



fordys
VAR

Fostering Inclusive Learning
for Children with Dyslexia

Manual

FORDYSVAR

AR

English

<https://fordysvar.eu/es/>



Cofinanciado por el
programa Erasmus+
de la Unión Europea



UNIVERSIDAD
DE BURGOS



USER MANUAL - FORDYSVAR AR

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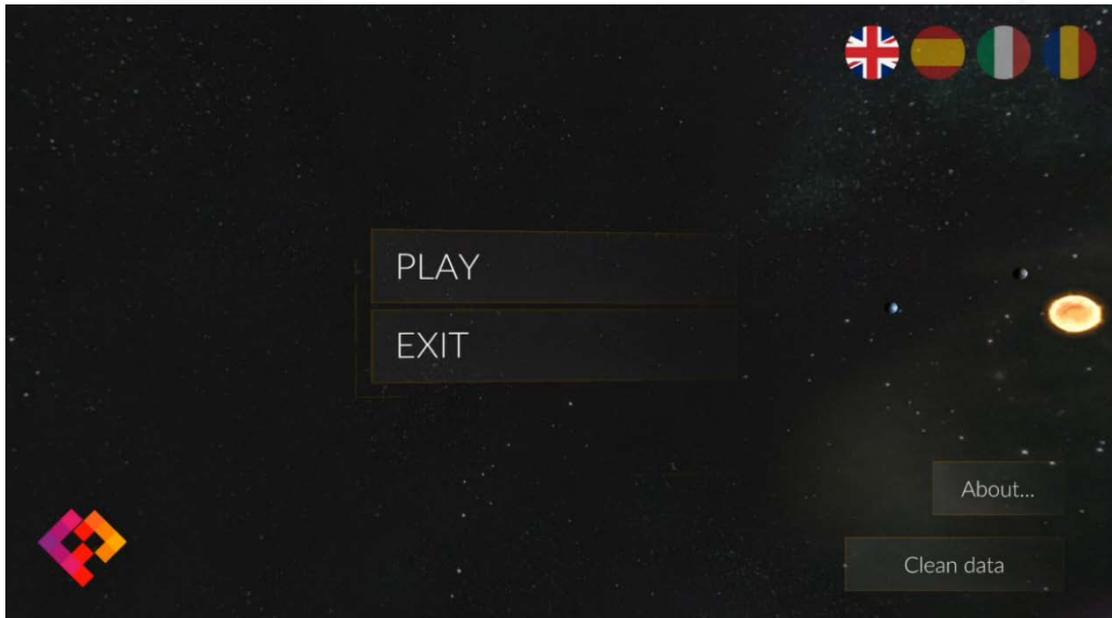
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MENU

In the AR version the Menu changes slightly since it also allows us to choose the world and the activity.

This means that there is no mother ship as such and the point from where we control our progress is in the Menu itself





< FLURIDIUM

- Formula
- Magic Squares
- Latitude
- Temple

< Fluorite Formula

In this world we find enemies who are sensitive to fluorite, which is the predominant mineral in this world. For this, it is very important that you remember that its chemical formula is $\text{Ca} - \text{F} - 2$ and that it is a thermoluminescent mineral. You must discover the molecules that

START ACTIVITY

GAME ACTIVITIES

FORDYS AR activities are based on and adapted from the VR version. To consult information about these activities, consult them in the *User Manual - FordysVAR VR*.

These activities are FORMULA, MAGIC SQUARES, LATITUDE, AND TEMPLE (Final). The operation is very similar to those defined for VR changed so that they can be played in this version.

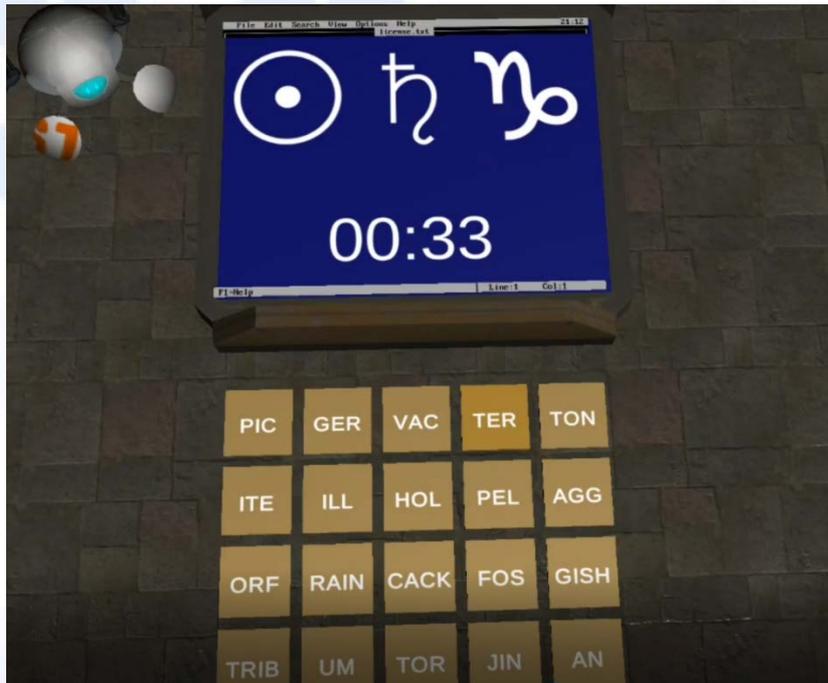
The interaction in the activities will obviously be carried out with the finger in a tactile way as it is a mobile device

Formulas Fluridium Activity

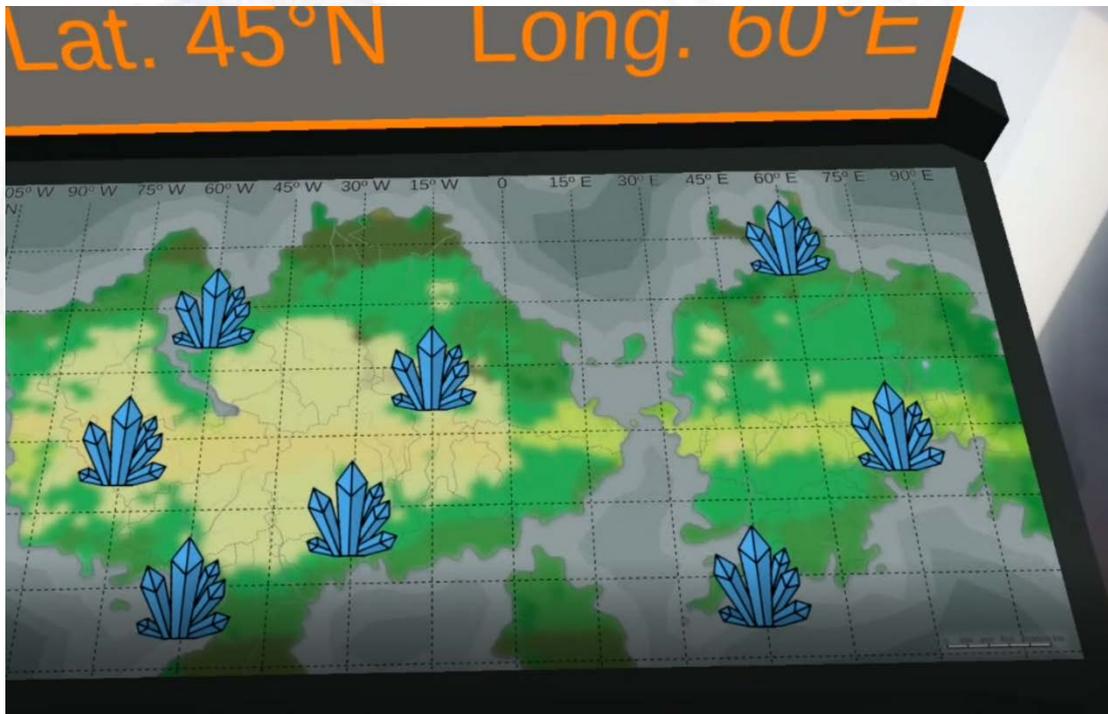




Fluridium Magic Squares Activity



Latitude Fluridium Activity



MARKER

We will need the marker to place our AR content. The marker to be used (provisionally) is as follows:

It is recommended to print it to be able to place it where we want.





To recognize the marker correctly, it is recommended to place it in a place with sufficient light, without reflections, that it is completely visible, point it straight ahead ...

If we follow these guidelines, the content will be more stable and the AR technology will work better. The experience will ultimately be more satisfactory.





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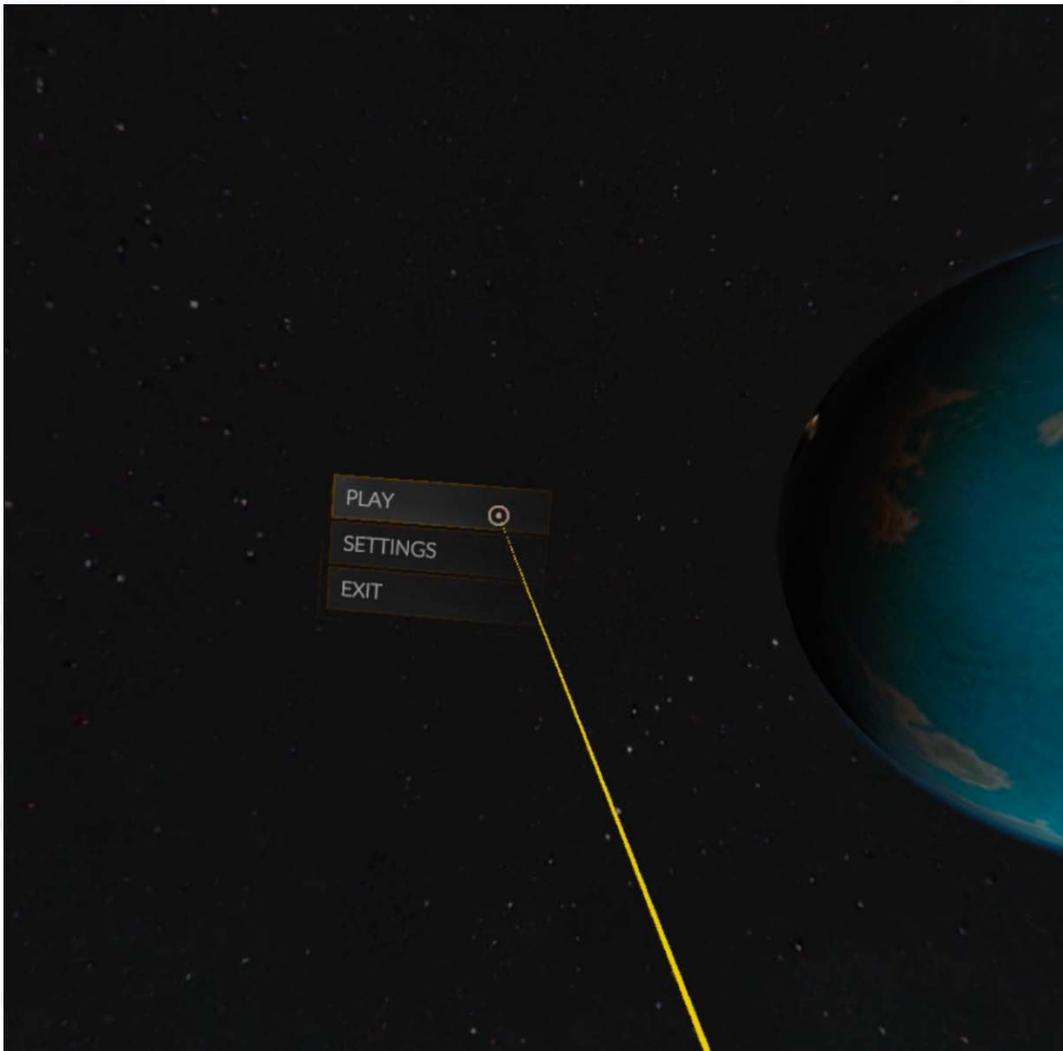


MENU

From the *MENU* We can create a new game, load a current game or change the language and subtitles settings. Window *SETTING* It is opened by clicking on the "Settings" button.

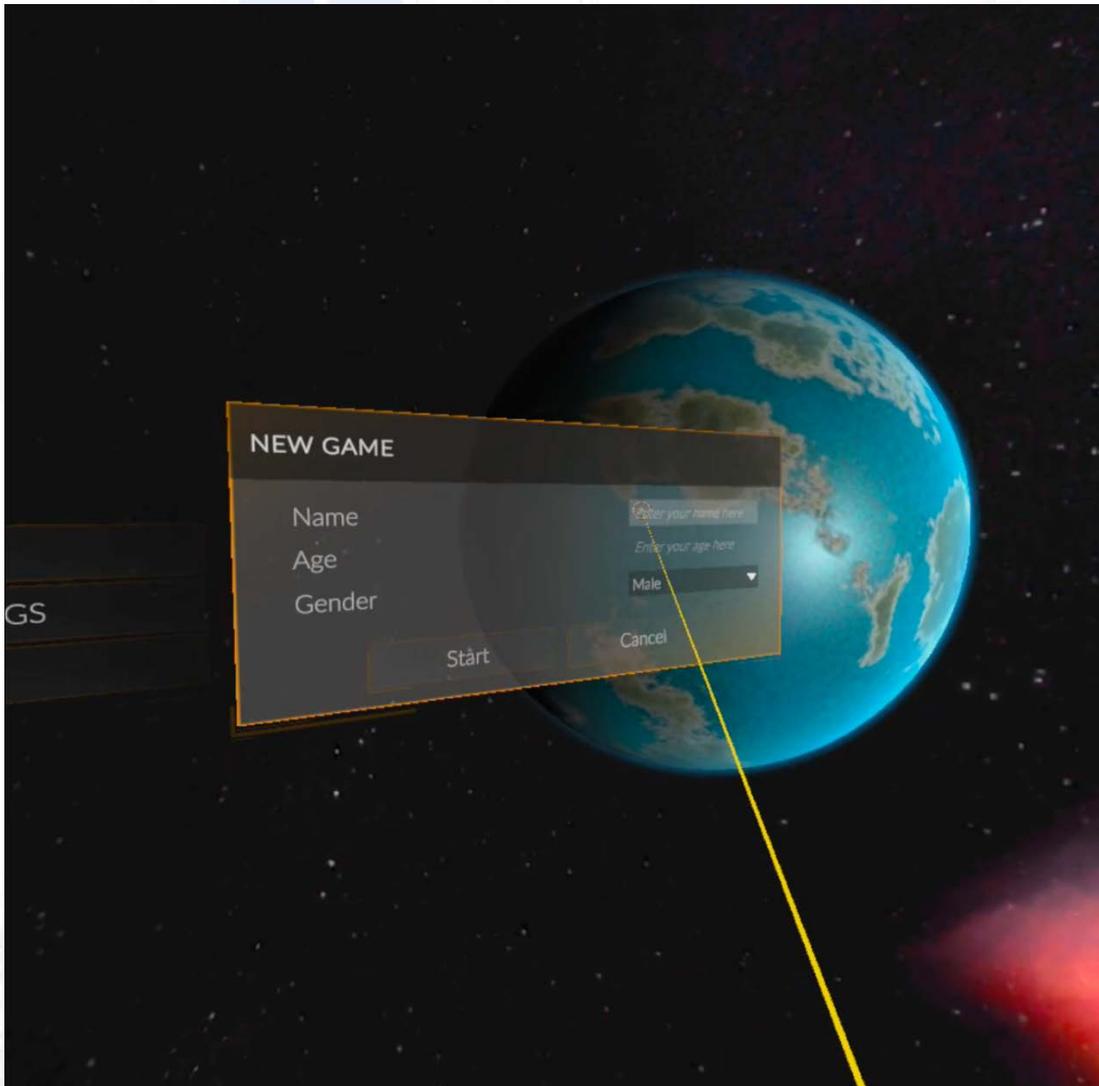
To create a new game we follow the following process:

- We press the "Play" button, this will open the submenu in which we will choose whether to create a new game or load an existing one





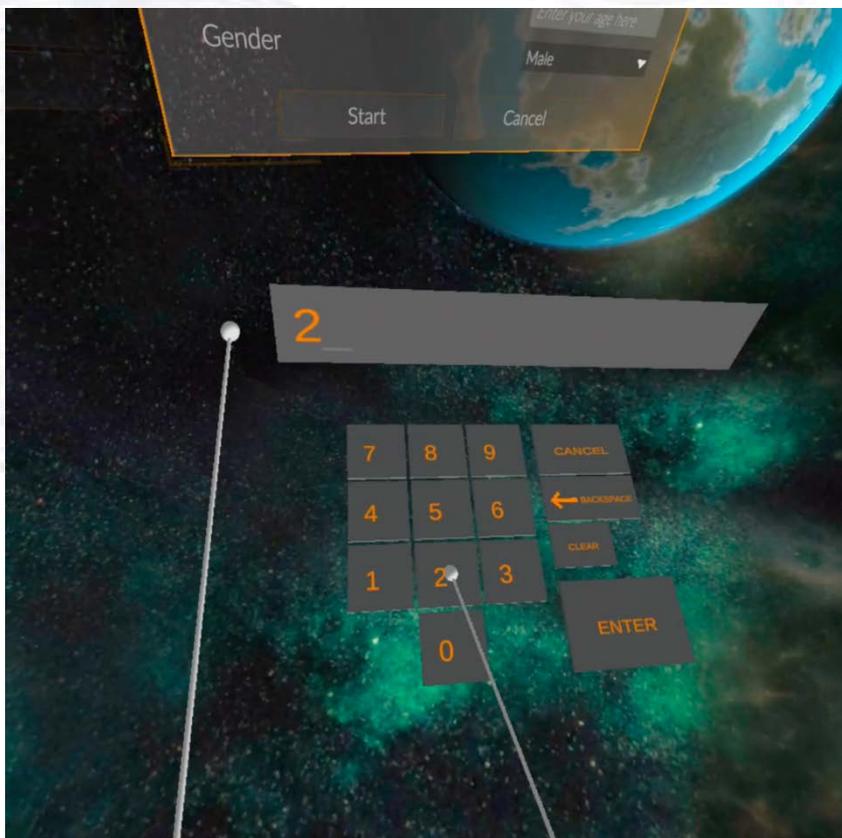
- In the window *NEW GAME* We enter the name and age of the player, clicking on the text box will open the keyboard for data entry



- The keyboard will allow us to enter the name and age data using some drumsticks. It will be written as if it were a xylophone

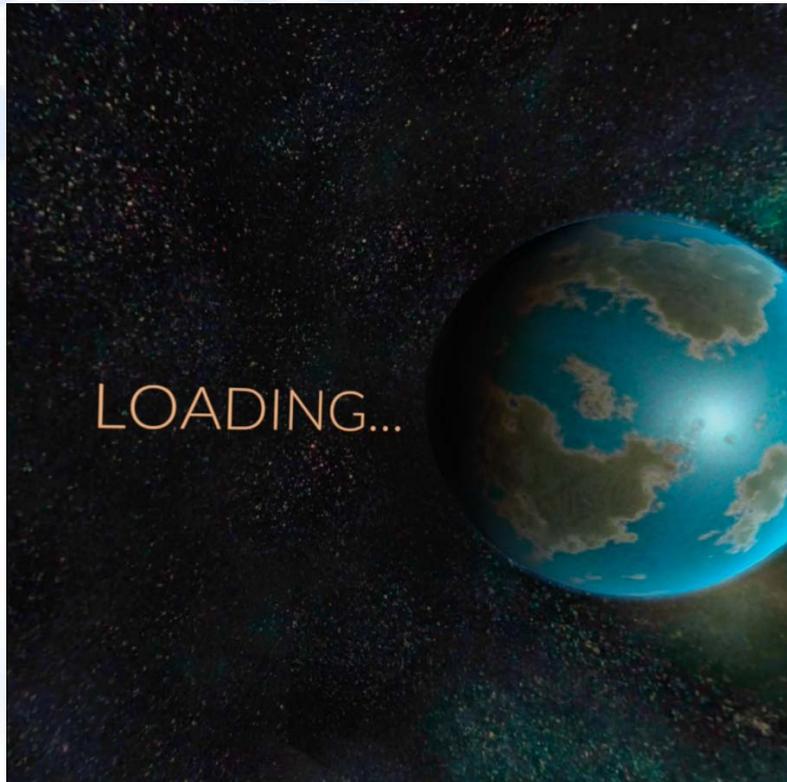


- The keyboard to enter the age will be only numeric and will limit the entry





- Once the "Start" button is pressed, the game will begin to load. It will take a few seconds.





MOTHERSHIP

- Once the game is loaded we will appear in the mother ship. A message will appear that will tell us how to move around the ship

The movement stick will be used throughout the game to move through the worlds and thus find the activity panels.



- Once we touch the cue ball with the remote, it will wake up. WIBU will explain an introduction to the game and the ship



- WIBU shows us the main screen from where we will choose the planet to which to travel and where we will consult the scores.





- Once WIBU invites us to get the license of the flying motorcycle we will have to touch it again with the remote control to transport us to the driving area

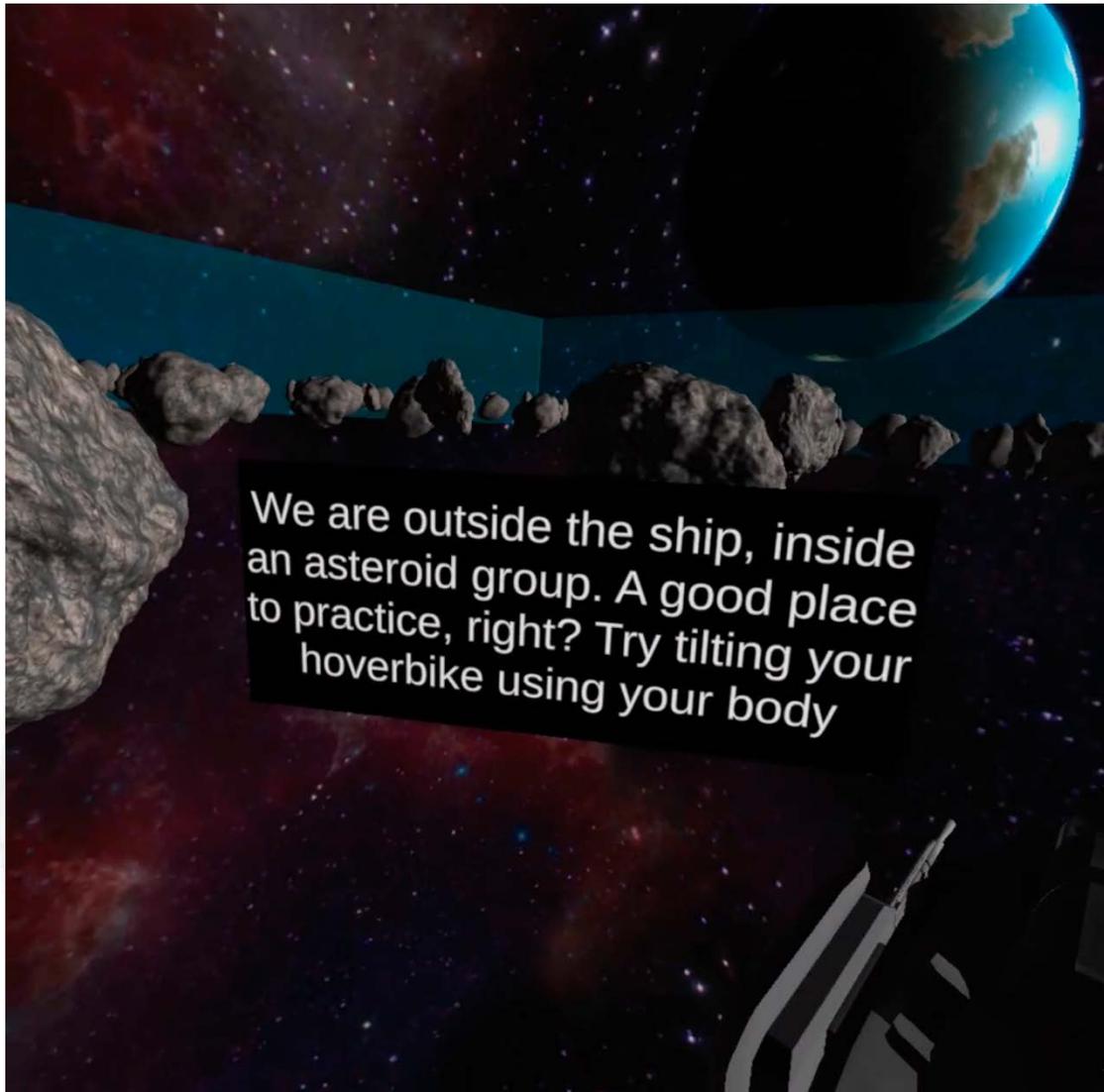




DRIVING TEST

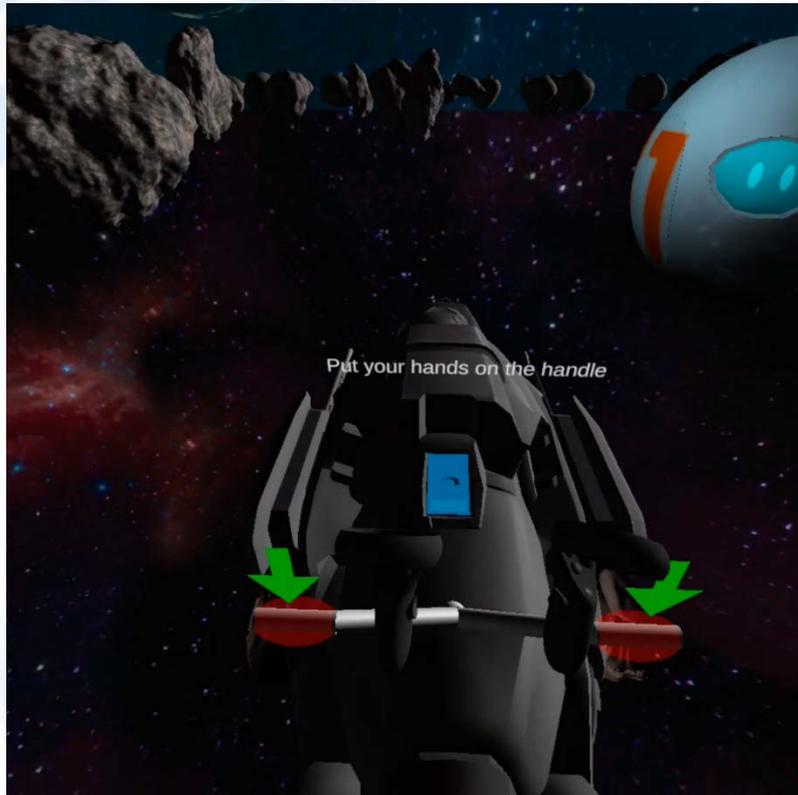
- Once we are transported to the driving area, WIBU will explain to us step by step in a guided way everything necessary to control the flying motorcycle

The stage is an asteroid belt that will help us practice driving using obstacles

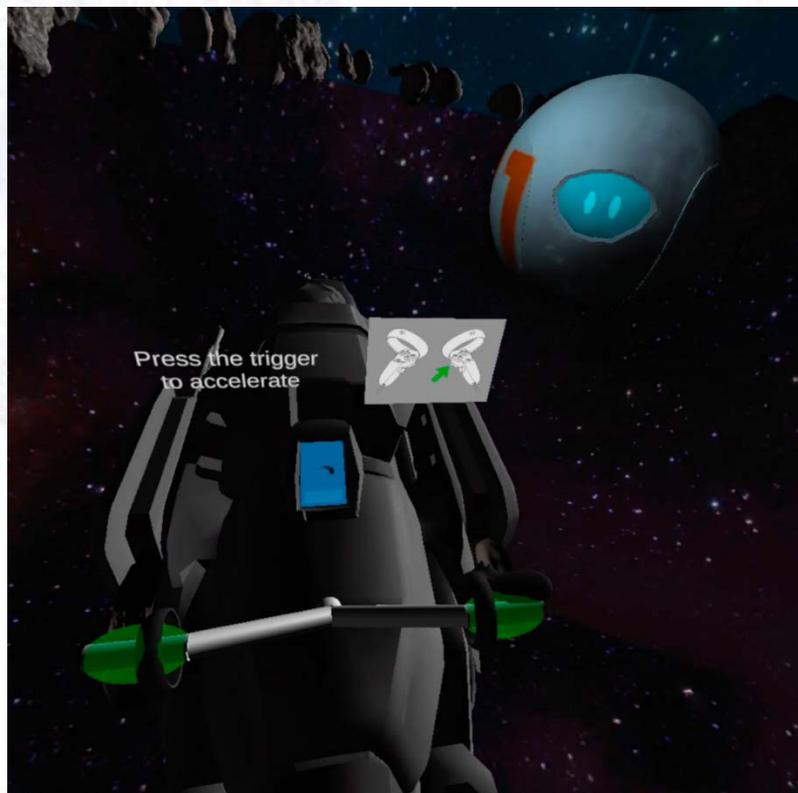




- WIBU will indicate the steps one by one graphically and audibly in the following way: Hands should be placed on the handlebars so as not to lose control

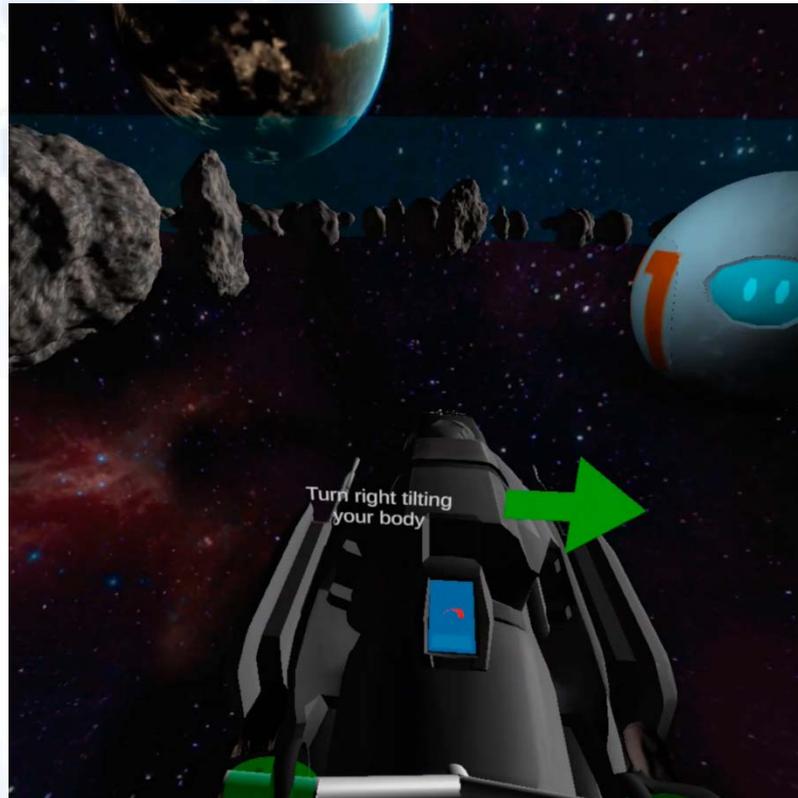


- We will use the trigger of the right control to accelerate the motorcycle

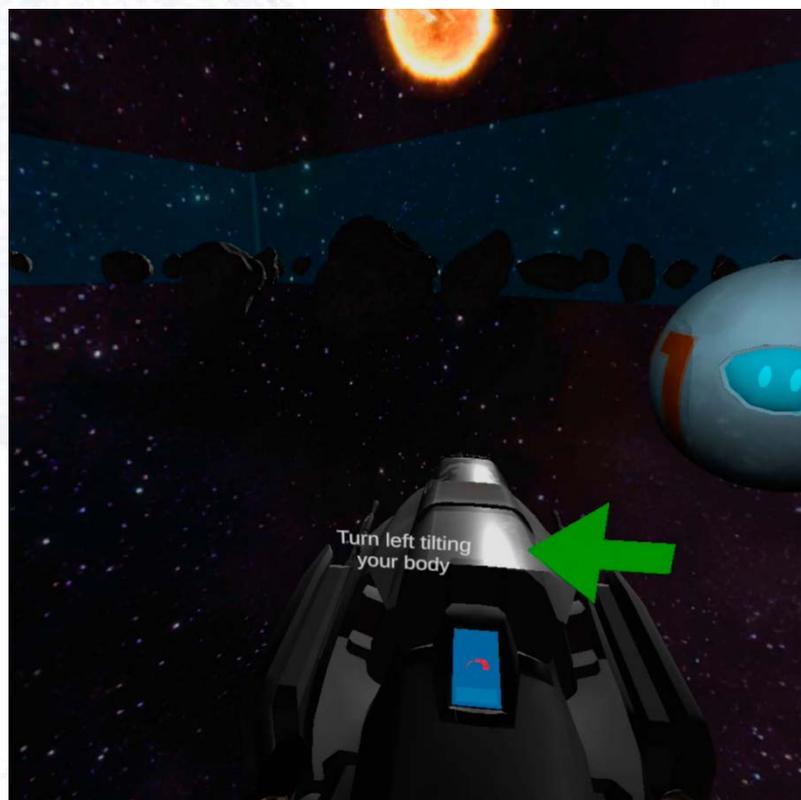




- Turning our head to the right the motorcycle will turn to the right

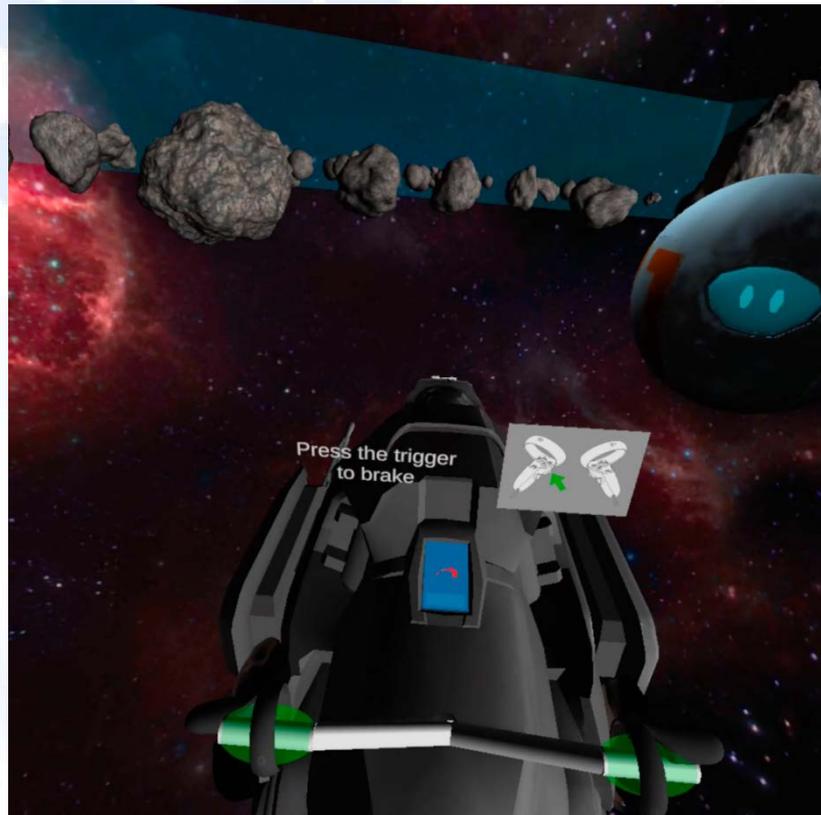


- Turning our head to the left the motorcycle will turn to the left

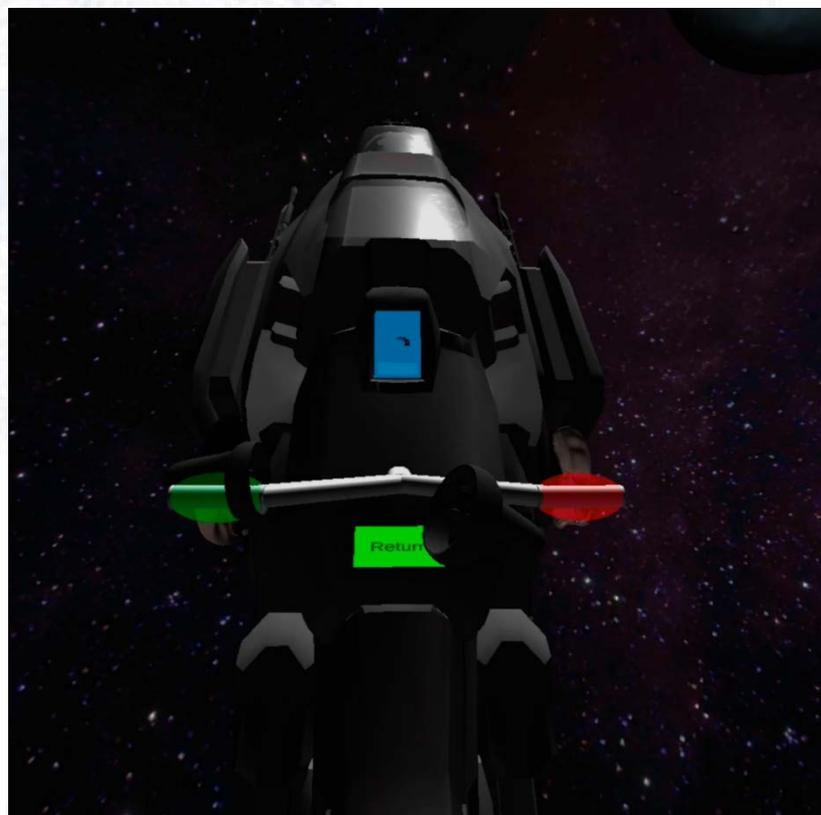




- The left control trigger will be used to brake the motorcycle



- When we finish the test, the button will return to the ship to press





JOURNEY TO THE FIRST PLANET

- Once the driver's license for the motorcycle is obtained, WIBU will indicate that we can travel to the first planet from the main screen

Fluridium will be unlocked on this screen and we will have to choose it to start the journey, we can also choose an avatar.

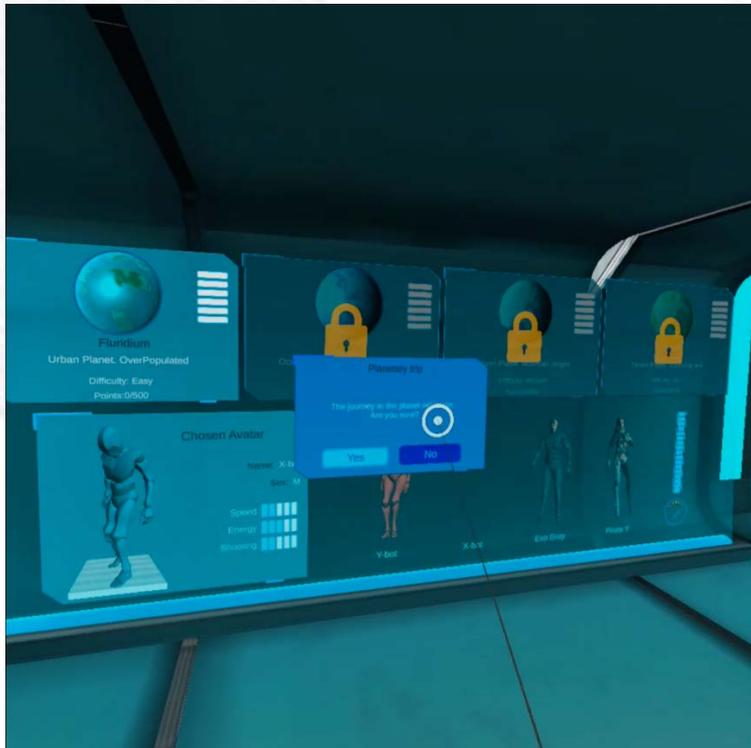




- The other planets will appear locked and these will be unlocked when we complete the previous planet

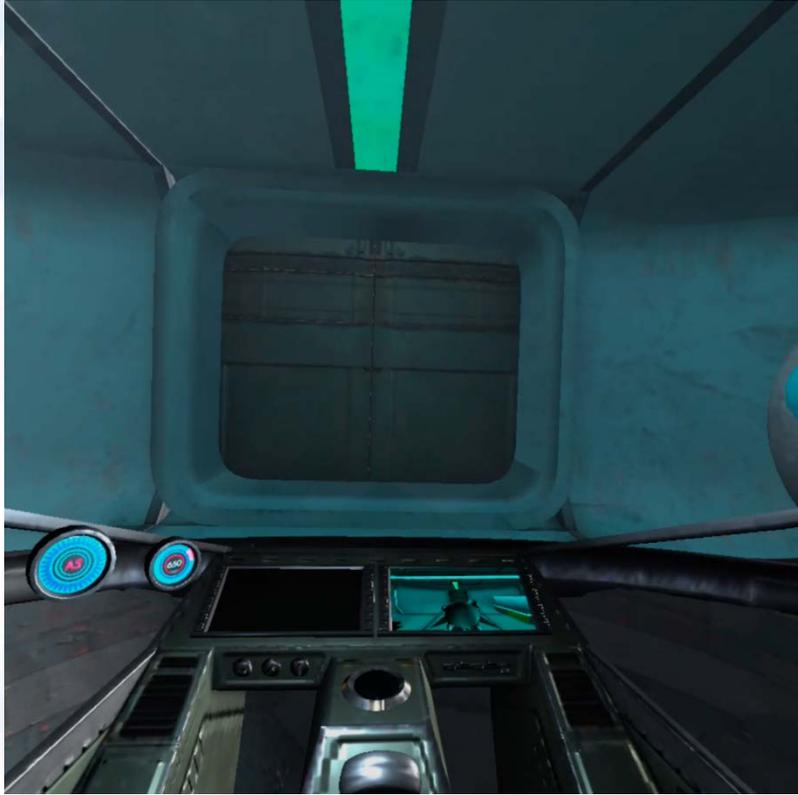


- By clicking on the planet, a window will appear that will start the trip to the planet and there will be no going back until you return to the mother ship.

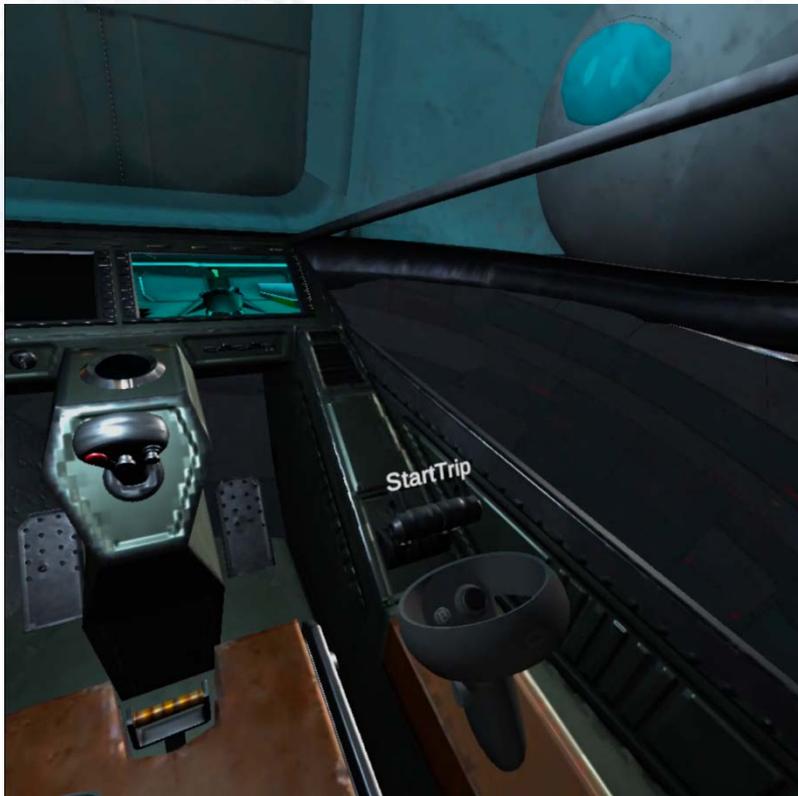




- We will be transported to the small ship that will take us to the different planets

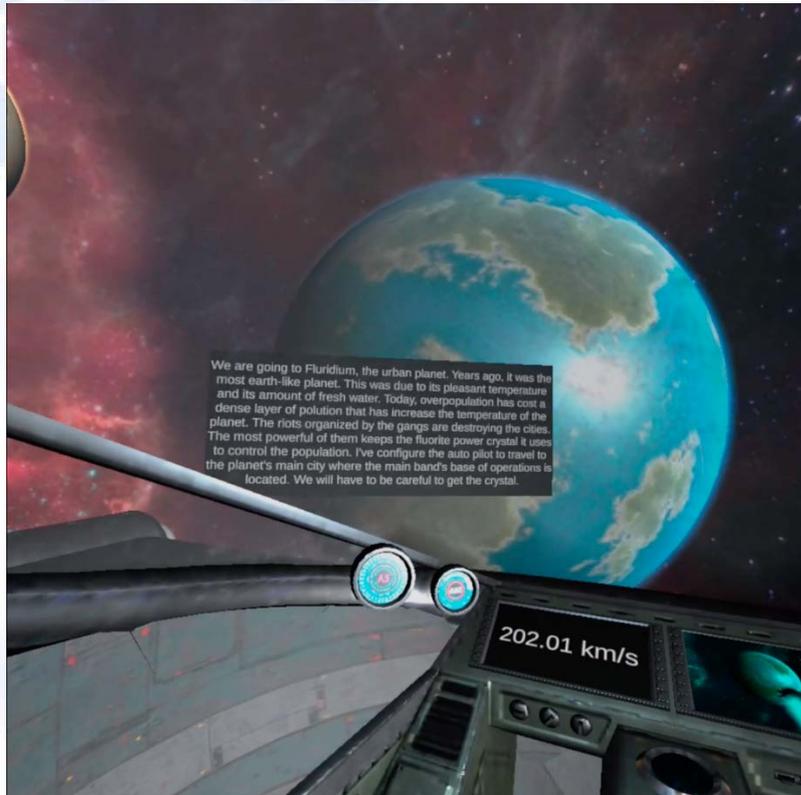


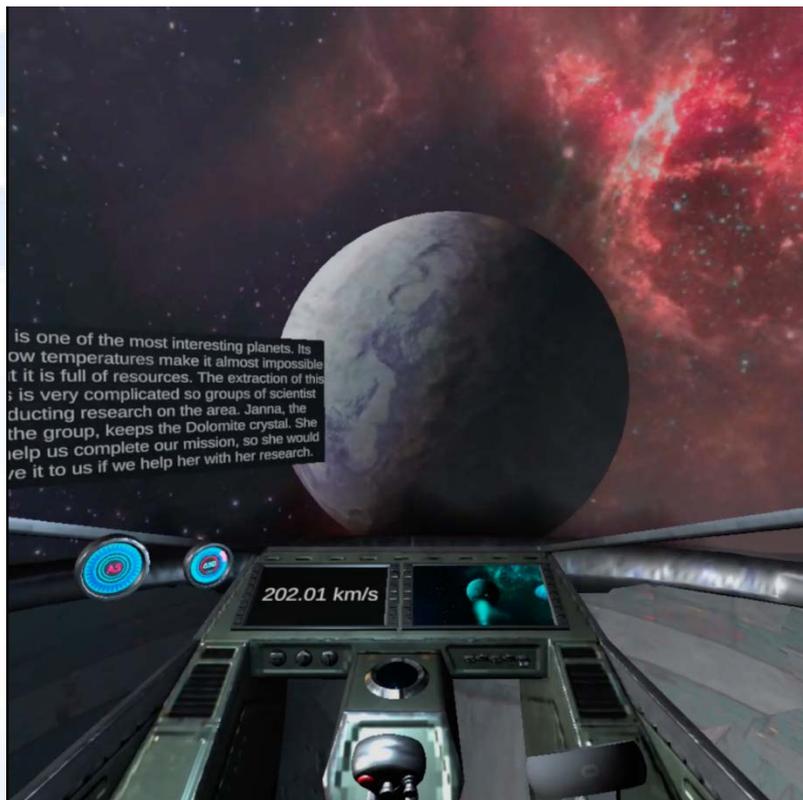
- To start the trip we will push the starter lever on our right





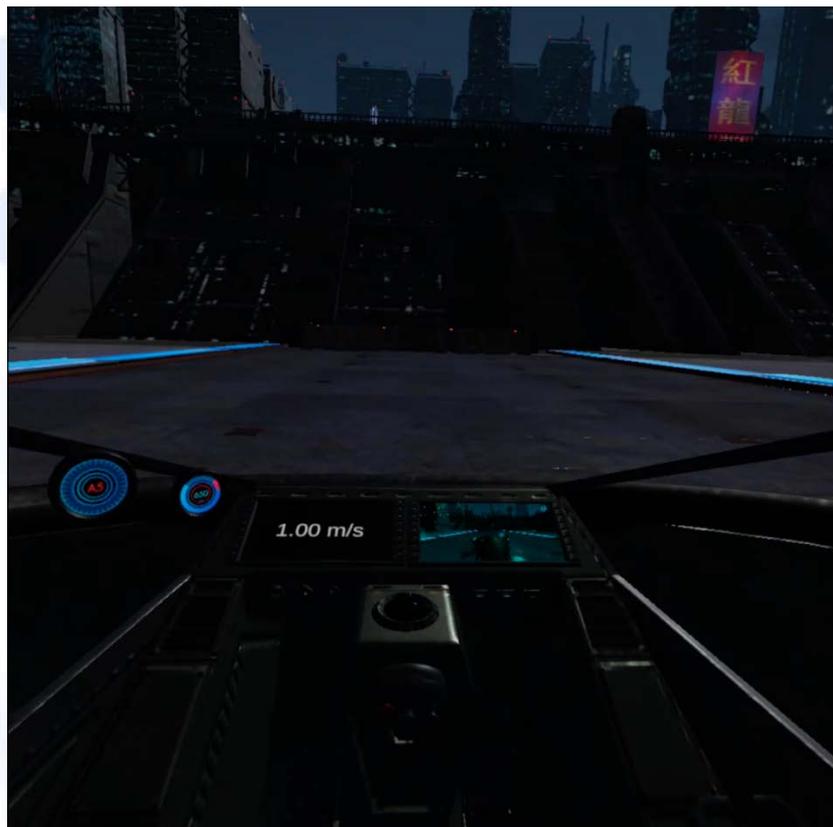
- During the trip to the planet WIBU will tell us a brief introduction about that planet. Some data will be useful for some activities on that planet





- Once we enter the planet, the landing will begin







- Once disembarked, WIBU will guide us to the first activity, the rest we will have to find on our own by looking for the activity panels





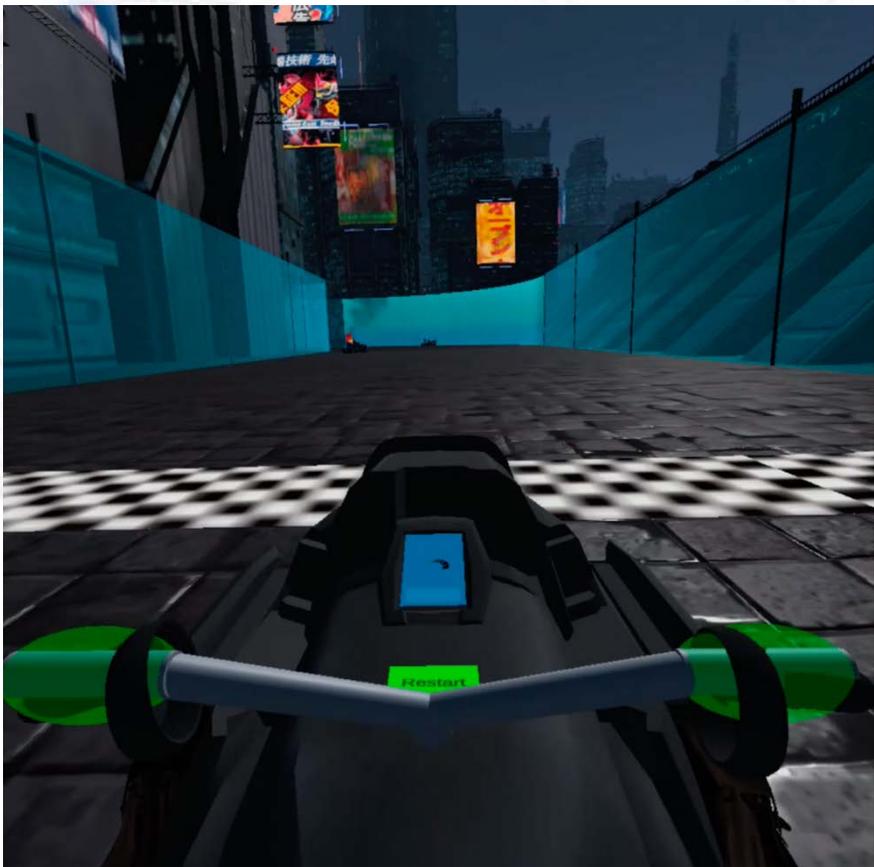


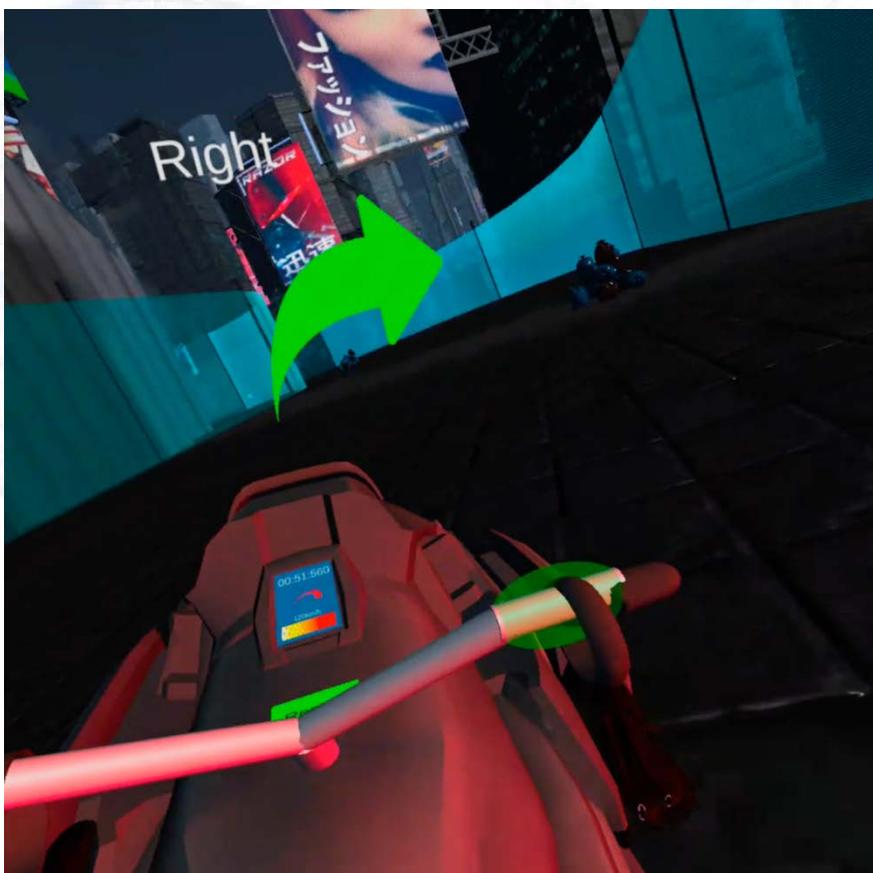
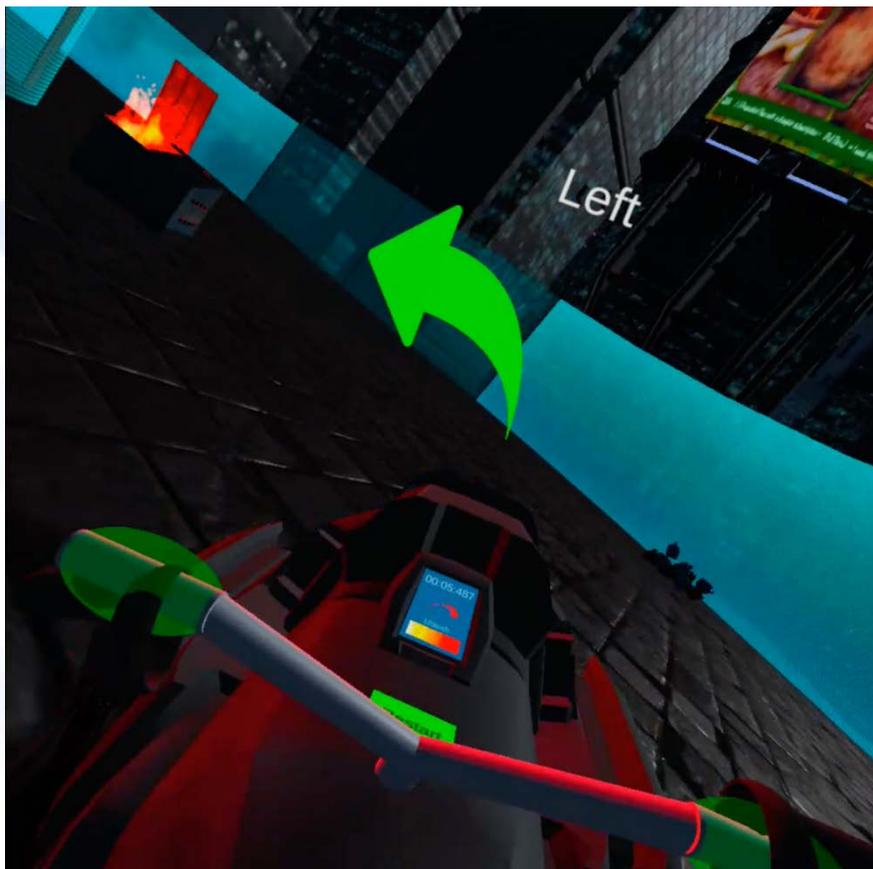
ACTIVITY: CAREER

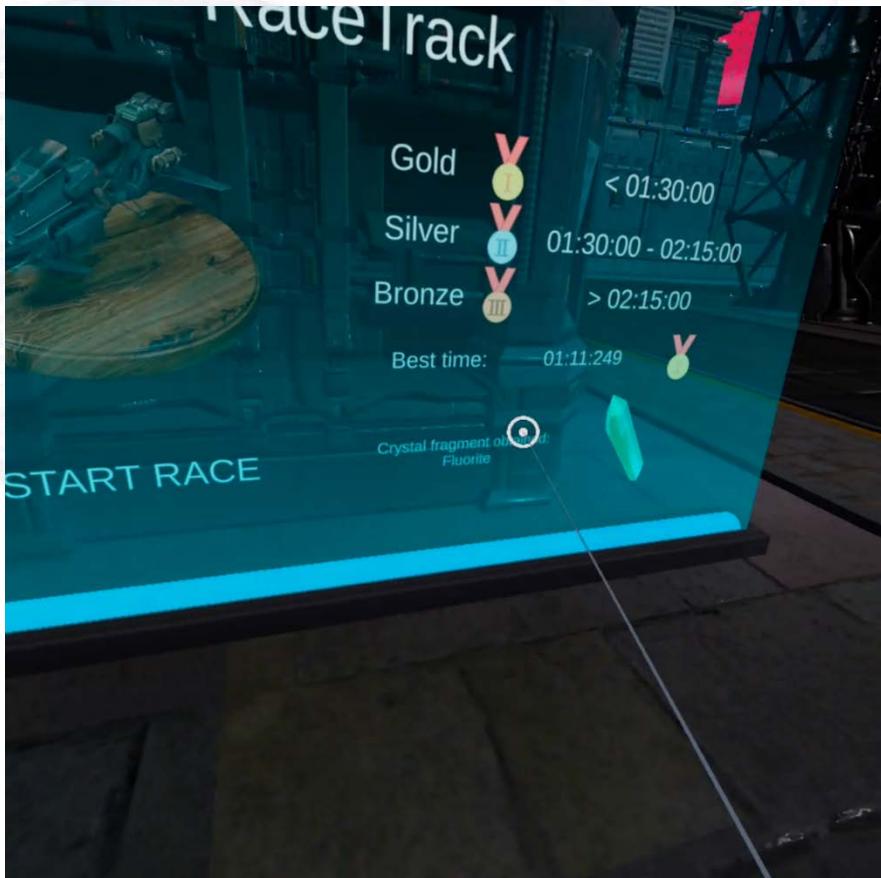
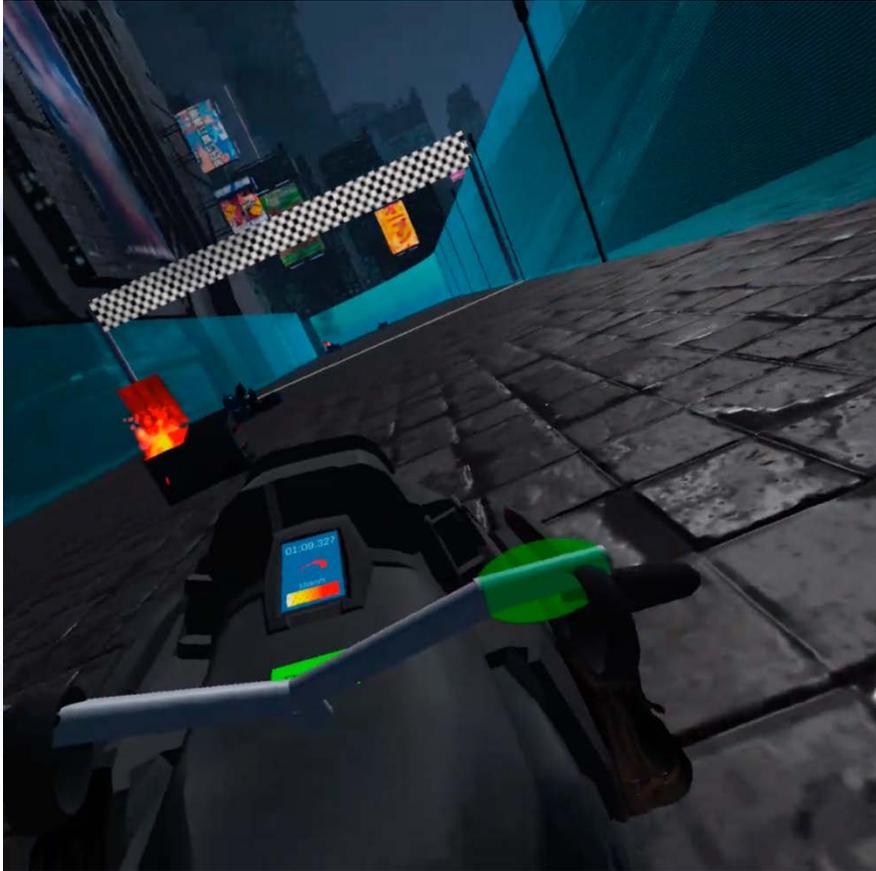
- The character of that planet will explain the history behind that activity. Broadly speaking, we will have to beat a certain time in an obstacle course with audiovisual guides.
- The screen from which we will start the activity *RACE* he is almost always close to the character of that planet.
- Below are images of this activity for the planets Fluridium, Kowat and Atimolod.

FLURIDIUM:





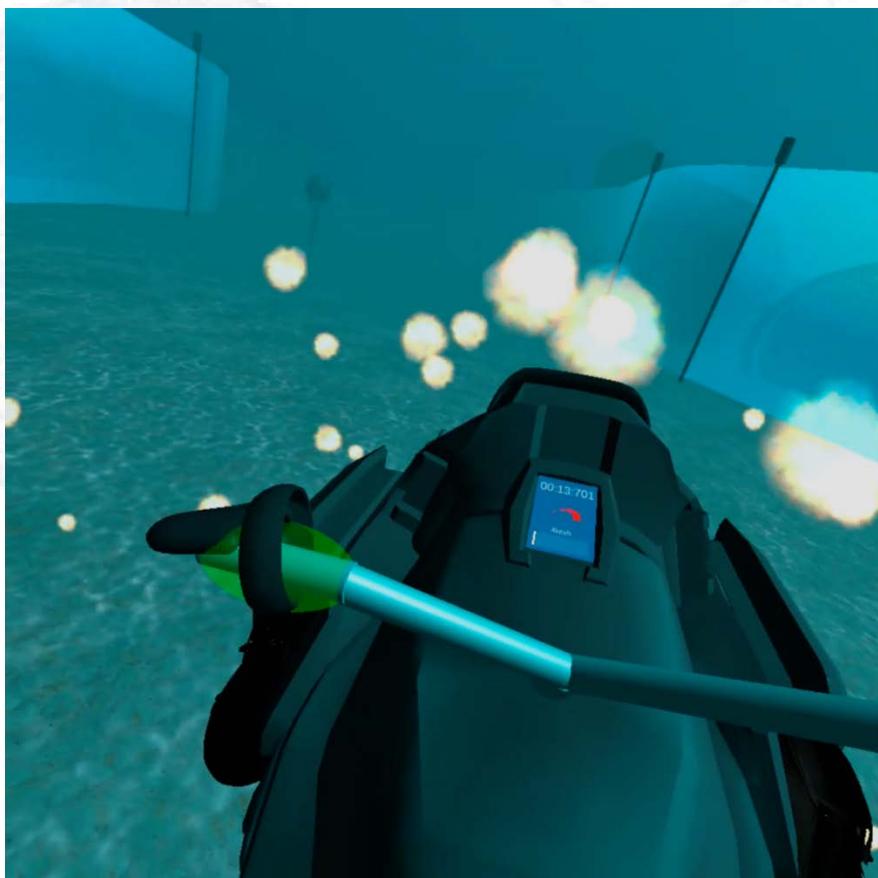






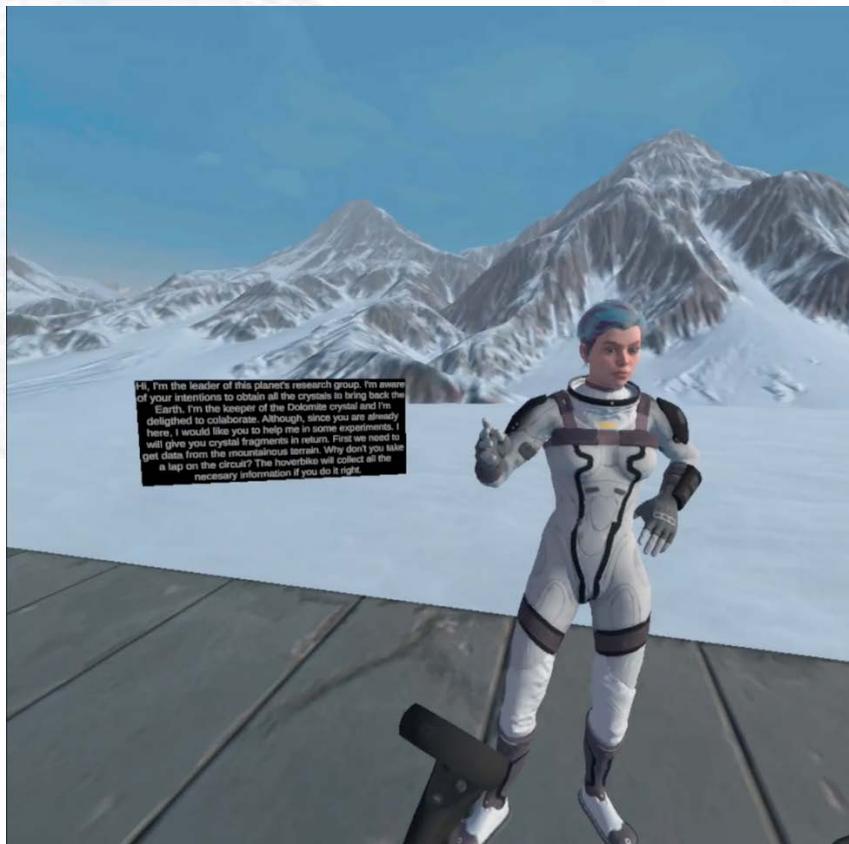
KOWAT:

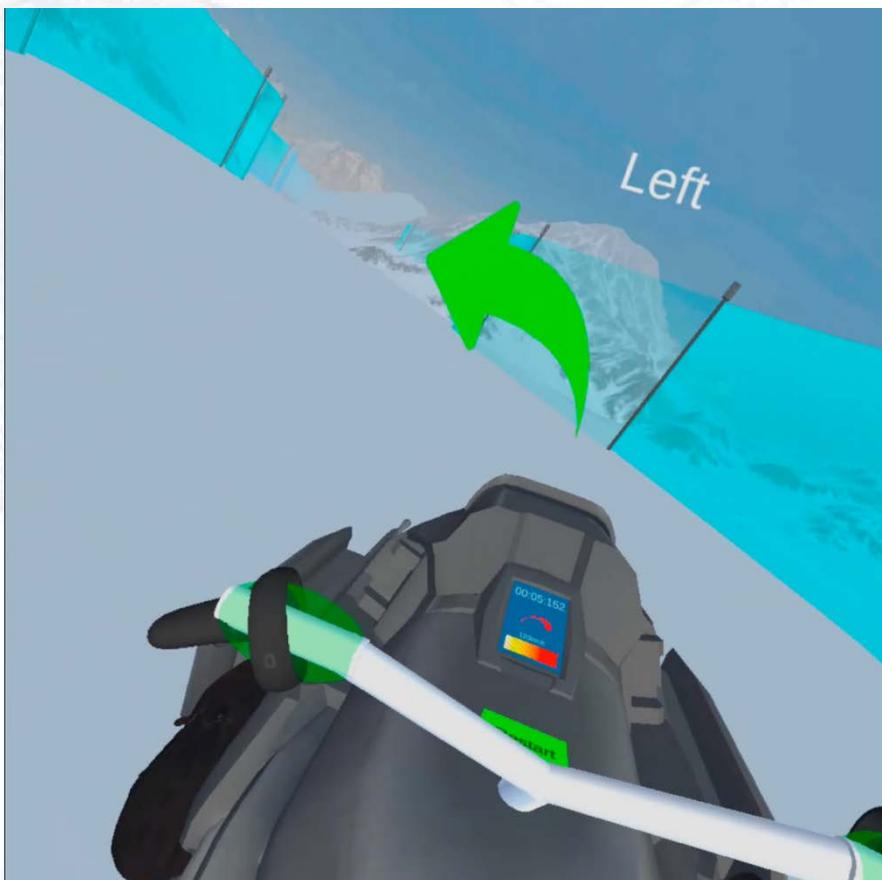
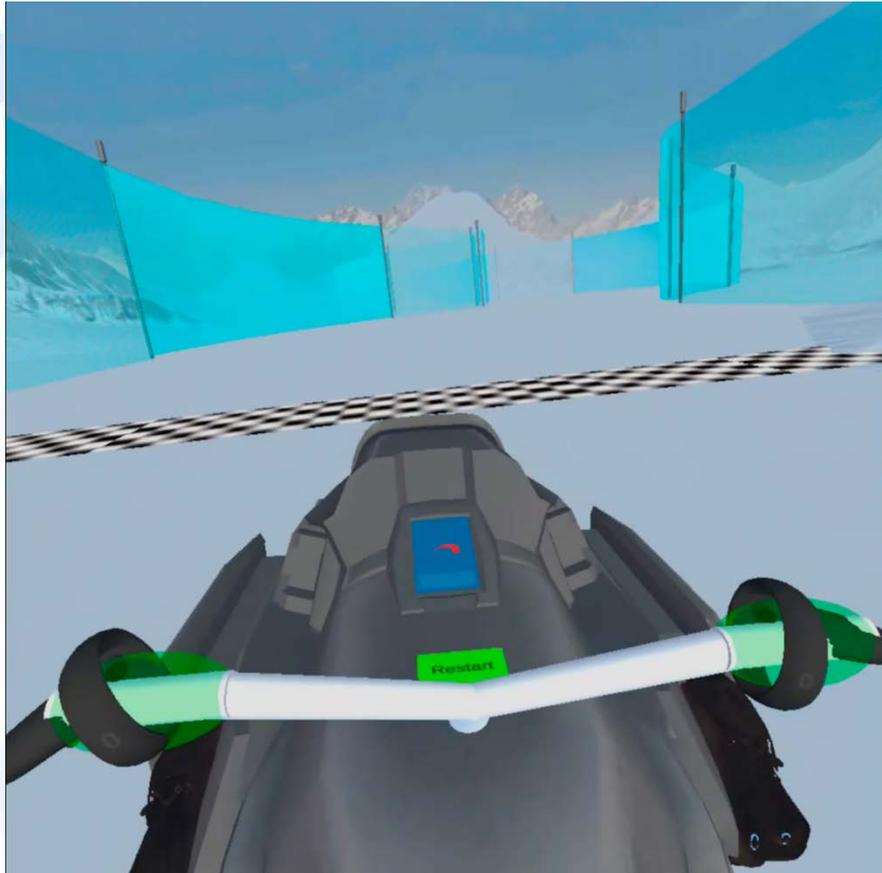






ATIMOLOD:



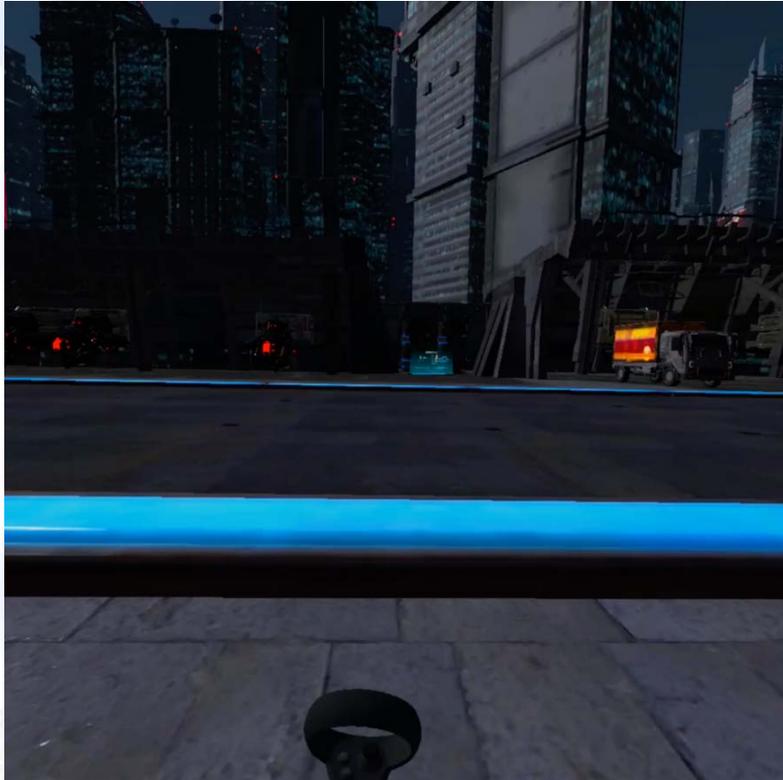






ACTIVITY: AVOID OBSTACLES

- Once the race is completed we will have to find the next activity, for that we will have to look for its panel. The panel will have been activated upon completion of the race.





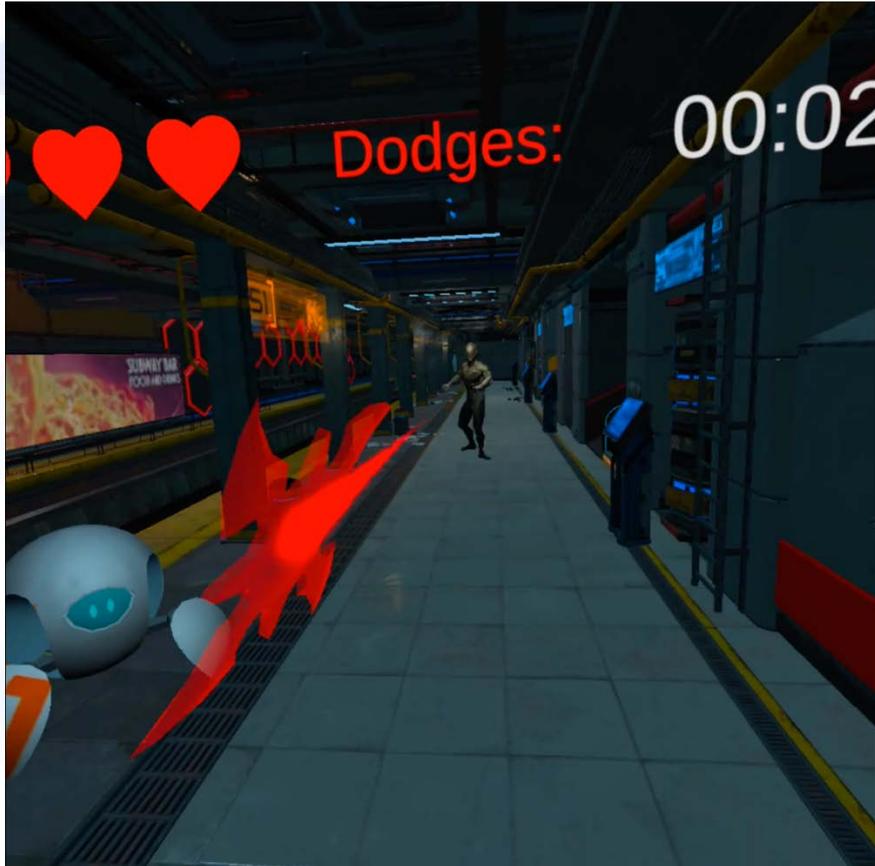


- In this activity we have to dodge the objects that the character throws at us. For that we will use the audiovisual indications that WIBU provides us

Below are images of this activity on the different planets

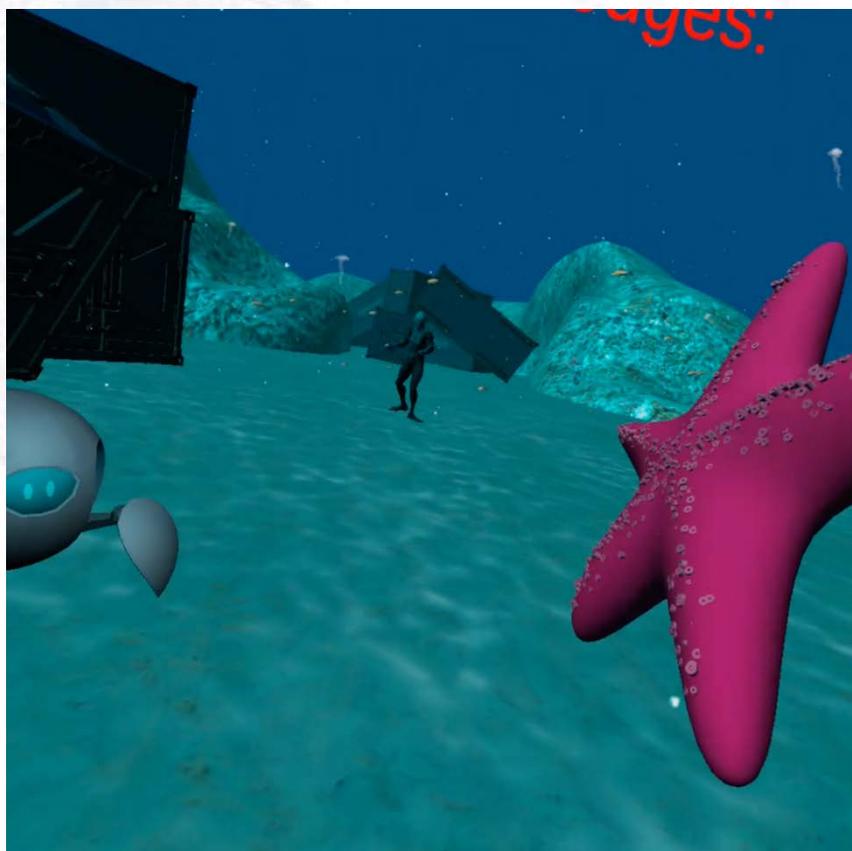
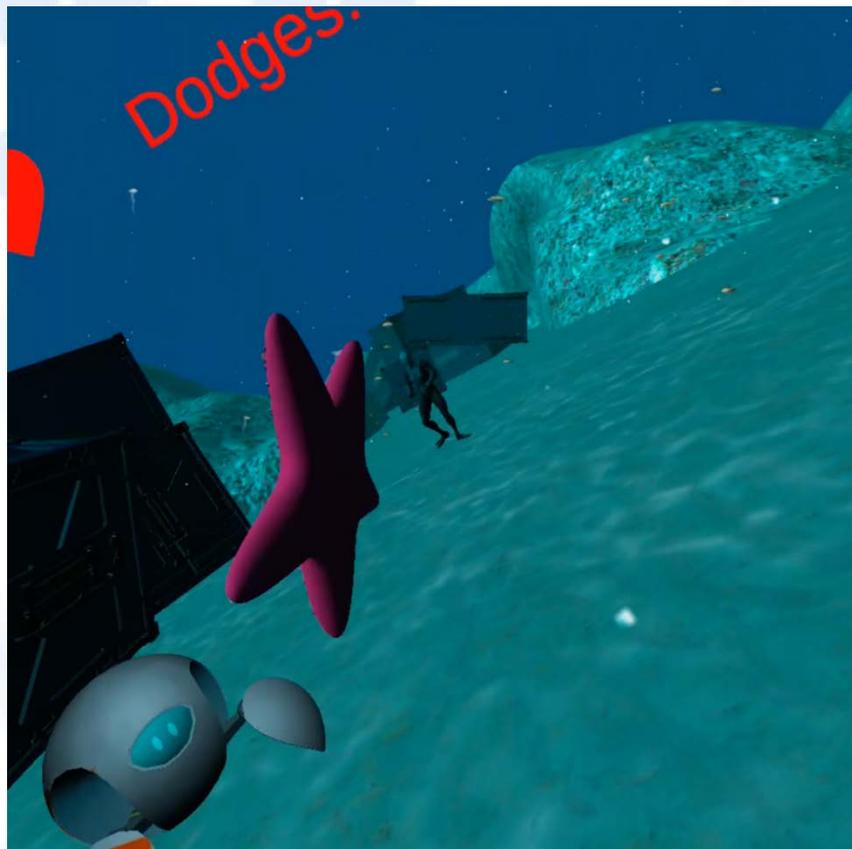
FLURIDIUM:





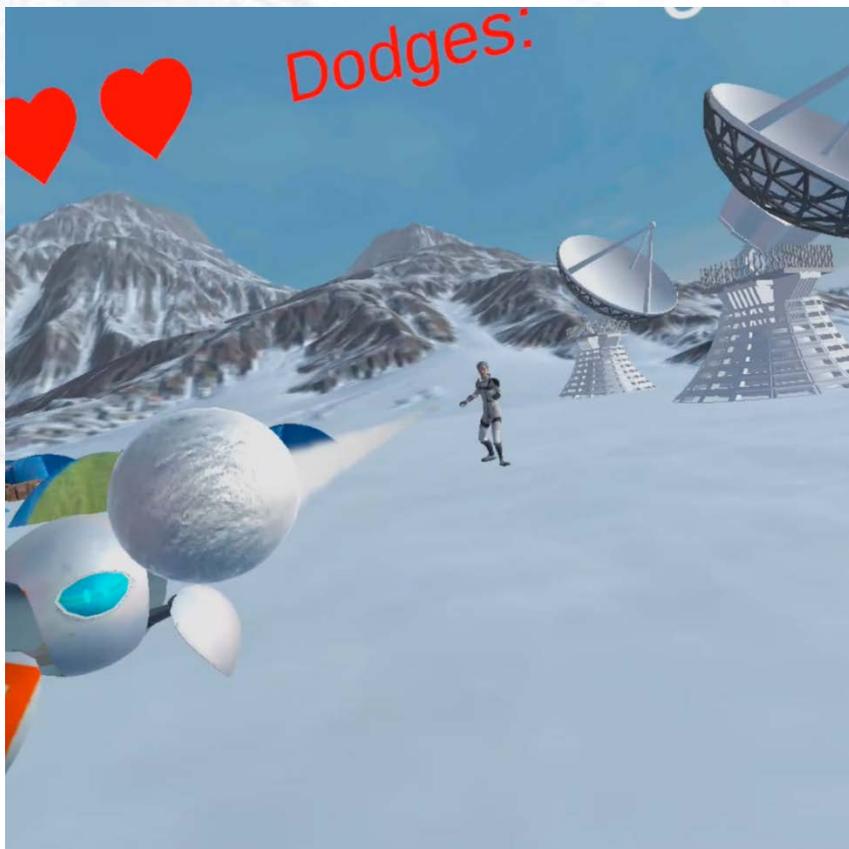
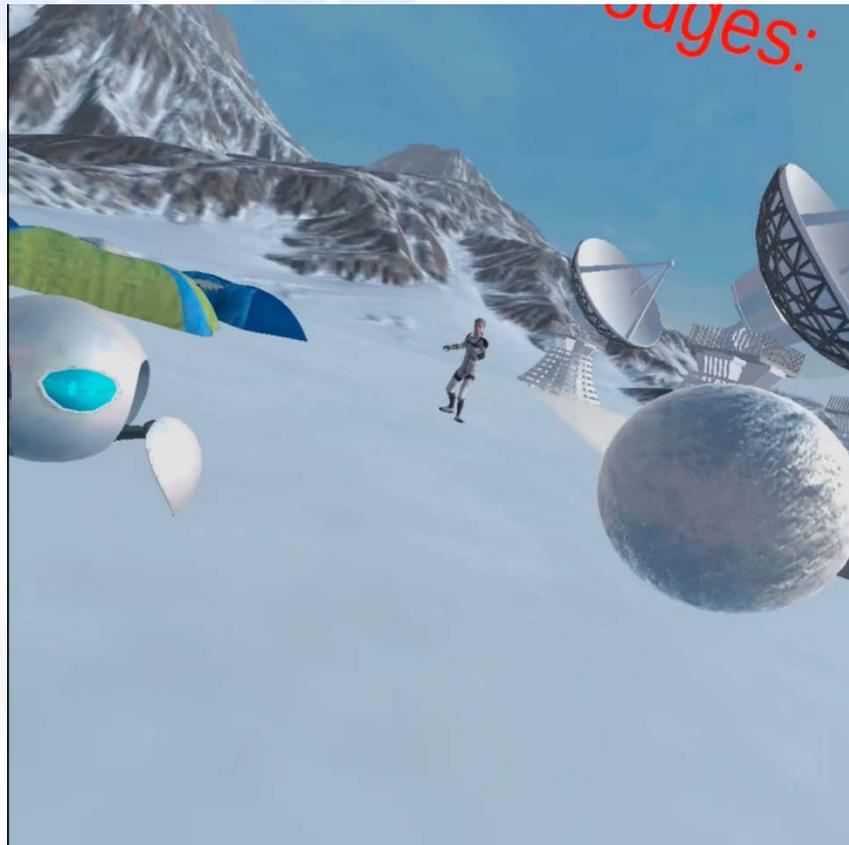


KOWAT:





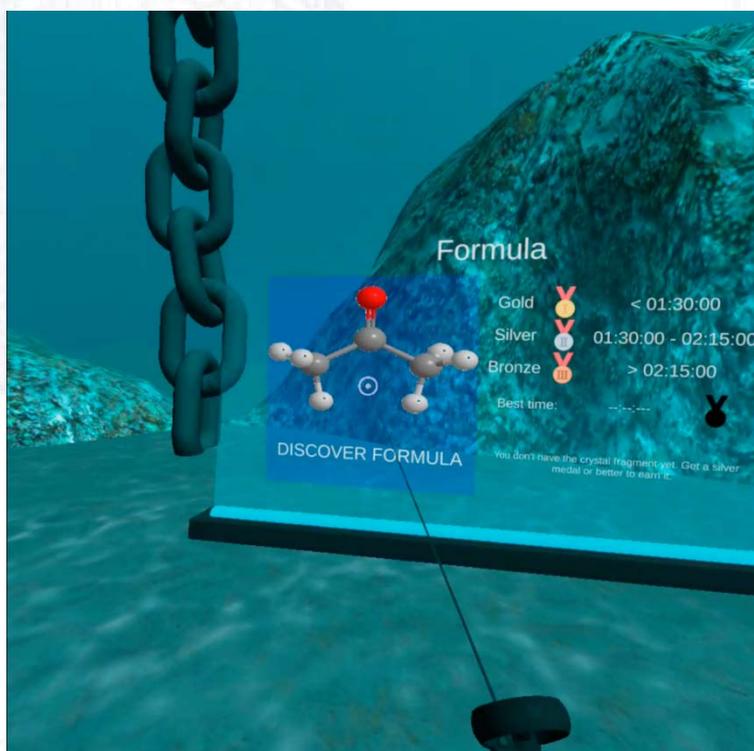
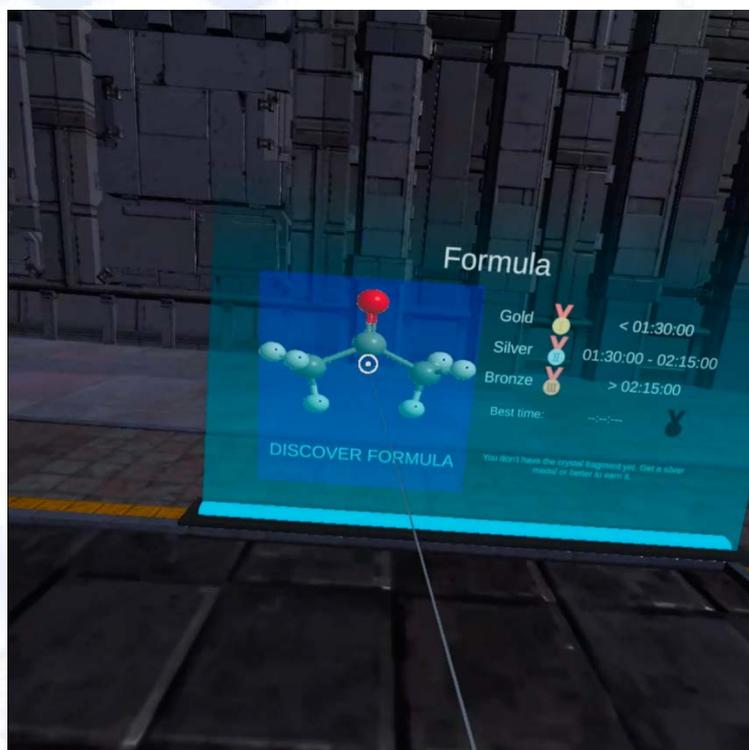
ATIMOLOD:



ACTIVITY: DISCOVER THE FORMULA

- Once we overcome the dodging activity, we must find the activity panel of the activity to discover the chemical formula of the element of that planet

Below is that panel on different planets





- The development of this activity on the planets Fluridium, Kowat and Atimold is shown below.

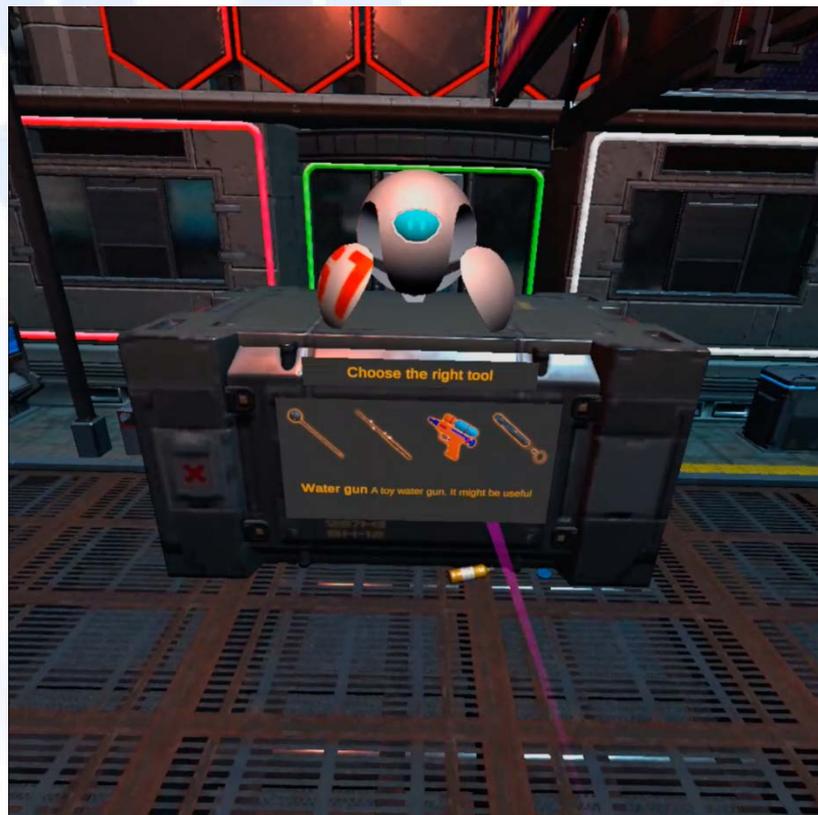
FLURIDIUM:

or WIBU gives us important information about the mineral to choose the tool correct

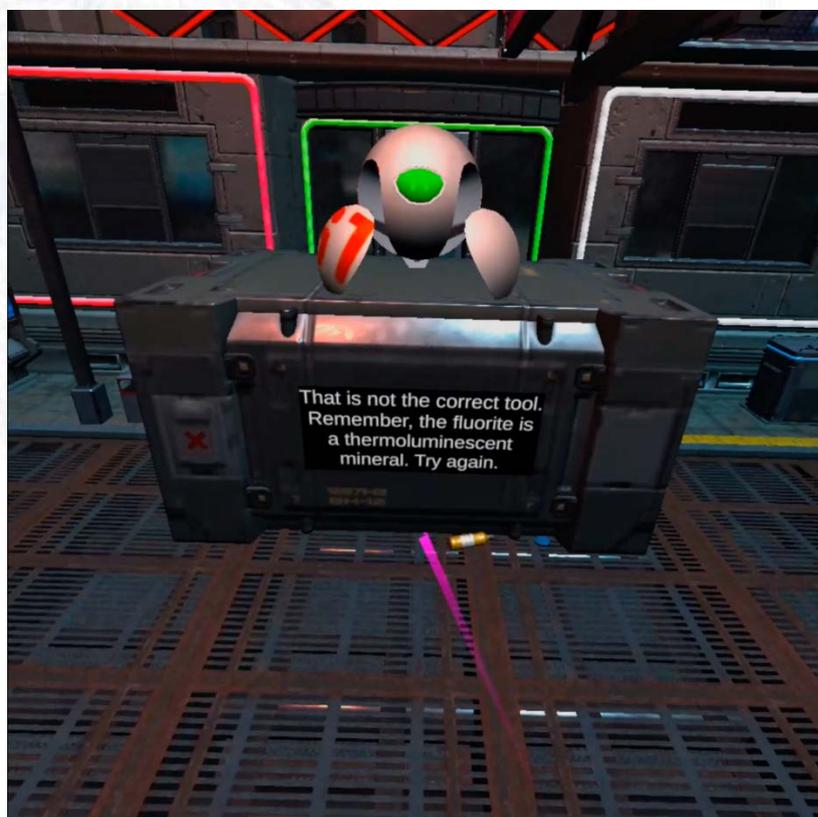




or The tool selection panel appears

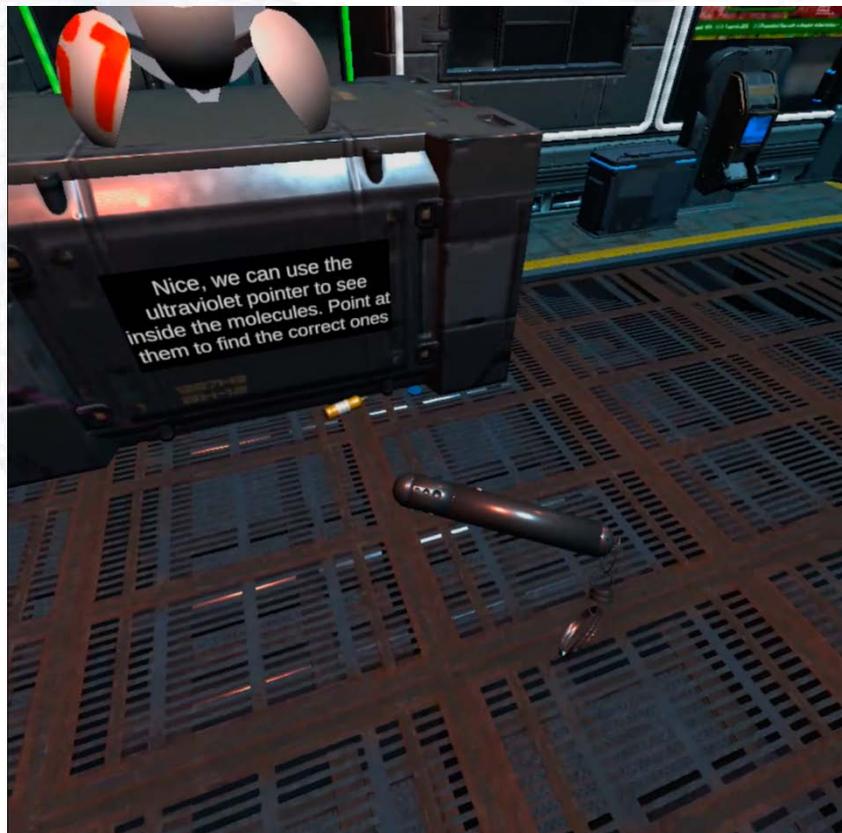


or If we fail, we will get a brief characteristic of the mineral that to help us



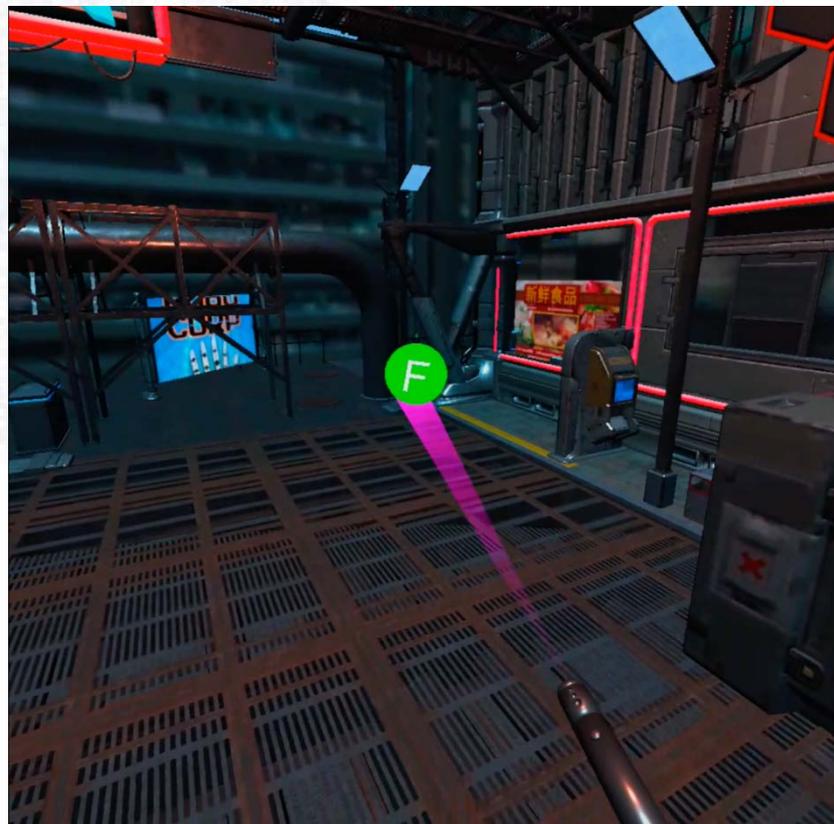
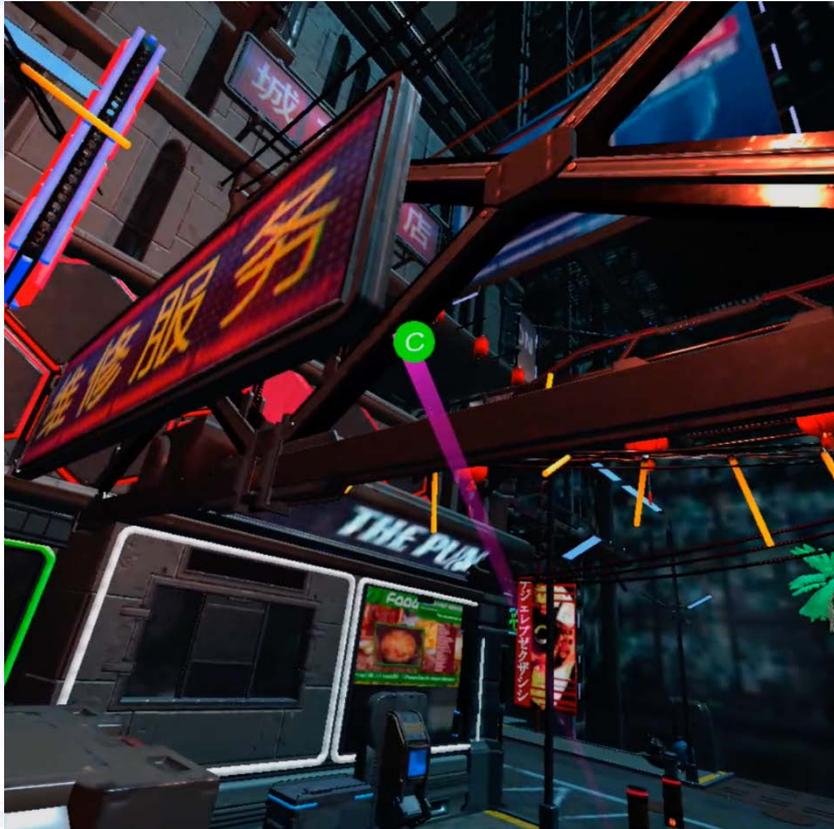


or Now we will choose the correct tool (UV Laser for Fluridium)





or In Fluidium the molecules will appear from top to bottom and it will be necessary to choose them in the correct order.





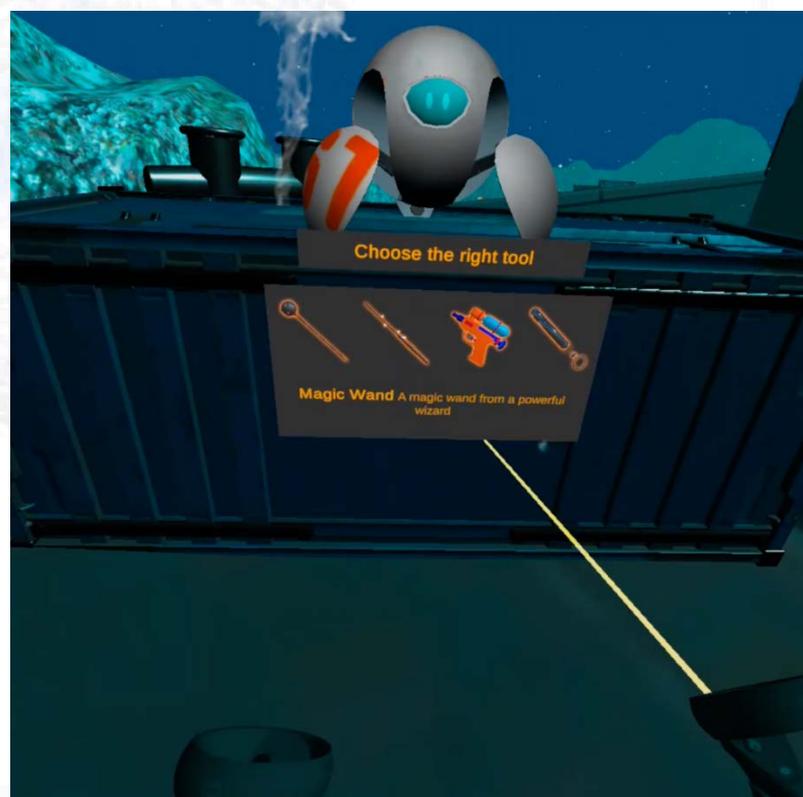
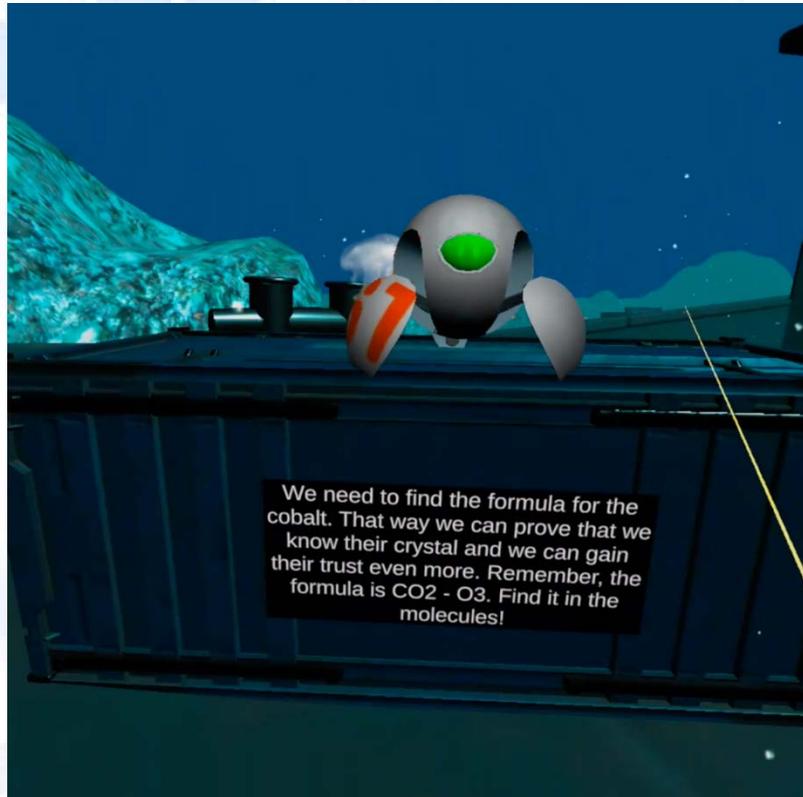
or Once the formula is completed, we will obtain that crystal fragment

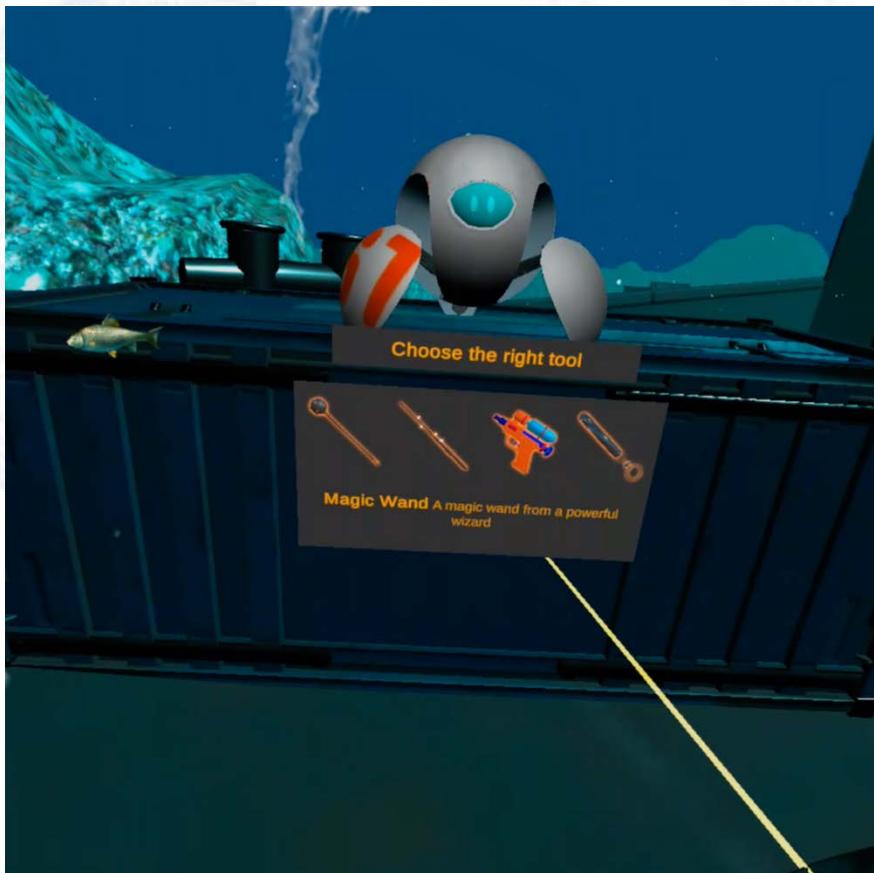


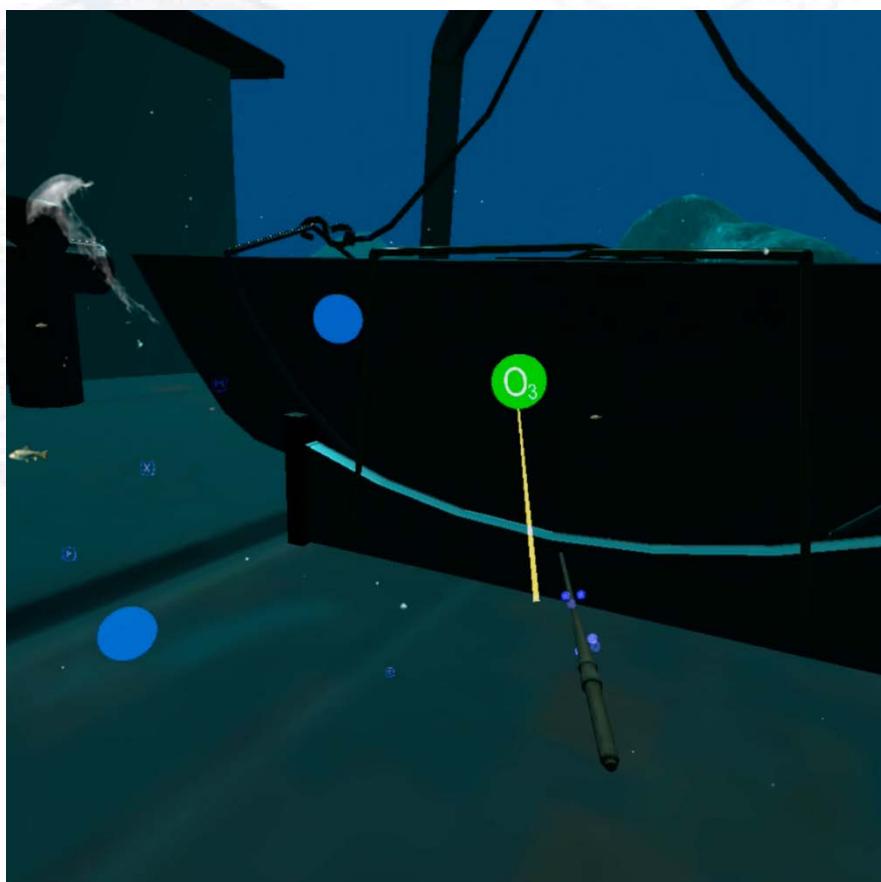
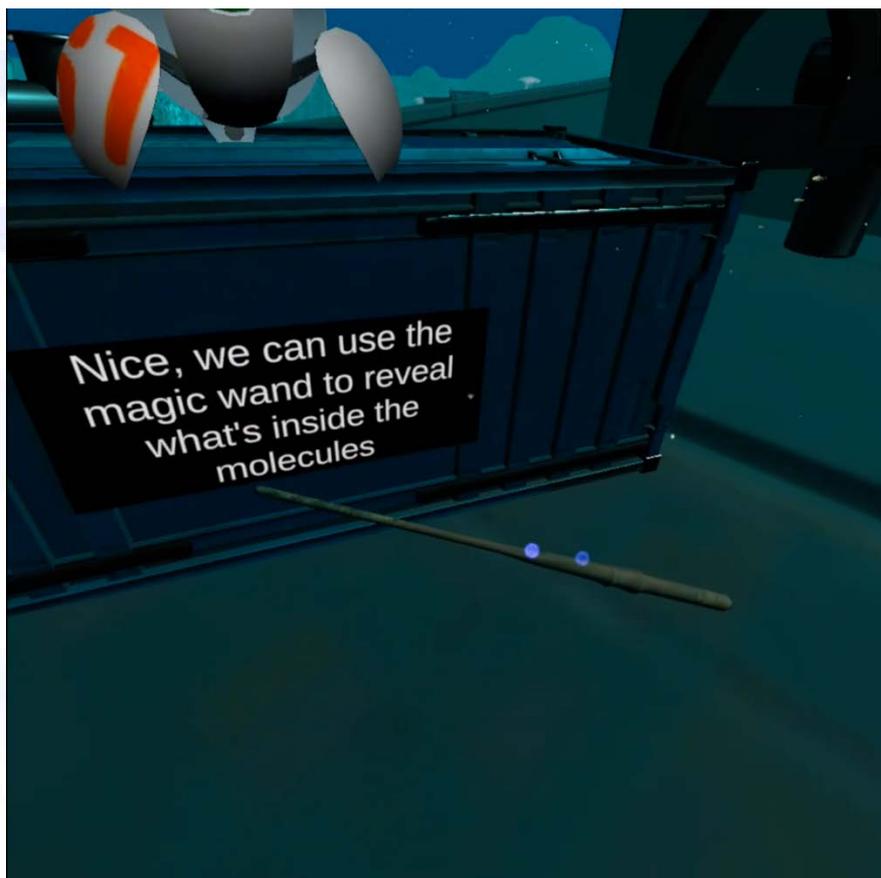


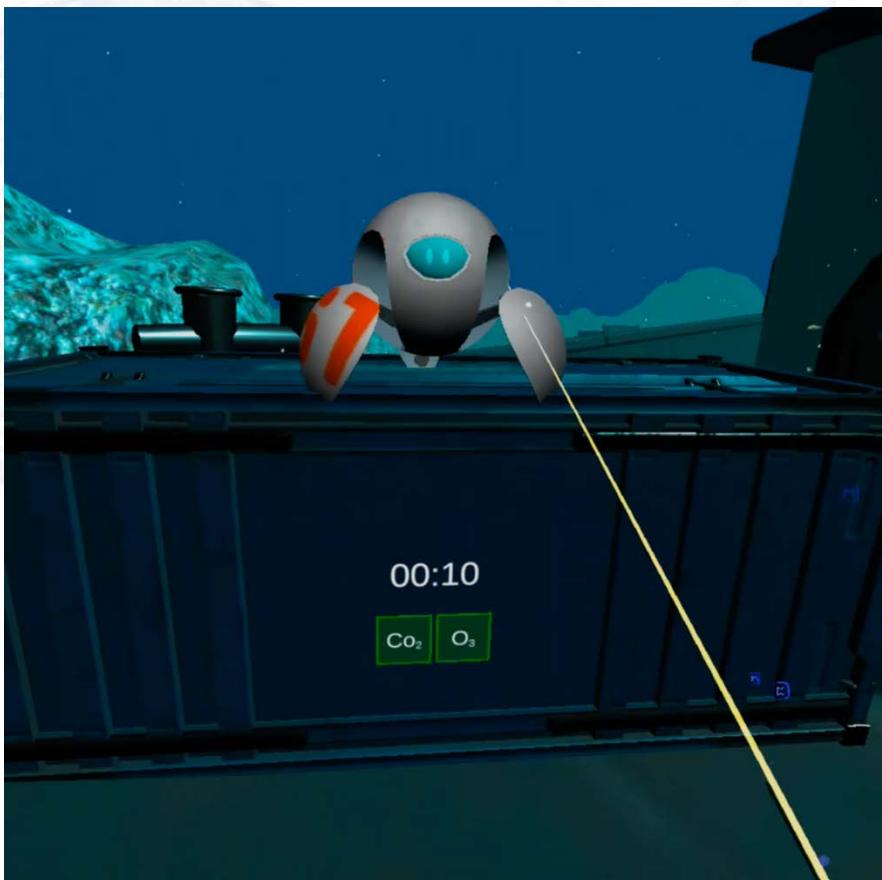
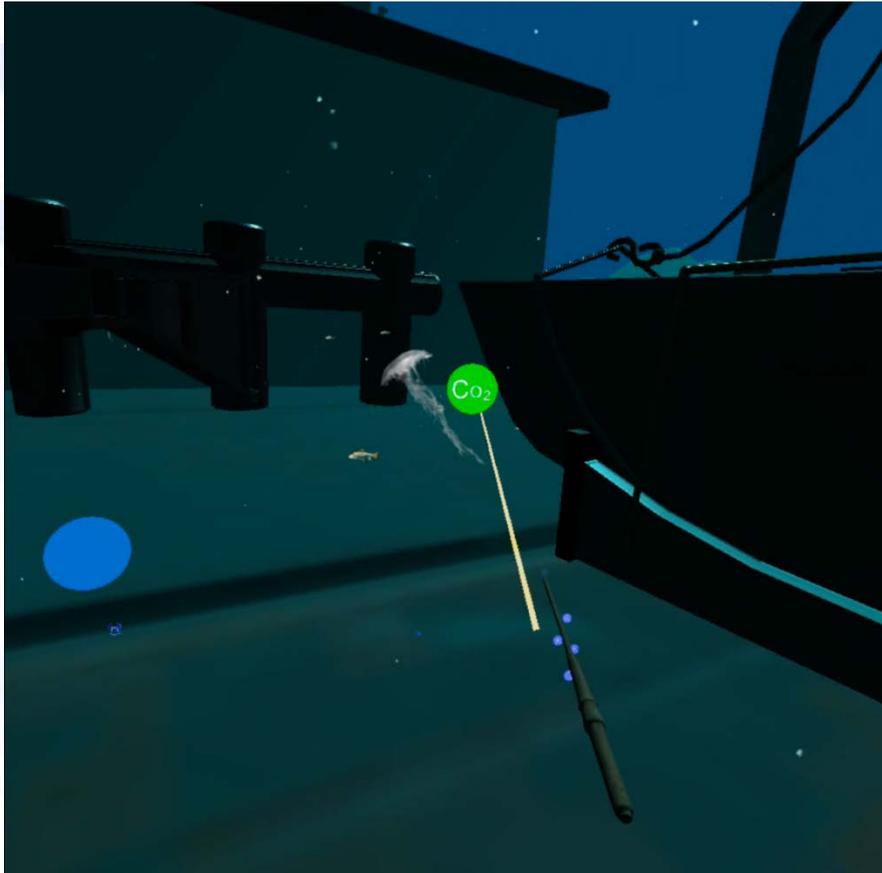
KOWAT:

or The same process is followed as in Fluridium but the molecules will rotate around us







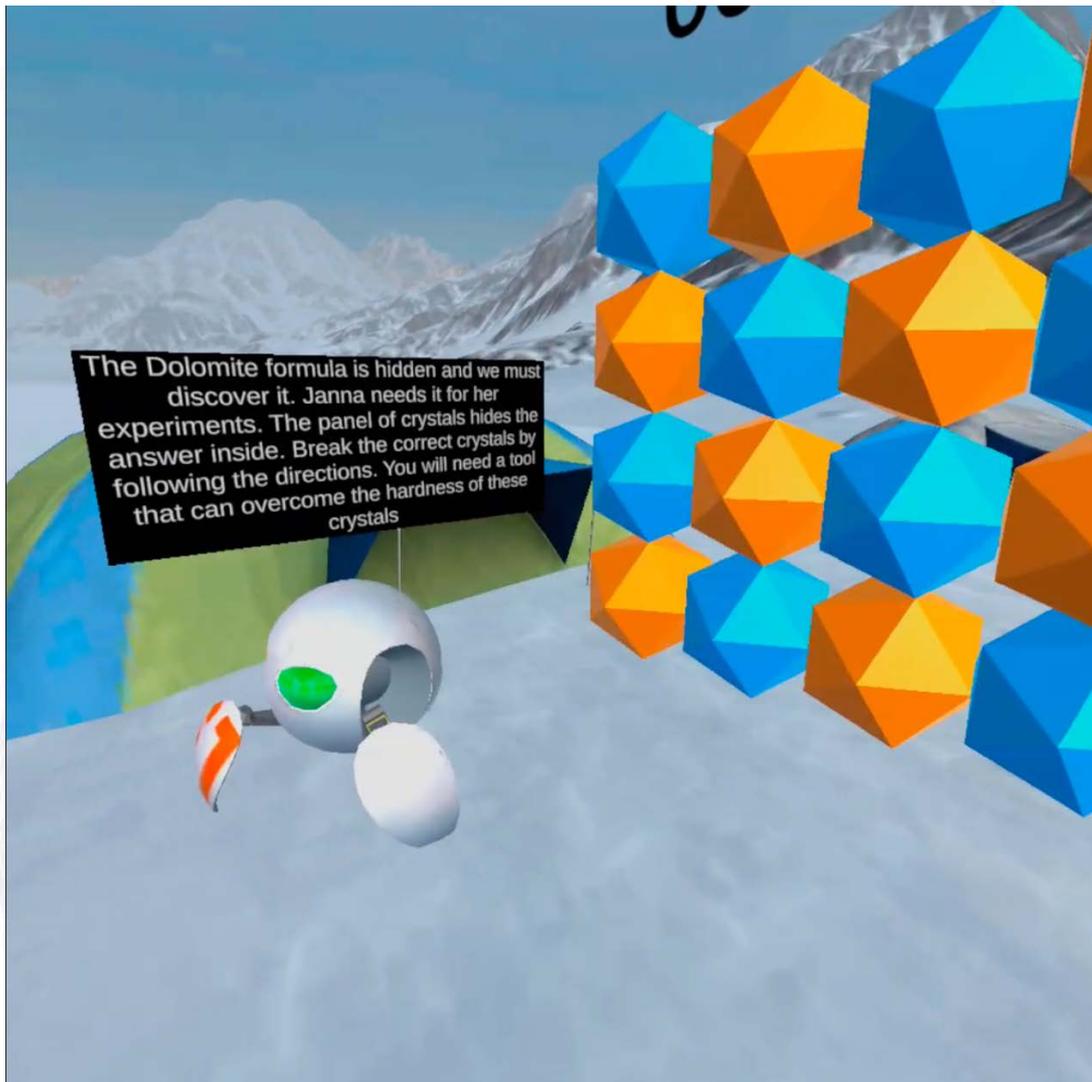


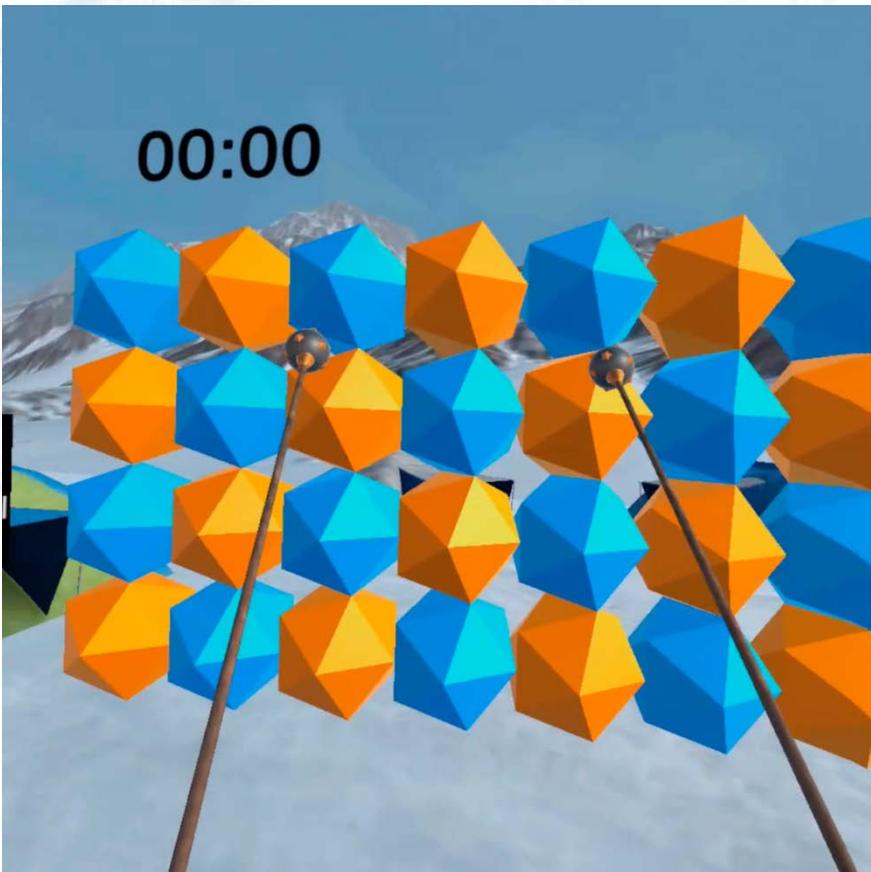


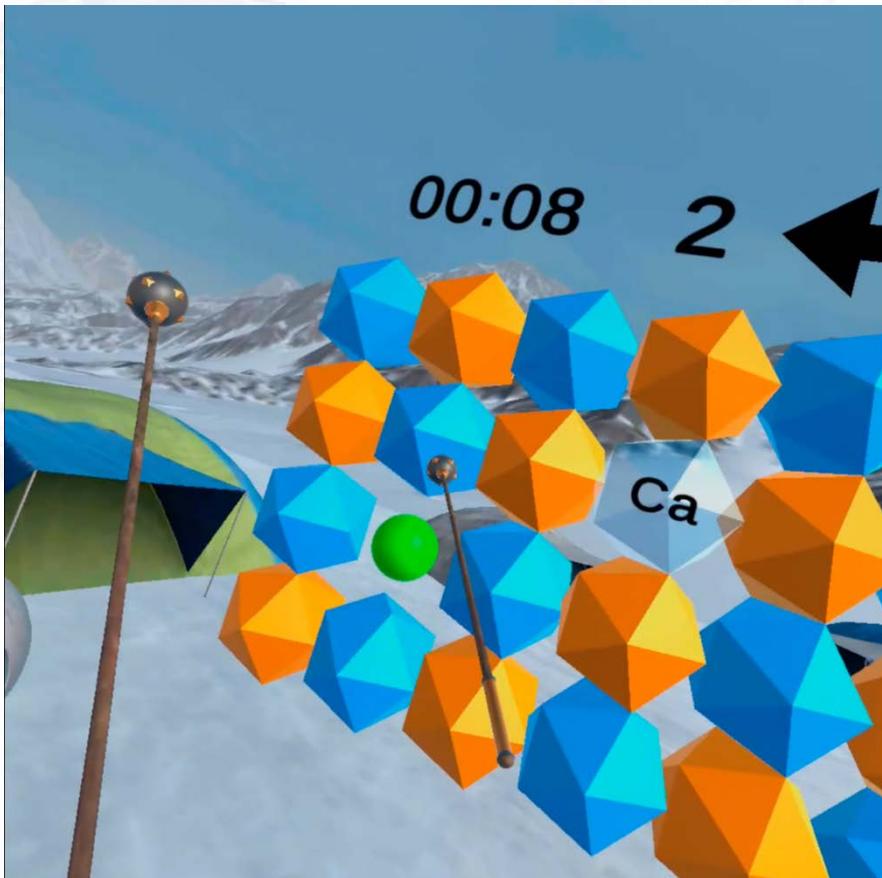
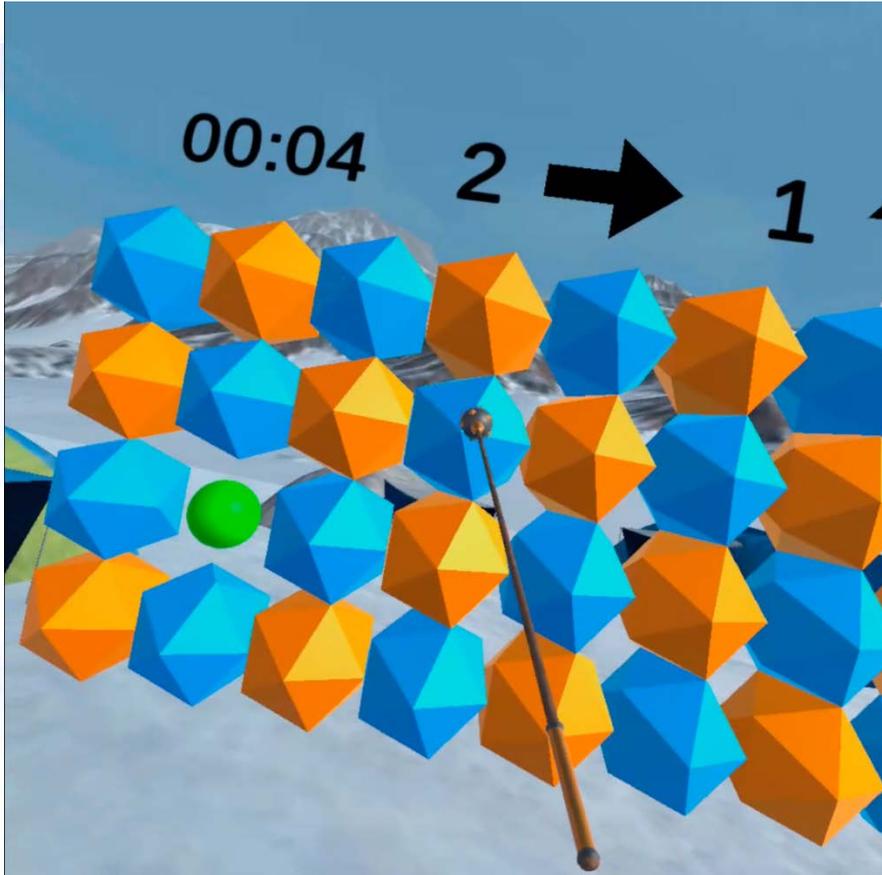
ATIMOLOD:

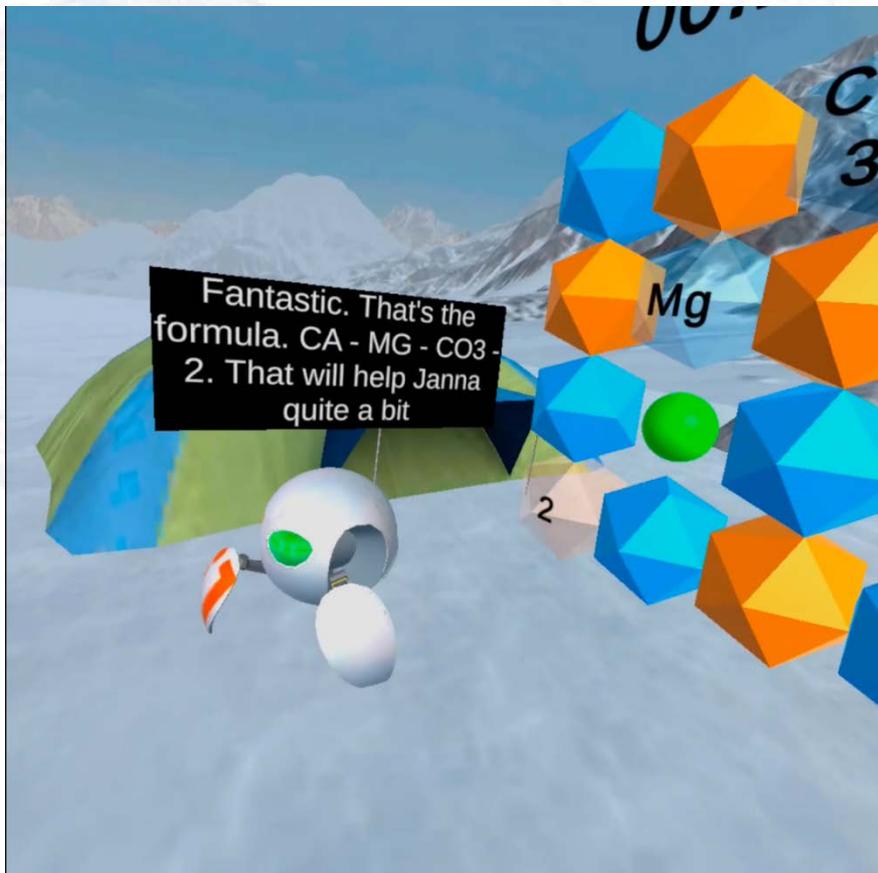
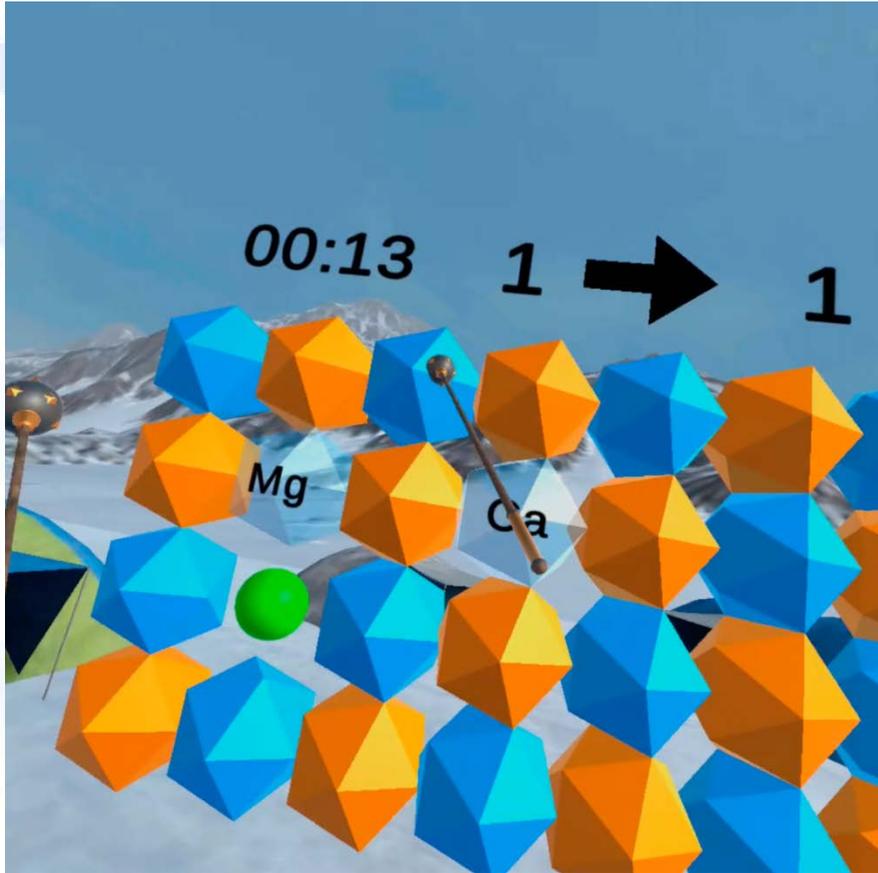
or In Atimolod it is very different from the previous planets. You should look for the formulated by breaking the crystals from the position indications and following the green dot in the first instruction as a reference.

For the following instructions, the previous broken glass will be used as a reference.











ACTIVITY: MAGIC SQUARES

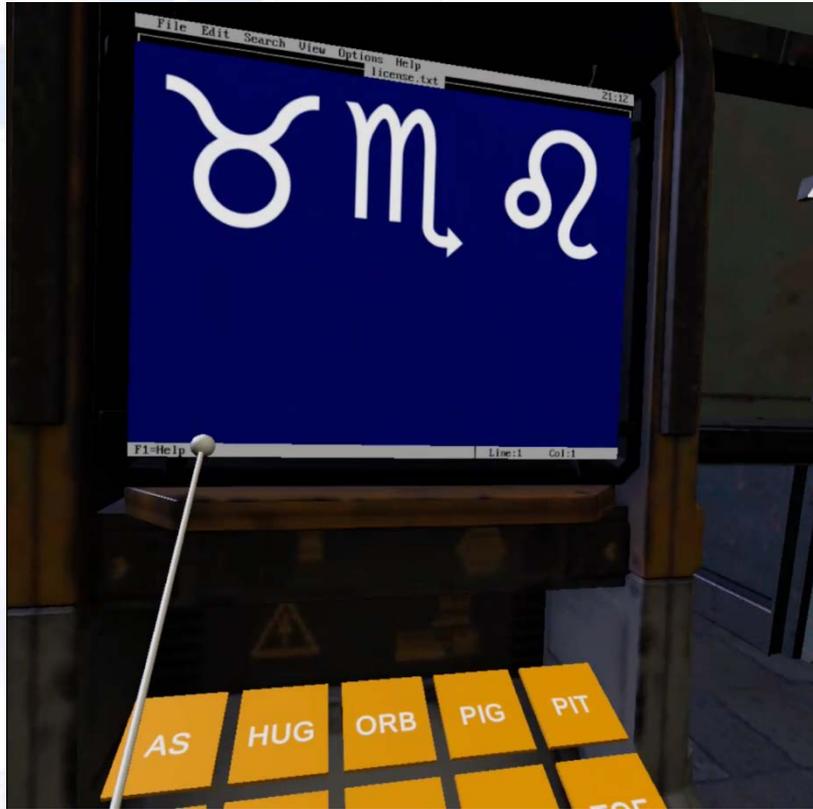
- Once the fragment of the formula has been obtained on each planet, we will have to overcome the activity of the magic squares.
- The activity consists of discovering syllables and memorizing the element they contain in order to form the key that will appear on the screen in order. For Fluridium these elements will be symbols, for Kowat they will be sounds and for Atimolod they will be images
- The location of these activity screens on different planets is shown below.





- The development of this activity for the different planets is shown below

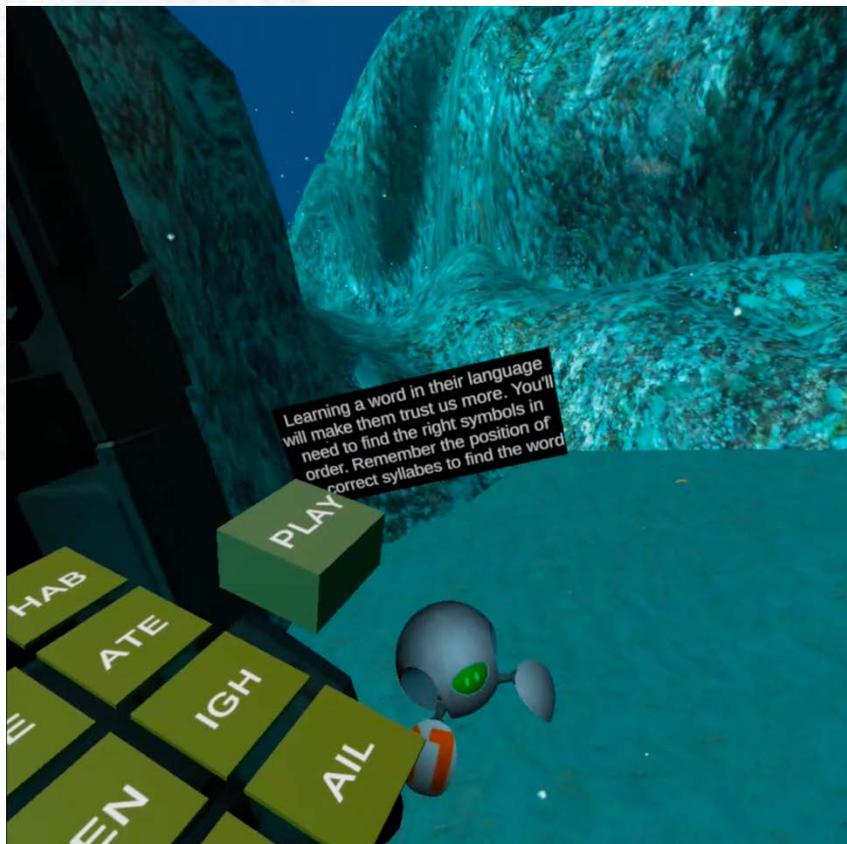
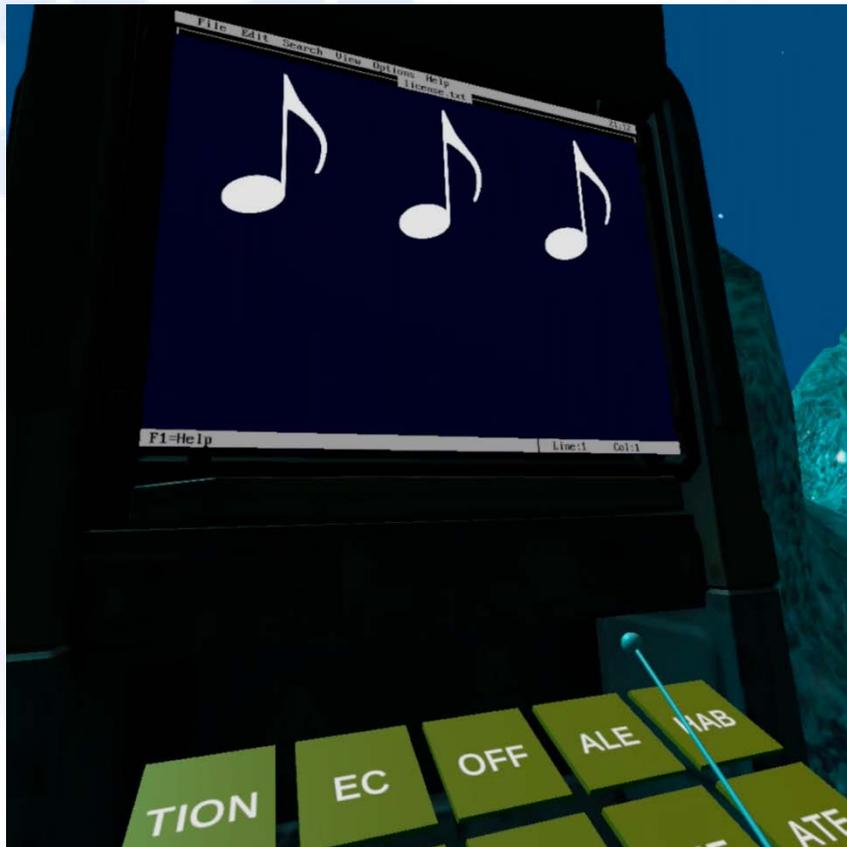
FLURIDIUM:

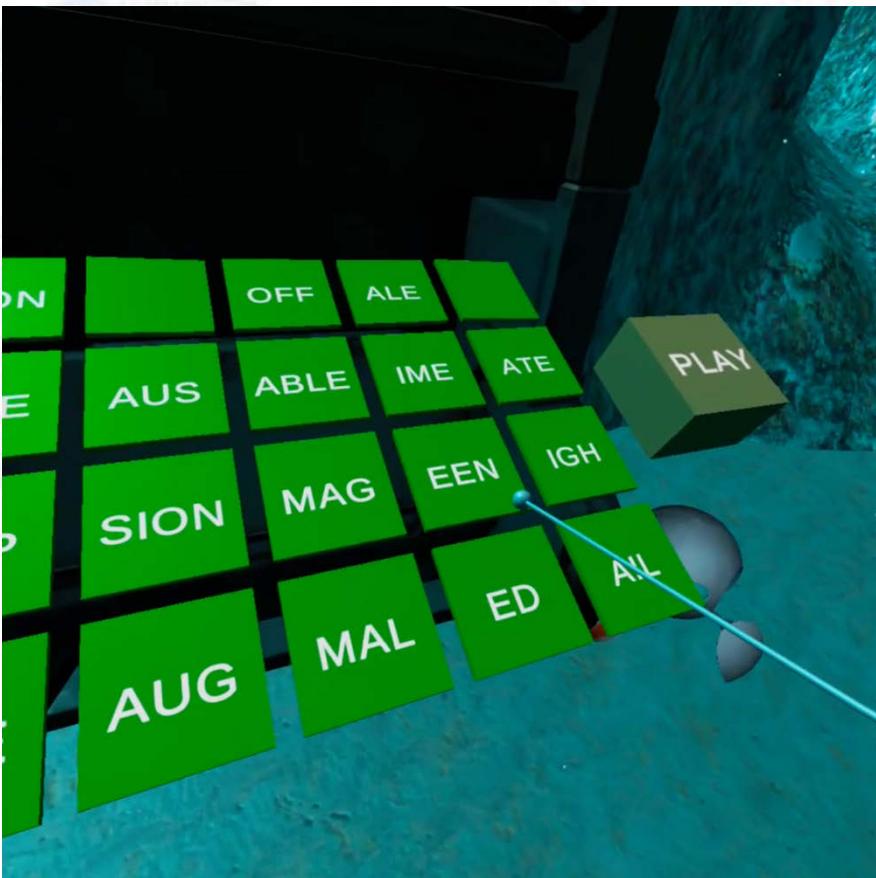
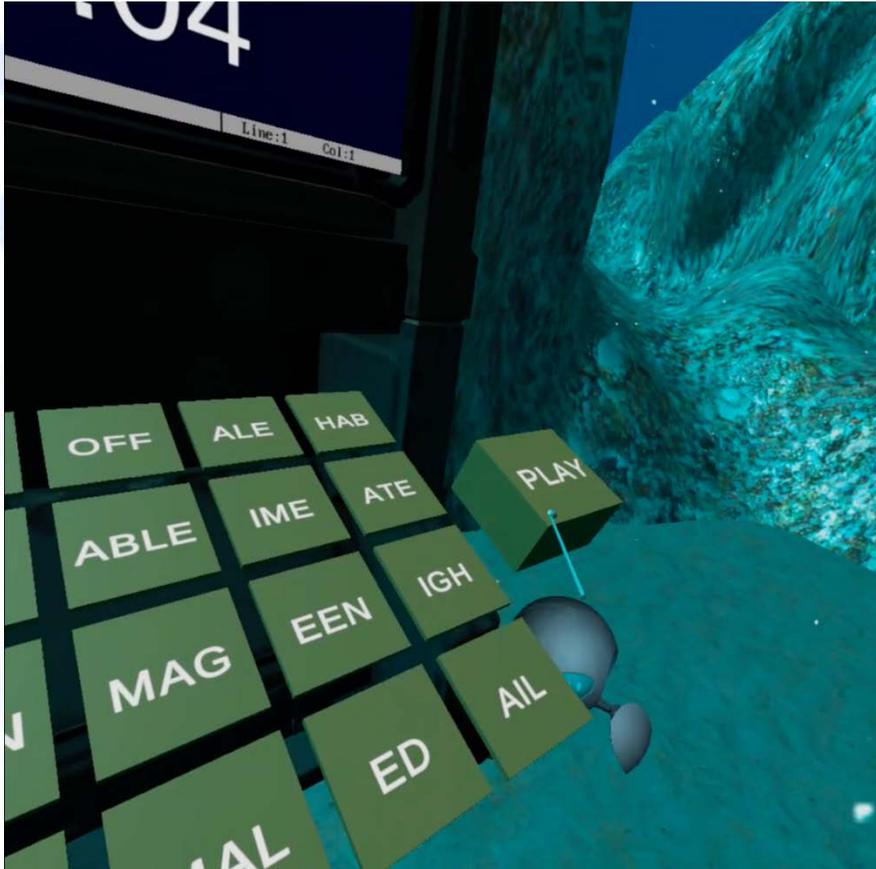






KOWAT:







ATIMOLOD:



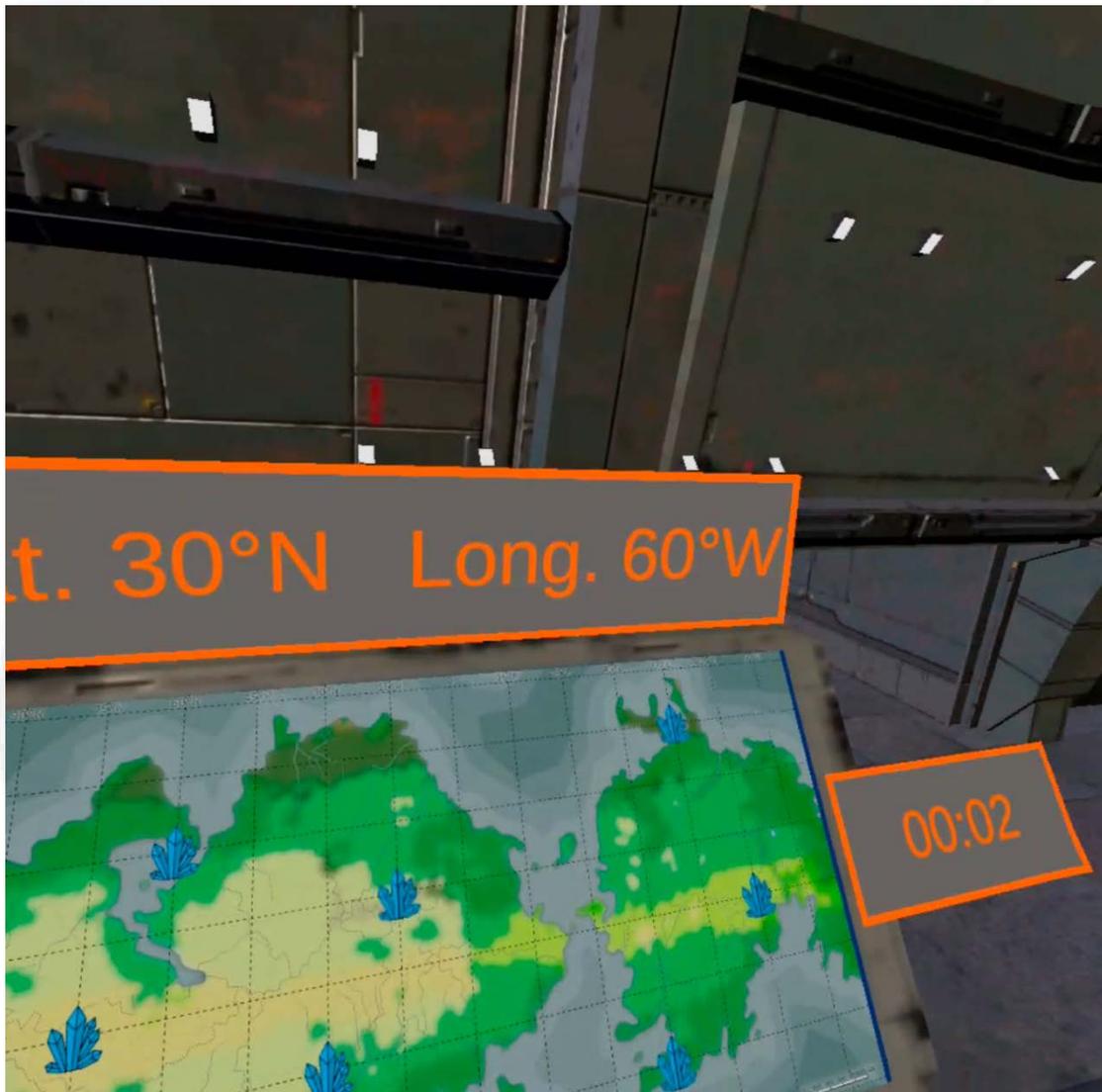


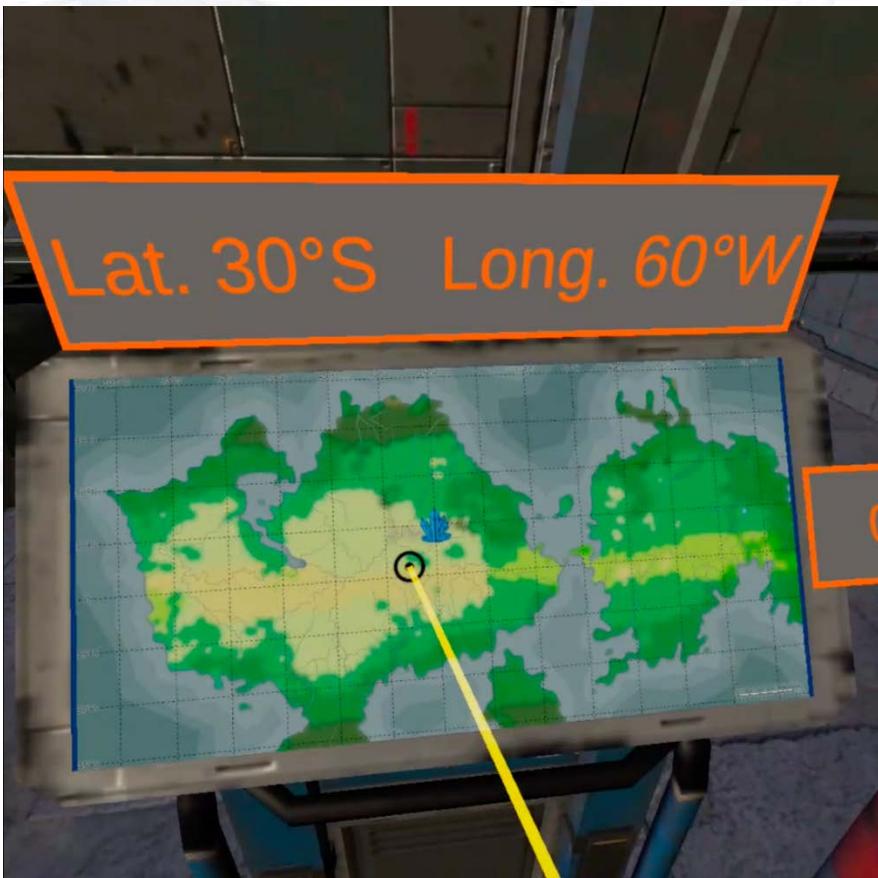


ACTIVITY: LATITUDE

- In this activity we will have to find the location of the temple where to assemble the power crystal of that planet.
- For Fluridium and Atimolod we will have a map of the planet and we will be told some locations that we will have to discard to obtain the final location. Next, images of this activity will be shown on those two planets

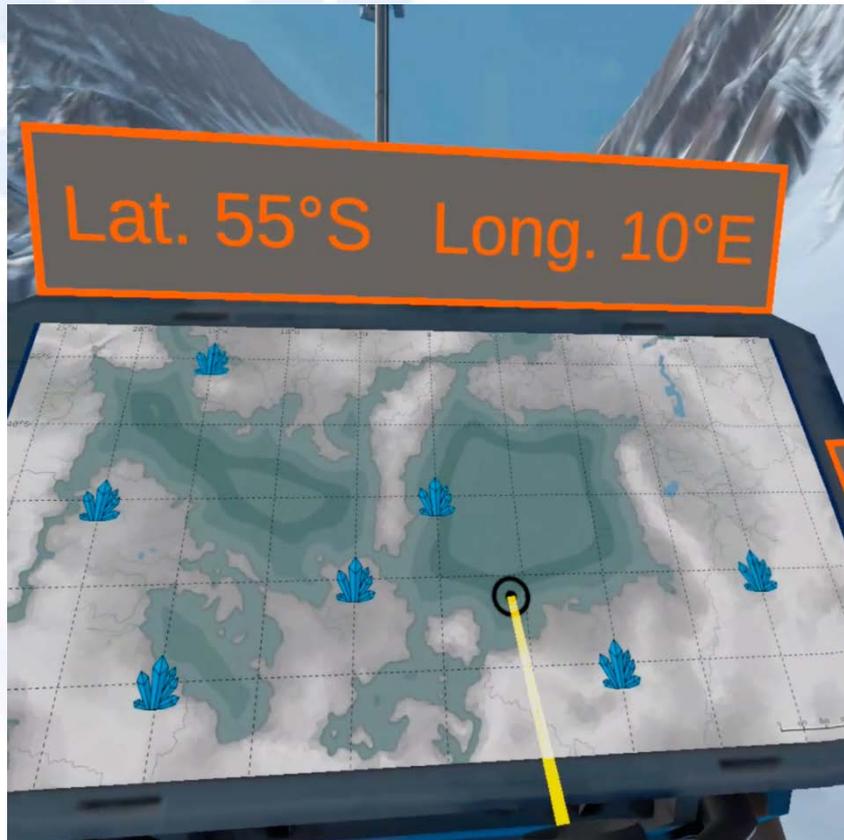
FLURIDIUM:







ATIMOLOD:

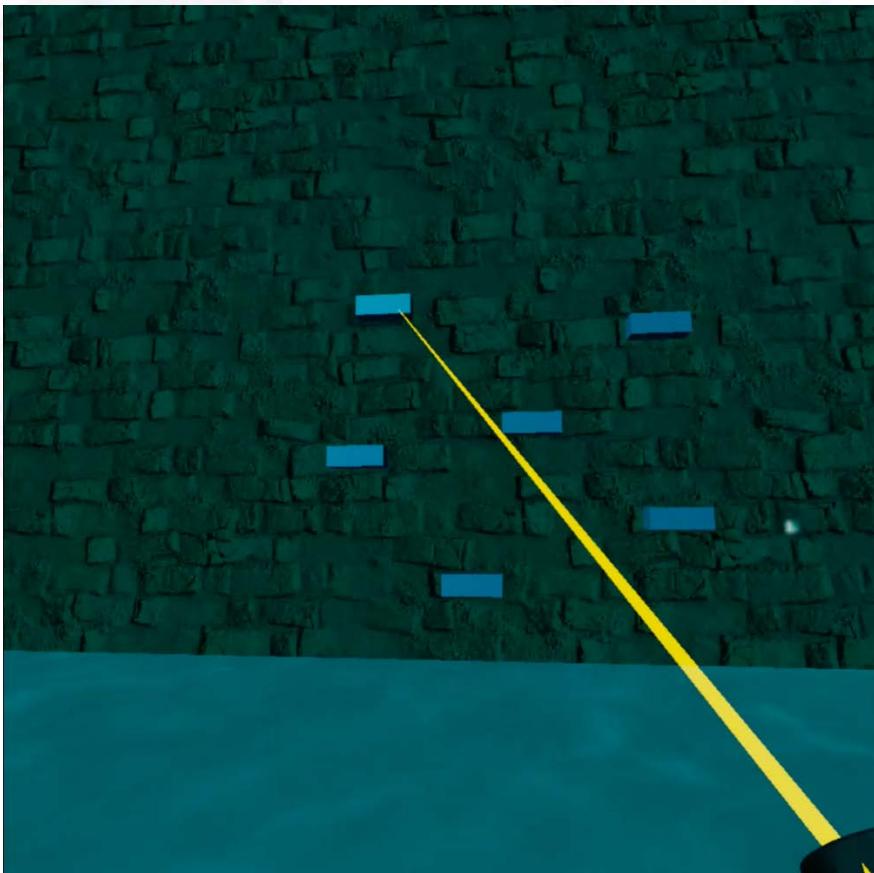
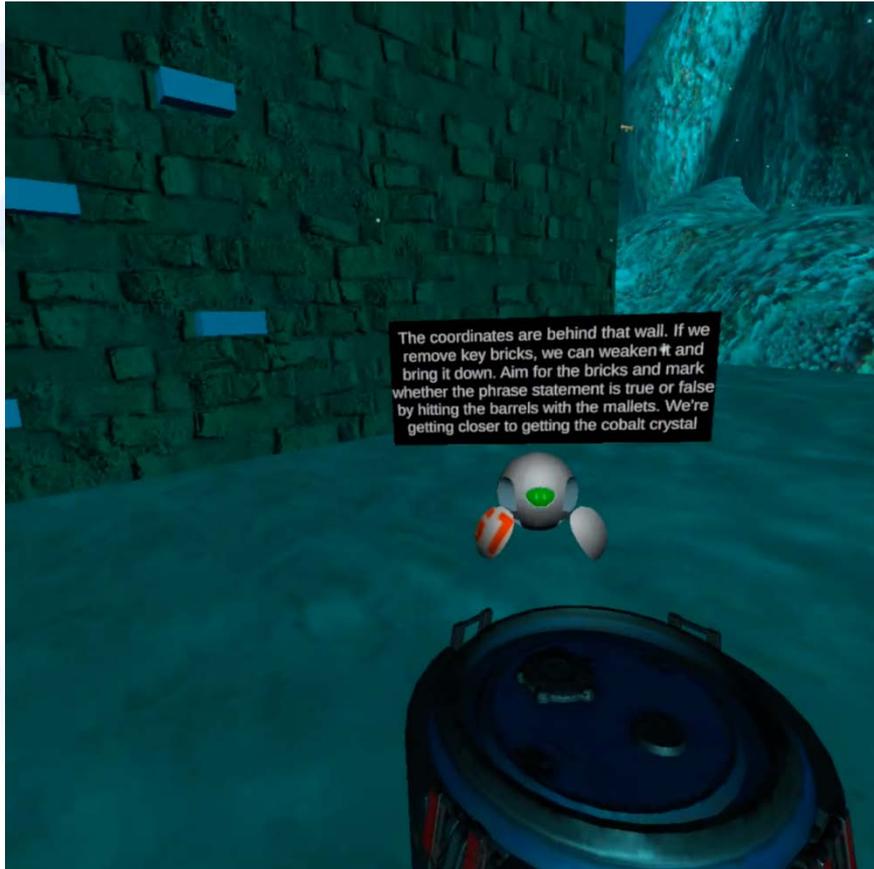


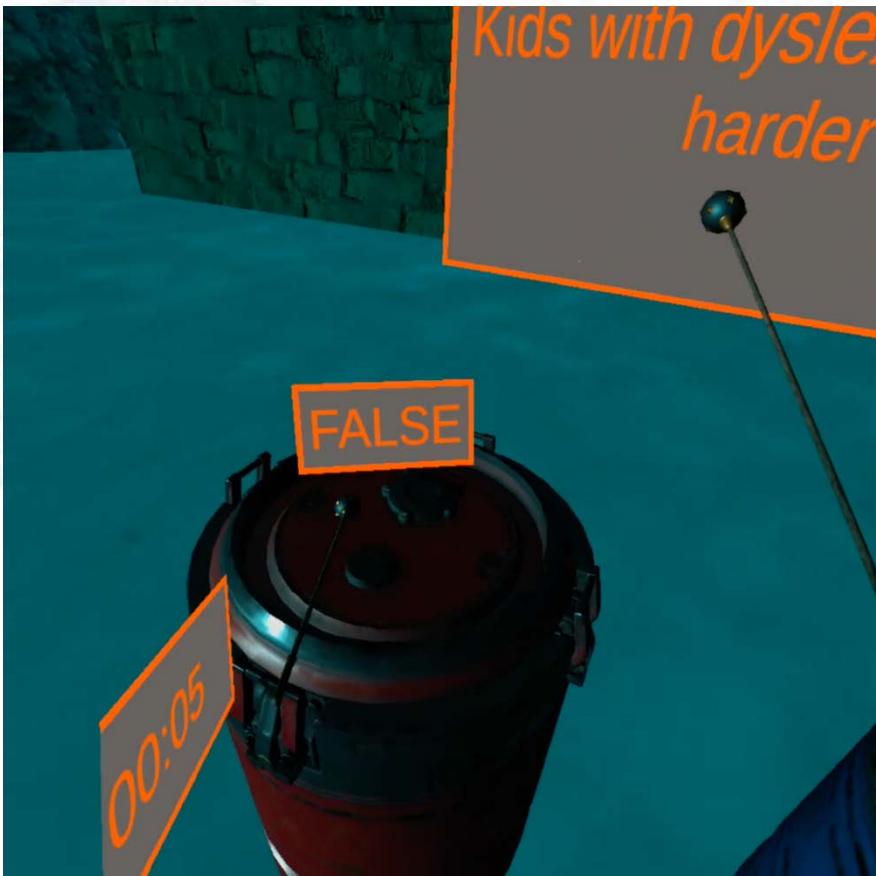


- This same activity for Kowat and Atimolod is completely different. It is based on awareness of dyslexia. You must answer some true / false questions to tear down the wall that will reveal the location of the temple of that planet

Next, images of this activity will be shown on the planet Kowat





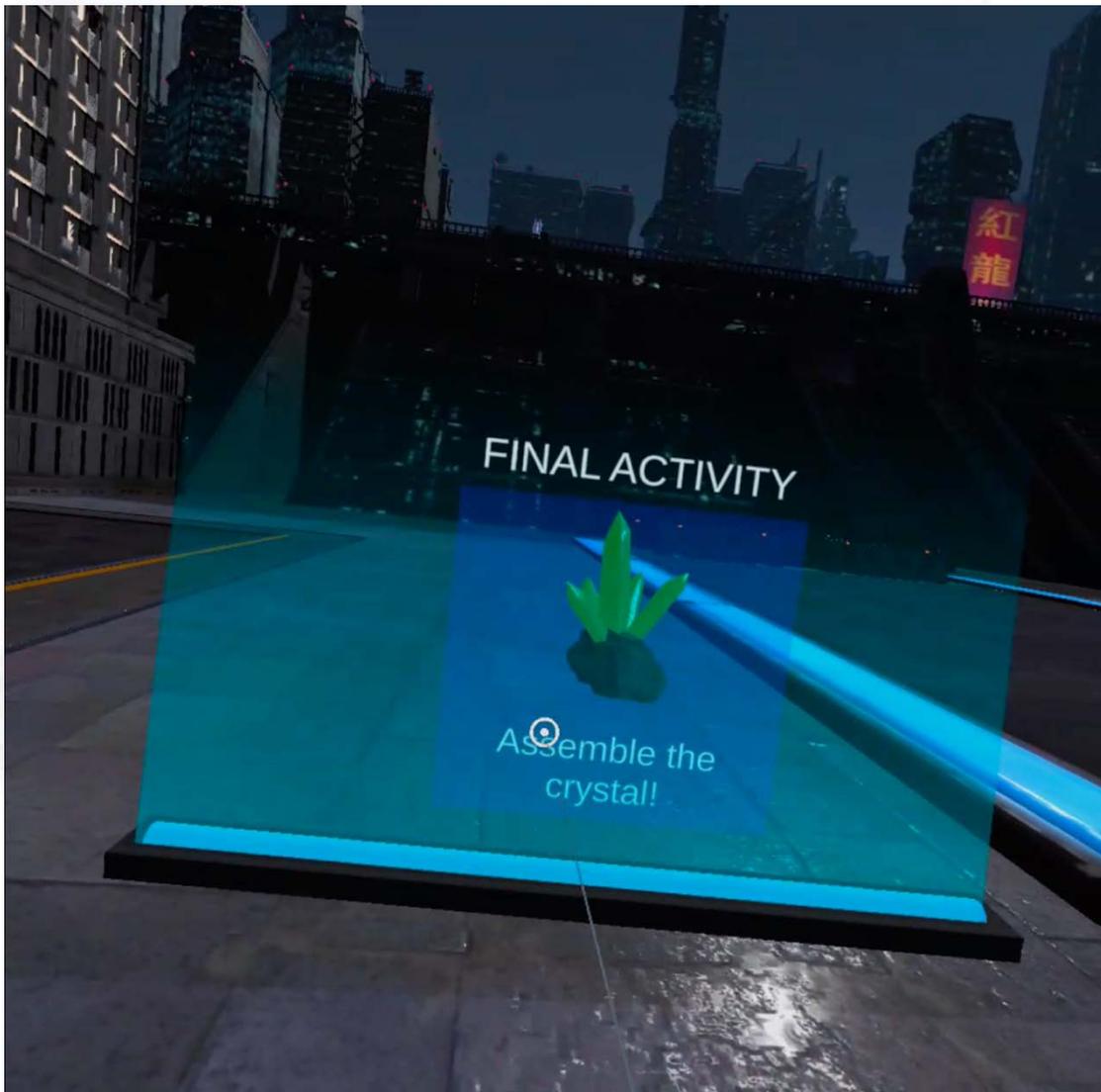




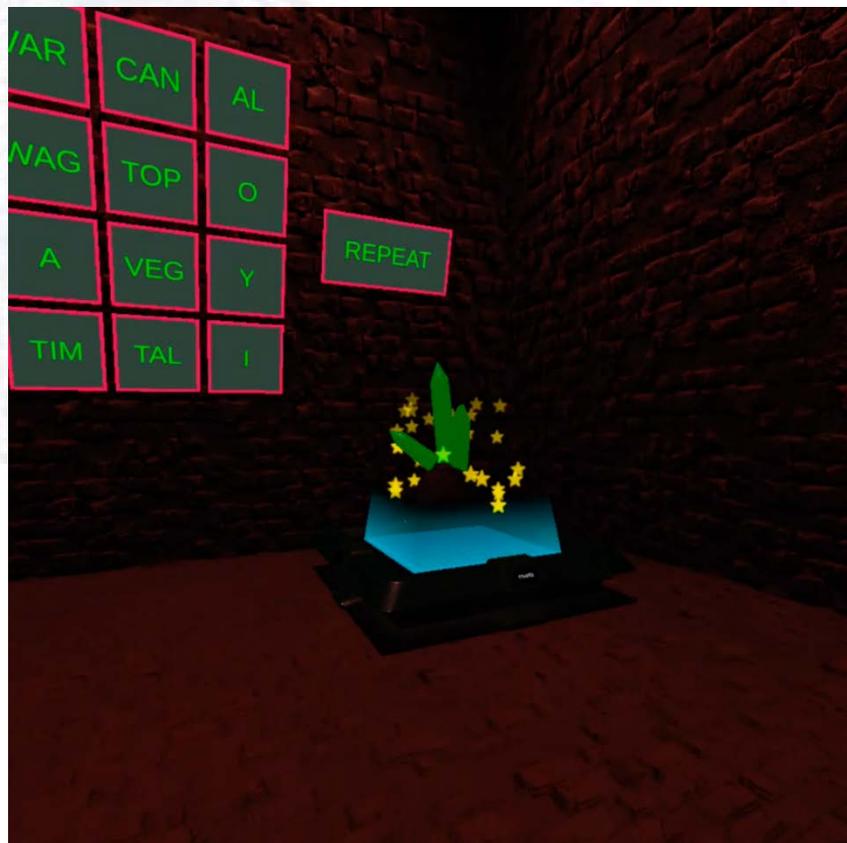
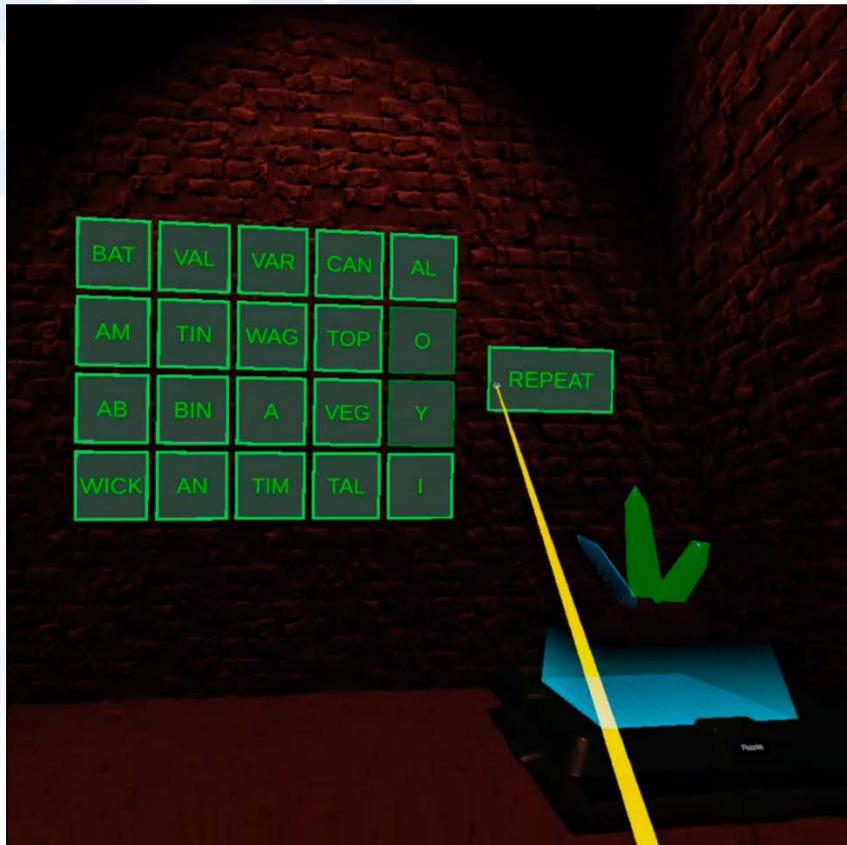


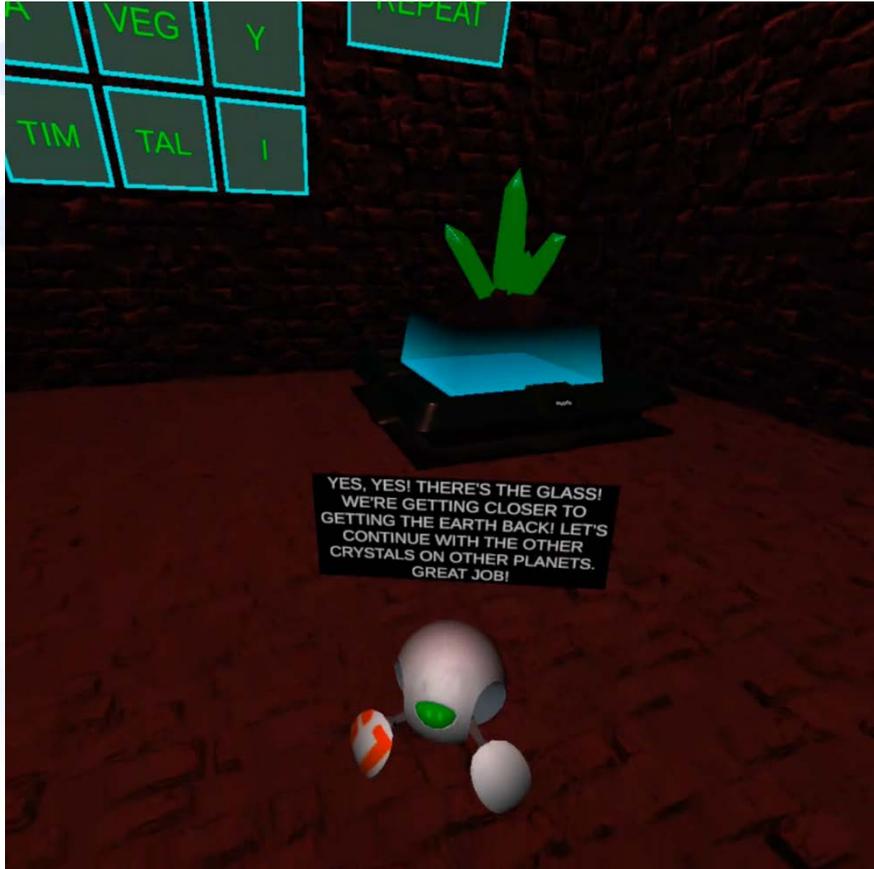
FINAL ACTIVITY: TEMPLE

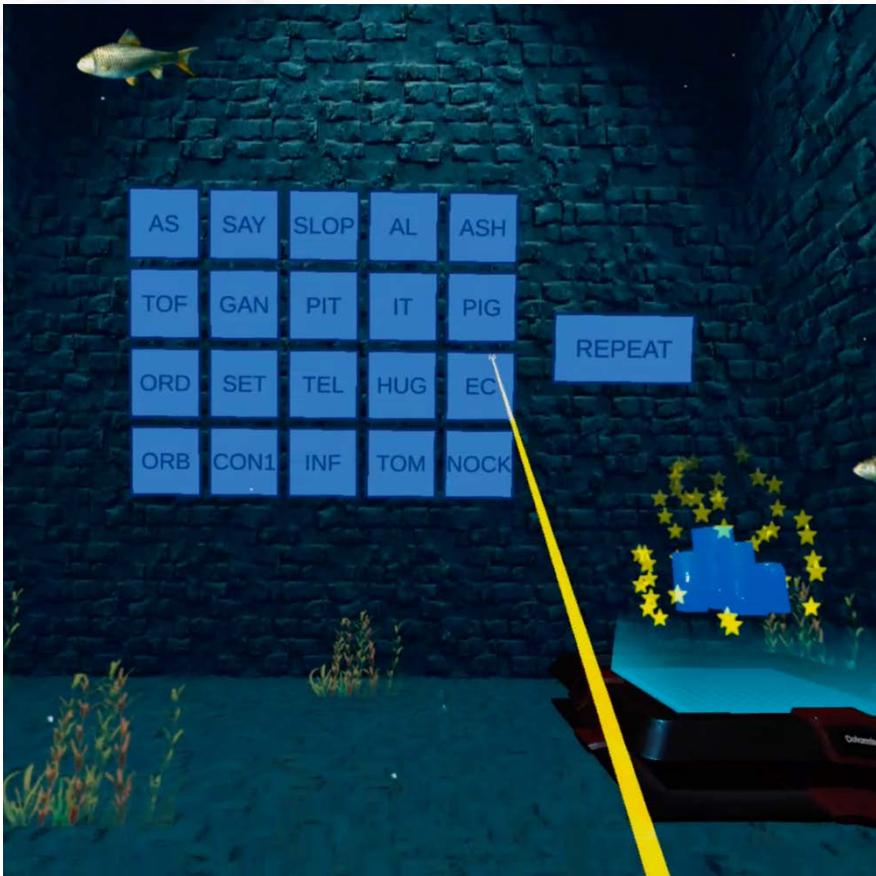
- In the final activity we have to assemble the crystal of the planet using the crystal fragments that we have obtained by completing all the activities of that planet.
- The activity consists of listening to the magic word that assembles that crystal and replicating it on the panel.
- Below are images of this activity for the different planets.

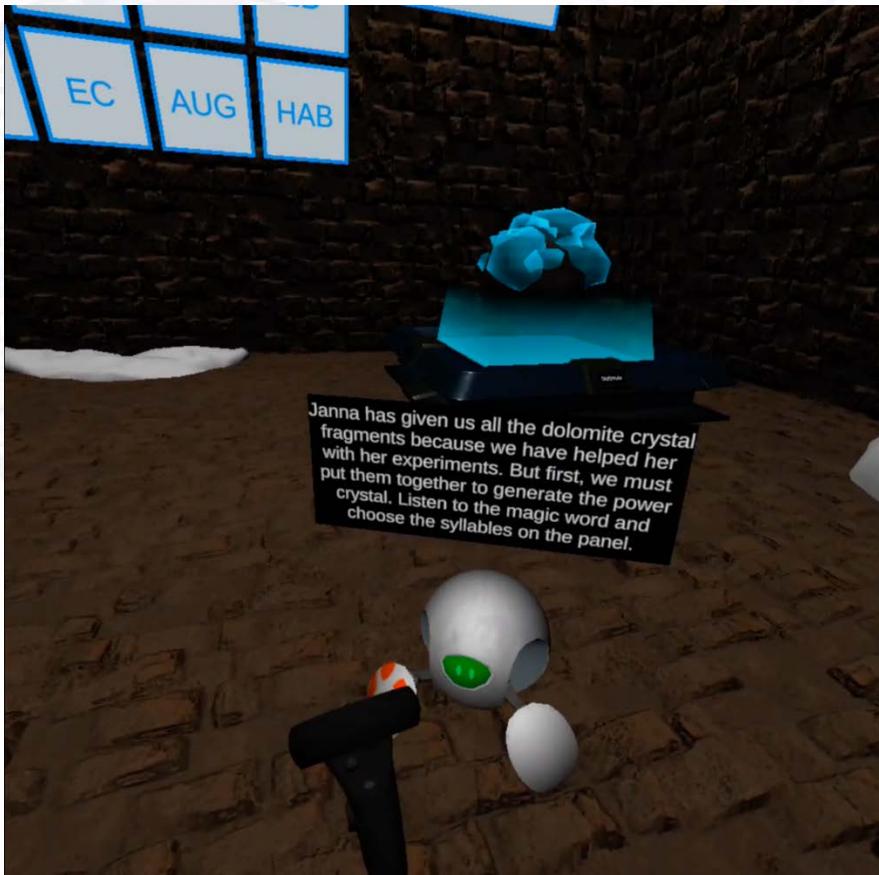


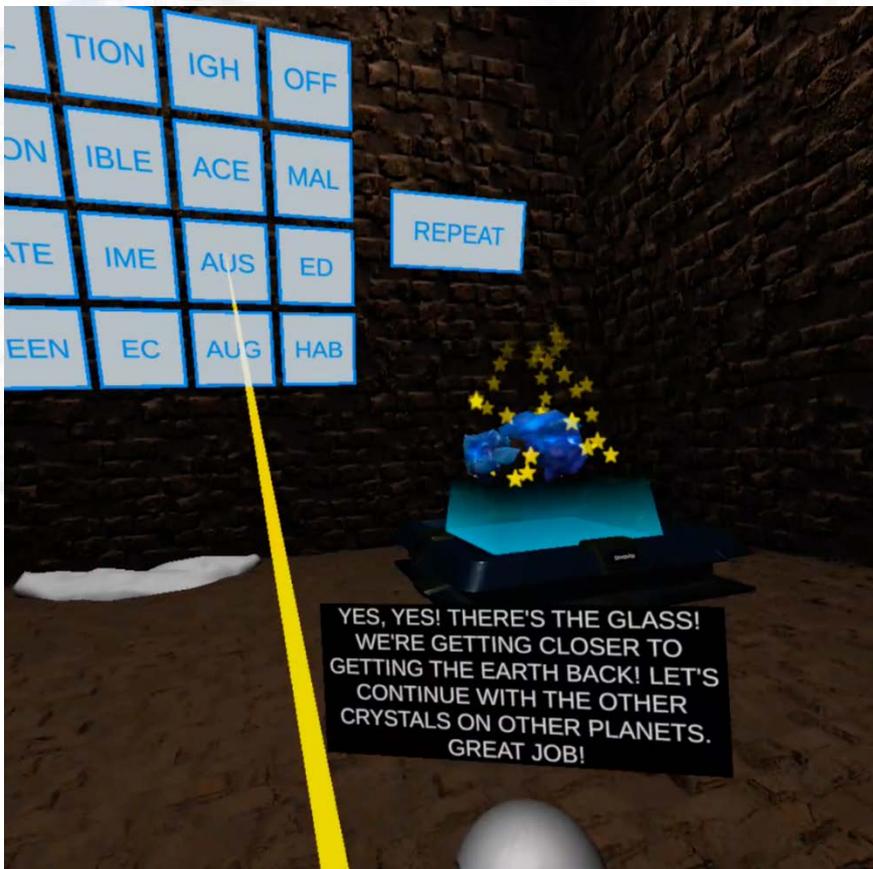








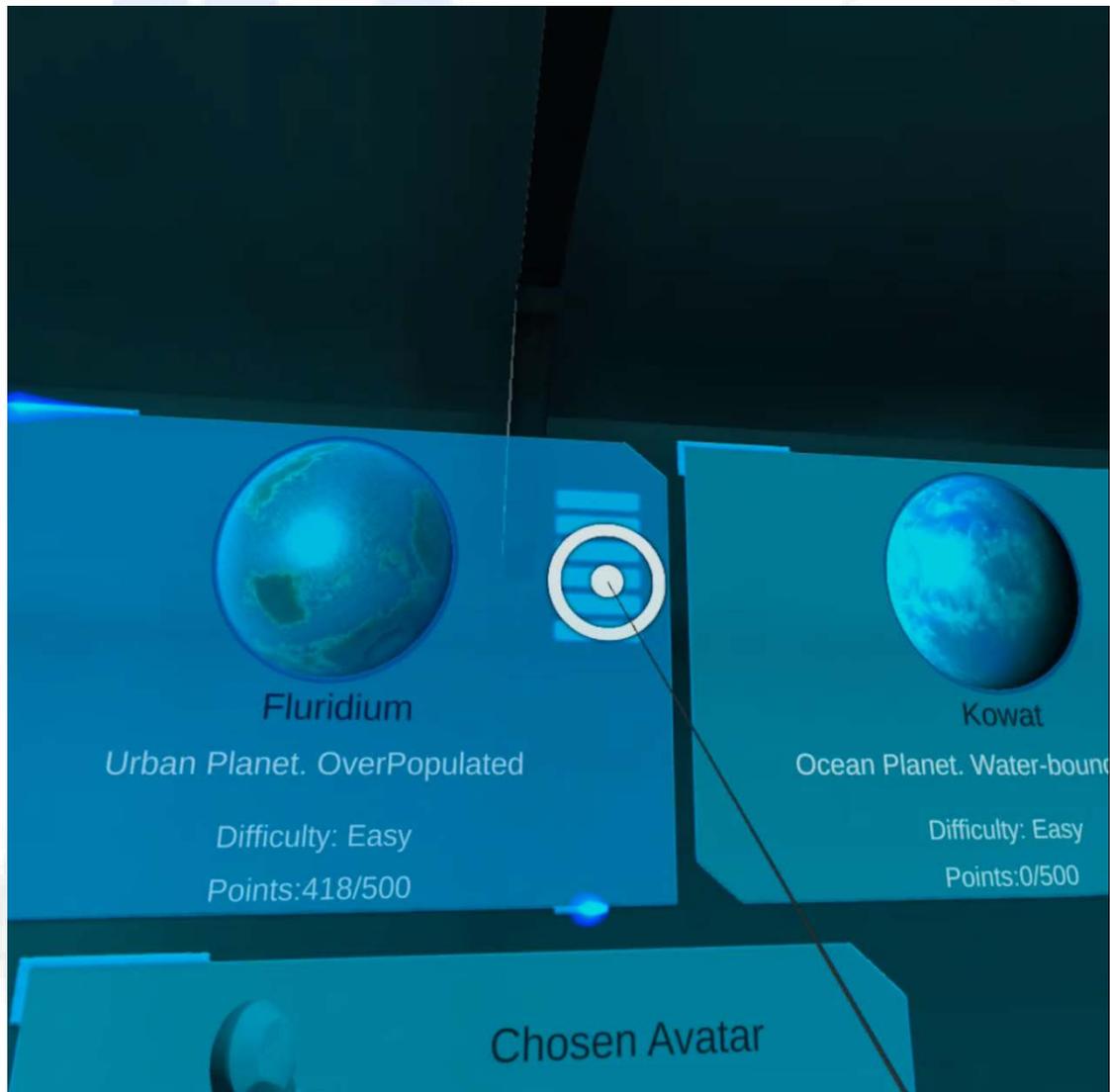






GETTING A CRYSTAL

- When we manage to complete a planet we will be transported to the main ship from the temple of that planet. That planet will appear as completed and the next planet will be unlocked





fordys
VAR

Fostering Inclusive Learning
for Children with Dyslexia

Tutorial Installation

FORDYSVAR

AR

English

<https://fordysvar.eu/es/>



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INSTALLATION MANUAL - AR - FORDYSVAR

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Phone: 637 09 86 85



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INSTALL ADB

ADB (Android Debug Bridge) is necessary to install our FordysAR .apk on our mobile device.

First we will download ADB from this internet address:

<https://dl.google.com/android/repository/platform-tools-latest-windows.zip>

Extract the contents of the zip in an easily accessible directory for example C: / Desktop / adb

CONFIGURE OUR MOBILE DEVICE

Once adb is installed we will have to configure our mobile or Tablet. We will follow the following steps:

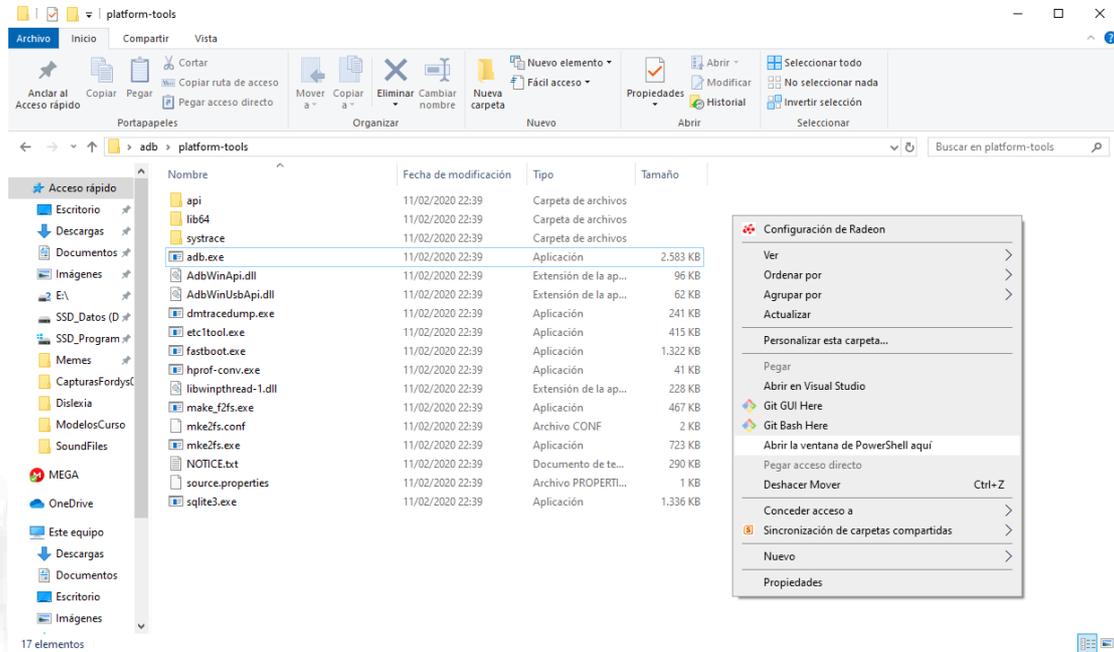
- We enter Settings and we will have to look for "About phone ..." or "Phone information". The location of this configuration varies depending on the device, but is usually within the submenu **System**.
- We look for the information of "Build Number" or "Build Number" and click on it repeatedly until a text of "Developer mode activated" appears
- We go back to the settings screen and we should see a new menu called "Developer options". We click and enable the option "USB Debugging mode"

INSTALL OUR APP USING ADB

Once these steps have been carried out on our device and having the adb installed, we proceed to install fordysAR.apk.

With the mobile phone plugged into the computer via USB, we open a Windows PowerShell from the adb folder.

To open a Command Prompt from this directory, it is done in the following way, Shift + right button on the directory. Click on the option where it says "Open the PowerShell window here".





```
Windows PowerShell
PS C:\Escritorio\adb\platform-tools> adb devices
List of devices attached
* daemon not running; starting now at tcp:5037
* daemon started successfully

PS C:\Escritorio\adb\platform-tools> adb install C:\Escritorio\fordys.apk
```

We check that our mobile phone is detected using "adb devices" and once verified we execute the command "adb install C: \ Desktop \ fordysAR.apk". After a few minutes fordysAR will have been installed on our device.



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Tutorial Installation

FORDYSVAR

VR

English

<https://fordysvar.eu/es/>



INSTALLATION MANUAL - VR (OCULUS QUEST) - FORDYSVAR

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INSTALL ADB

ADB (Android Debug Bridge) is necessary to install our FordysVR .apk on our mobile device.

First we will download ADB from this internet address:

<https://dl.google.com/android/repository/platform-tools-latest-windows.zip>

Extract the contents of the zip in an easily accessible directory for example C: / Desktop / adb

CONFIGURE OUR OCULUS QUEST GLASSES

Once adb is installed we will have to configure our OCULUS QUEST glasses

You must enable development mode for your Oculus device in your mobile phone companion app.

Before you can put your device into developer mode, you must be a member of (or have created) a developer organization in the Oculus dashboard.

If you develop on Windows, you will also need to install the drivers to use the Android Device Bridge (ADB).



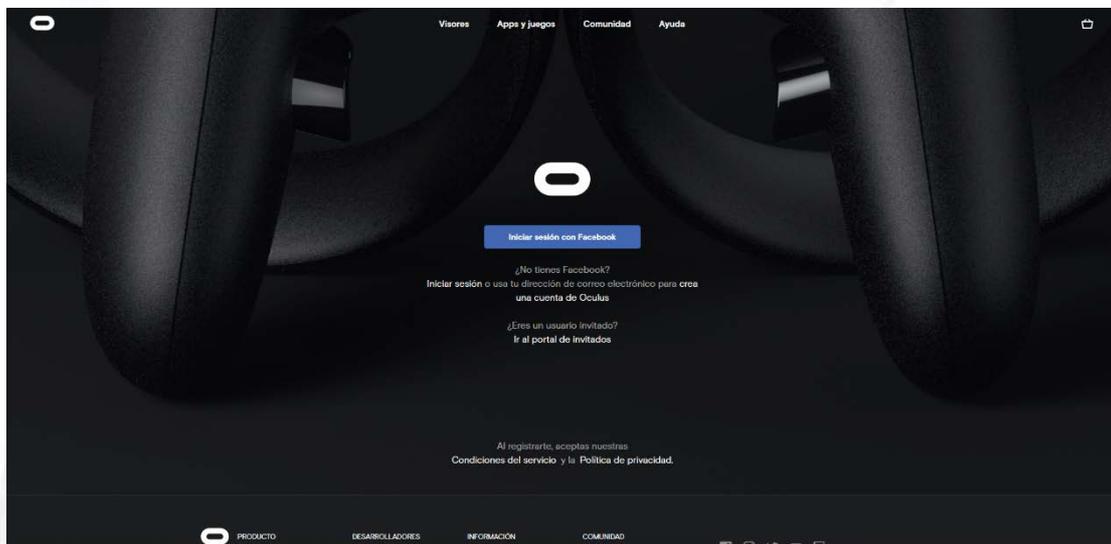
JOIN OR CREATE AN ORGANIZATION:

To join an existing organization, follow these steps:

- You will need to request access to the existing organization from the administrator.
- You will receive an invitation by email. Once accepted, you will be a member of the organization.

To create a new organization, follow these steps:

- Go to <https://dashboard.oculus.com/organizations/create/>.
- Fill in the appropriate information. (For this we will have to log in with an Oculus account. We can create one or login with a Facebook account)



ACTIVATE DEVELOPER MODE:

Once you are a member of a developer organization, follow these steps to put your device in development mode:

- Open the Oculus app on your iOS or Android phone.
- In the Settings menu, select the Oculus glasses you want to use for development.
- Select More settings.
- Activate development mode.



INSTALL THE OCULUS ADB DRIVERS (FOR WINDOWS ONLY):

Follow the next steps:

- Download the zip file containing the driver from the following web page:
<https://developer.oculus.com/downloads/package/oculus-adb-drivers/>
- Unzip the file.
- Right-click on the .inf file and select Install.

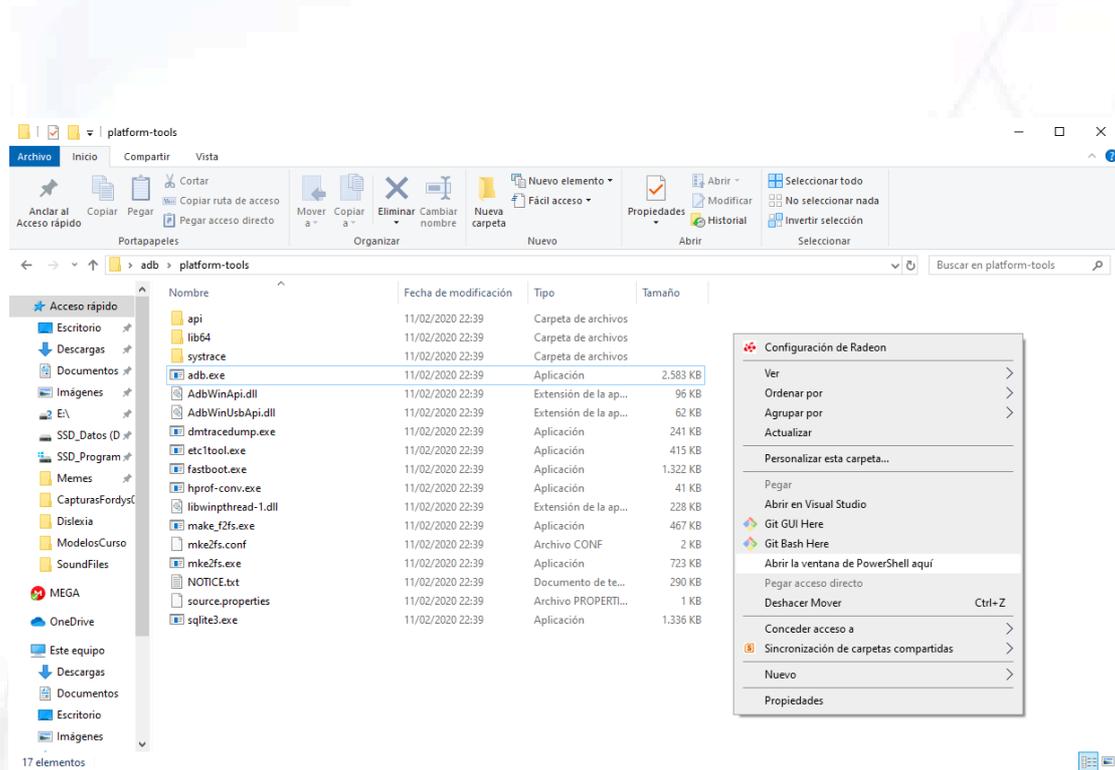
The screenshot shows the Oculus ADB Drivers 2.0 download page. The page has a dark theme with a white sidebar on the left containing navigation links like Home, Get Started, Learn, Develop, Distribute, Support, and Manage. The main content area features the title 'Oculus ADB Drivers' and '2.0 - | Published 04/09/2019'. Below the title is a 'Descargar' button. A section titled 'Oculus ADB Drivers 2.0' contains a paragraph explaining that the download contains drivers for use with Android-based Oculus devices and adds support for MTP mode connections. It also provides instructions: 'To install the driver, unzip the package and right-click > Install the android_winusb.inf file on your PC.' At the bottom, there are four columns of links: PRODUCTO (Oculus, Rift S, Go, Rift, Quest VR, Apps y juegos, MetaVR), DESEARROLLADORES (Centro para desarrolladores, Documentación, Descargas, Herramientas, Blog para desarrolladores, Foros para desarrolladores), INFORMACIÓN (Blog, Empleo, Centro de recursos de la marca, Oculus Connect, Investigación), and COMUNIDAD (VR for Good, Launch Pad, Creators Lab, Fotos, Soporte, Historial de pedidos).

INSTALL OUR APP USING ADB

Once these steps have been carried out on our device and having the adb installed, we proceed to install fordysAR.apk.

With the glasses plugged into the computer via USB, we open a Windows PowerShell from the adb folder.

To open a Command Prompt from this directory, it is done in the following way, Shift + right button on the directory. Click on the option where it says "Open the PowerShell window here".





```
Windows PowerShell
PS C:\Escritorio\adb\platform-tools> adb devices
List of devices attached
* daemon not running; starting now at tcp:5037
* daemon started successfully

PS C:\Escritorio\adb\platform-tools> adb install C:\Escritorio\fordys.apk
```

We check that our glasses are detected using “adb devices” and once verified we execute the command “adb install C:\Desktop\fordysVR.apk”. After a few minutes fordysVR will have been installed on our device.