License Agreement and go straight forward to next.



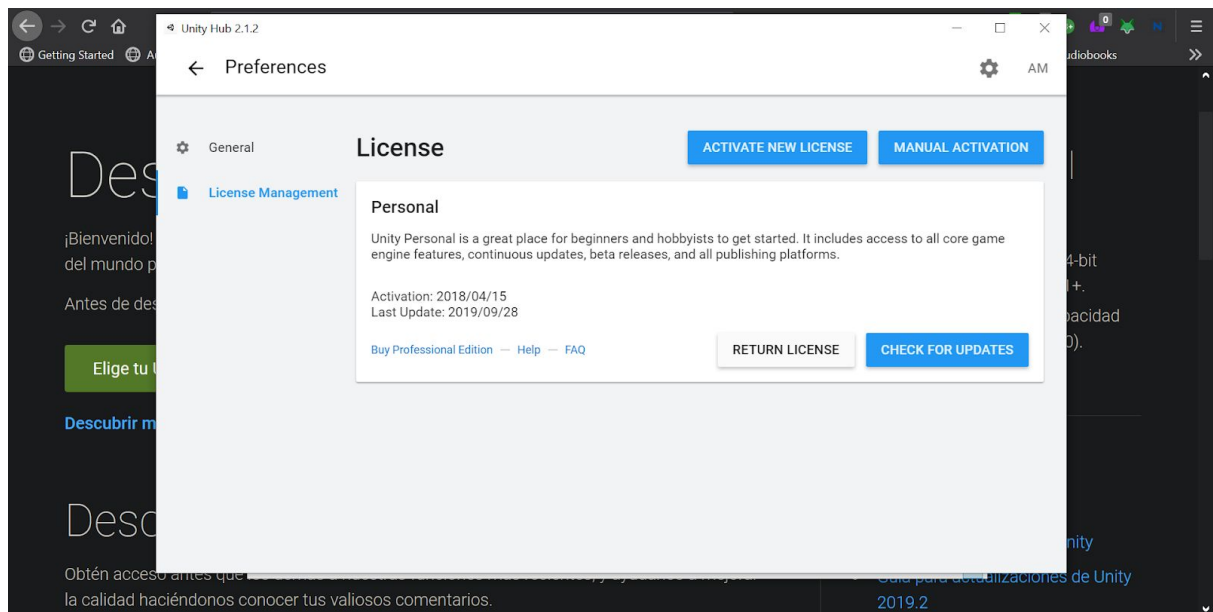
At the end of the installation we click on Finish and keep the button where it says "Run Unity Hub" activated.



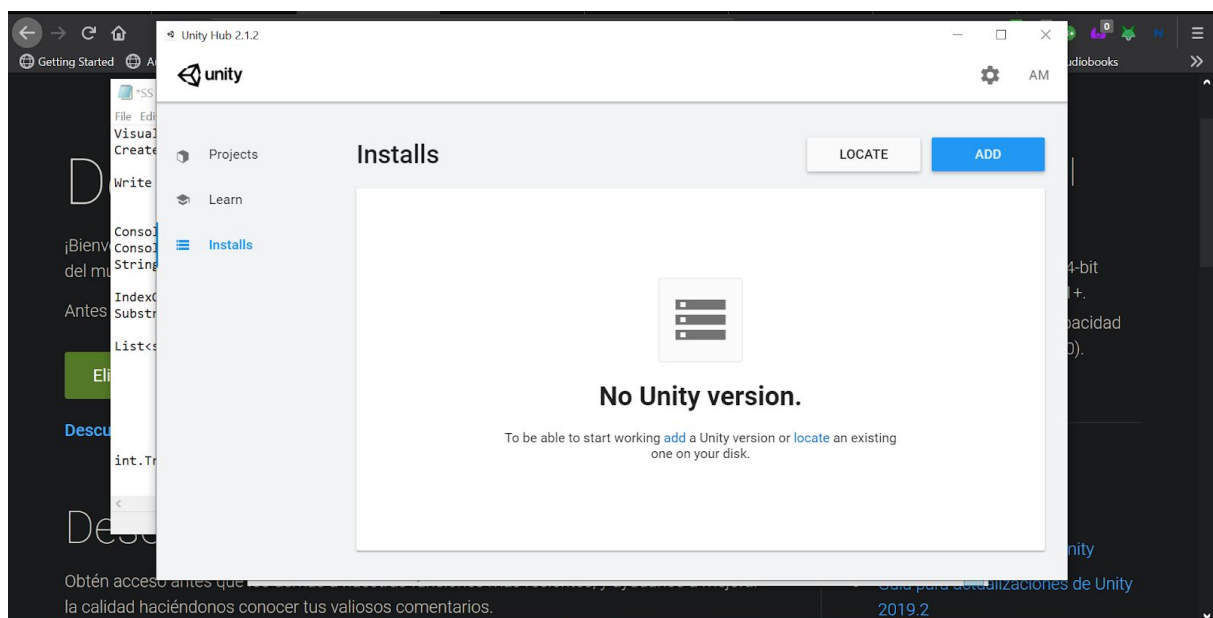
When the installation finishes we sign up with our Unity account previously created.



In this window we click on “Active New License”.



And we acquire a free personal license. After that we check for updates.



Then we go to installs and click to ADD, for the new Unity installation.

Add Unity Version [X]

1 Select a version of Unity ————— 2 Add modules to your install

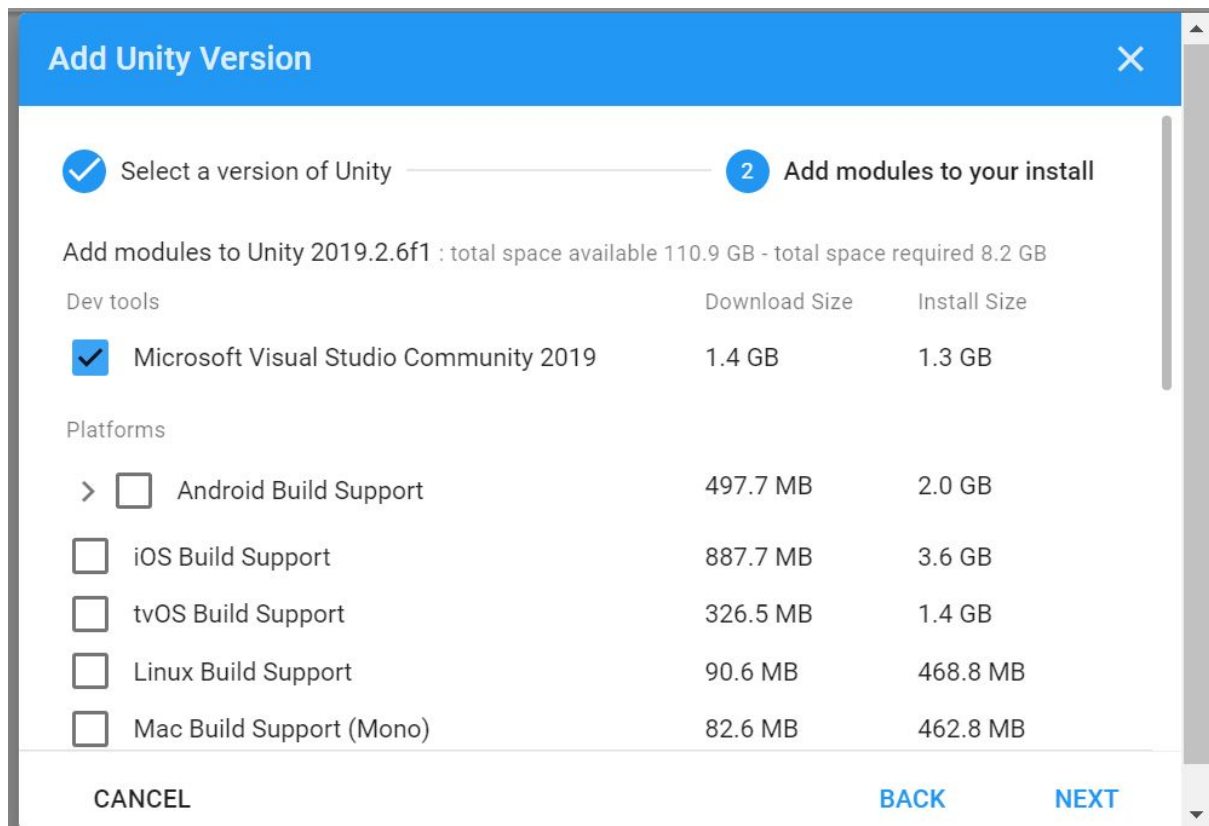
Can't find the version you're looking for? Visit our [download archive](#) for access to [long-term support](#) and [patch releases](#), or join our [Open Beta program](#) releases.

Latest Official Releases

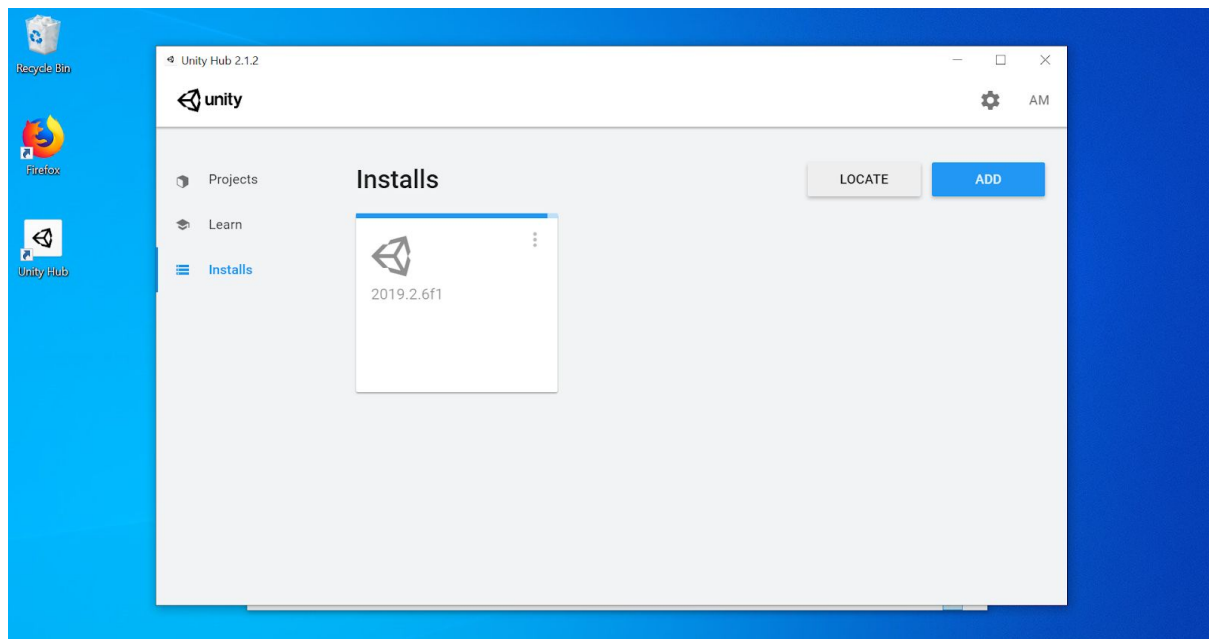
- ☒ Unity 2019.2.6f1
- ☐ Unity 2019.1.14f1
- ☐ Unity 2018.4.9f1 (LTS)
- ☐ Unity 2018.3.14f1
- ☐ Unity 2018.2.21f1
- ☐ Unity 2018.1.9f2

CANCEL BACK NEXT

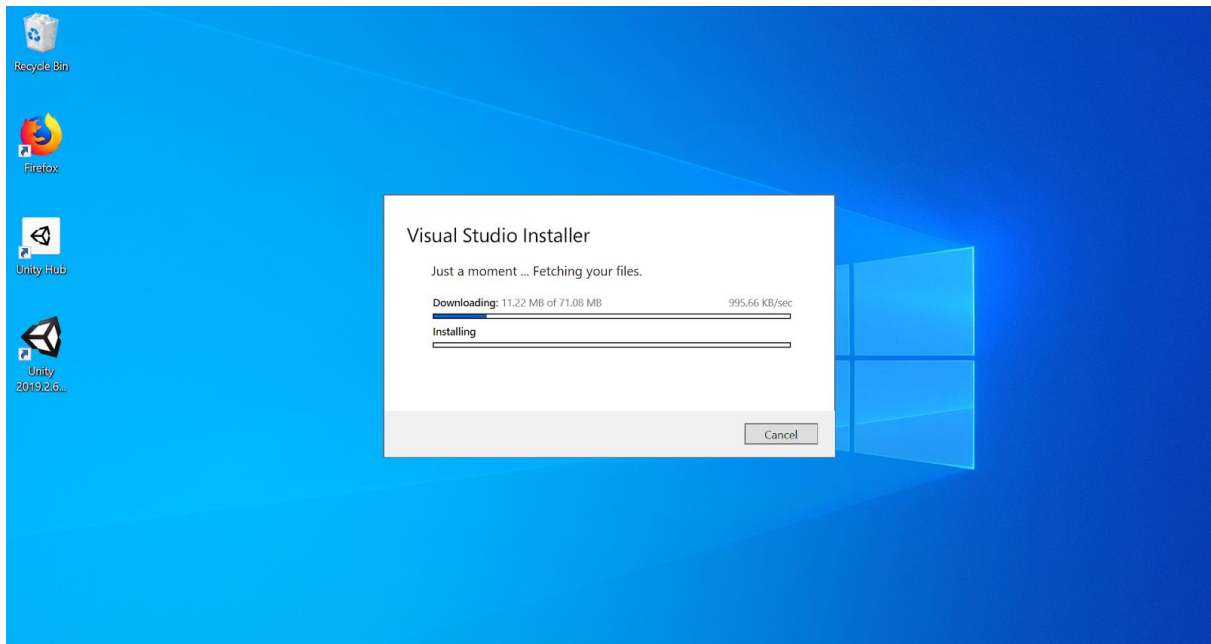
We click on the radio button where it shows the last Unity version and click on NEXT.



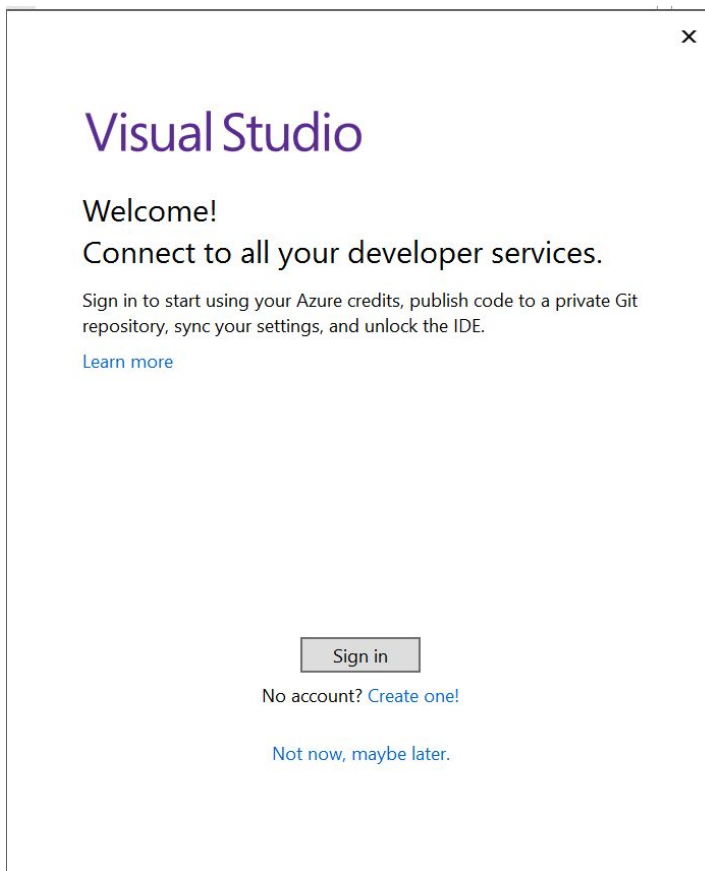
Here in my case I leave Microsoft Visual Studio checked cause I didn't installed it in the first place cause I just had a Linux distribution on my Laptop installed, but if you have already Visual Studio you can uncheck it. You must also download the Windows dll for the patch, simply by checking it on the bottom.



And now we must wait until the install finishes. Please keep the laptop charging because it will take several hours to finish. And don't shut down the computer.



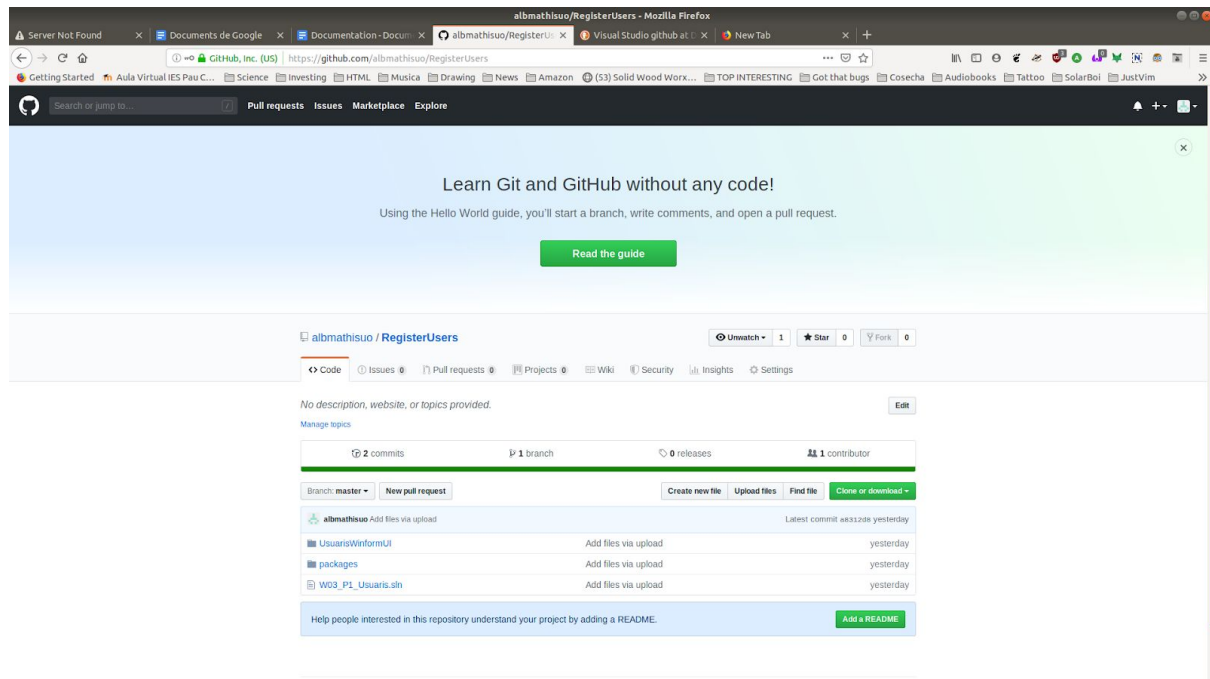
After the installation finishes we can see how automatically it installs Visual Studio for us.



When the installation of Visual Studio finishes we sign in with our Hotmail account, if we have one, and if not, we create one.

GITHUB SETUP

For registering users we upload it to Github.



>><https://github.com/>

Create and sync repo from existing project

- Create a new repository with same name as Solution
- Don't add Readme and neither .gitignore
- Create a new Readme.md, #First Winforms All ##
- # We are creating a github repo from an existing one
- +Review markdown syntax
- +Write something in Readme.md

Search for .gitignore Visual Studio file.

Create text file in root solution folder. Rename to .gitignore.

In root solution folder right click and git bash here.

```
$ git init
```

```
$ git add .
```

```
$ git commit -m "Initializing our repo for the Winforms"
```

```
$ git config user.email
```

(Windows>> Credential MANAGER >> Windows credentials >> github.com)

\$ git remote add origin https://github.com/githubuser/Solutionfoldername

\$ git push origin master

To clone a repository:

\$ git clone "URL"

Window → Layouts

Important windows

- Hierarchy
- Scene
- Game
- Inspector
- Project
- Console
- Assets
- Asset Store

UNITY WITH 3D OBJECTS AND PERFORMANCE

Windows > Rendering Lighting Settings

- For best performance, uncheck Auto Generate Light

Windows > Animation > Animation

Hierarchy

GameObjects > Very Important in Unity

Scene - Contains game Objects - Start menu, Level 1, Level 2

Examples of GO:

- Camera
- Direction Light
- 3D Object
- 2D Object
- UI

GO are made of components (they appear in Inspector window). For instance, Transform component.

Add new GO 3D and place it in (0,0,0)

Moving through Unity:

- Right click + WASD

- Right button mouse click + move mouse > Turn head around
- Left Alt + Left mouse button clicked > Move view around object selected
- Zoom > Mouse wheel
- Shift > Up speed
- Select a GO > Double Click on Hierarchy

01/10/2019

Basic 3D objects

- Cube, sphere, capsule, cylinder
- Plane

Grid

W - Move objects - Snap to Grid(Cntrl)

Change Grid > Edit > Snap settings

Decorate GO

-Material > Assets R > Create > Material - Choose Color or albedo play with Metallic & Smoothness. Drag material to GO.

-Texture (seamless texture)

-Save the texture in Assets

- Drag directly to the GO (a new material will be created automatically)

- Create new material (FloorMaterial), Albedo > Select texture image, assign

FloorMaterial to GO

Assets

- Assets store (3D models).

3D models

-FBX, OBJ

- .max, .blend, .. (need to have installed 3D Studio Max, Blender..)

Prefab: Assets > Folder > Prefabs > Drag Projectile to Prefabs folder

Create Bullet Creator and Create a new Script

GameObject projectilePrefabRef;

void Update()

```
{
    if (Input.GetKeyDown(KeyCode.F))
    {
        Instantiете(projectilePrefabRef, transform.position, Quaternion.identity);
    }
}
```

FOR MOVING GUN:

New script asociated with the gun.

```
void Update()
{
    // Input.GetAxis: Returns a value from 1 to -1 depending if we press -> or <- and the
    // duration we have been pressing the key. Can be set up in Edit -> Project Settings -> Input ->
    Axes
```

```
    // Know why hInput must be in Z position if we want to move from left to right.
```

```
    float hInput = Input.GetAxis("Horizontal");
    Debug.Log(hInput);
    transform.Translate(new Vector3(0, 0, hInput) * Time.deltaTime * moveSpeed);
}
Transform.Rotation
Transform.Translate
```

Campera FPS (Standard assets)

Characters -> First Person Character -> Prefabs -> FPS Controller

- Resize and reposition
- Put gun inside
- Pull bullet creator inside

MYSQL AND WINDOWS.NET FRAMEWORK

Mysql: Grant all privileges on * (root) we must change it to grant all
grant select on lector to biblioteca

F7 per canviar entre codi i el diseny.

Double click to the button to create the object in the code.

Search Button:

We create a string that lately we use to connect to to Mysql, then we put the output of
the ArrayList in a "con.Query<User>(sql).ToList()". And Display the information in the Array
of the list users.

For showing the output of the MySql:

```
for (int i = 0; i < books.Count; i++)
{
    booksListBox.Items.Add( books[i].TITOL );
}

foreach(var book in books)
{
    booksListBox.Items.Add(book.ID_LLIB + ":\t" + book.TITOL);
}
```

- If we want to Display it in a ListBox, the ID_LLIB and the TITOL of the sql we do it this way.

For the connetion with Mysql we need to import from Nugget Packages this two libraries:

```
using Dapper;
using MySql.Data.MySqlClient;
```

Unity Movement Reminder

-3D Unity Rigidbody, Force, Gravity, ProjectWindows where assets are, and well organized. Prefabs, scripts, textures, and Assets Store (Nuget Packages)

Moving in 3D space:

- Right Mouse + WASD (Move itself)
- Right mouse clicked + move mouse (Move only direction)

It's better to select an object in the hierarchy than in the game object.

E - Rotate Tool

R - Scale 3D tool

x axis -> Vector3.left and Vector3.right

y axis -> Vector3.up and Vector3.down

z axis -> Vector3.forward and Vector3.backwards